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SUMMARY.

Oct. 5.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, with New Views on the Nature, Causes, and Treatment of Mental Diseases. By PINEL, Physician to the two National Mad Asylums of France, &c. Translated, with Illustrative Notes, by Dr. COSTELLO 1

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THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education.

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

The necessity of collecting in a treatise, the scattered elements, of which the pathology of nervous affections at the present day consists, and which, from their number and their diversity, form a subject of continual confusion for those who wish to study them, has been felt generally. Such an undertaking pre-supposes the most complete disinterestedness in the theoretical questions still under discussion; it requires the exercise of a severe choice in regard to the documents that have been accumulated on all sides, and a prudent reserve in regard to the deductions which investigations have too hastily drawn from them. Added to these, there is another serious difficulty, that of filling up, by fresh researches, the numerous lacunæ, which the works of our ablest authors have left, and to connect, by natural relations, diseases which at first seem isolated, and, as it were, disconnected.

The task, though large, is, nevertheless, but a part of what remains to be accomplished. Henceforth, it is absolutely necessary that the study of the derangements of the nervous system shall advance at the same pace with the knowledge of its structure, its development in the animal scale, and the results of physiological experiment. It is in this comparative observation of the healthy with the morbid state, of the anatomical development, with the development of the functions, and of experiment with the symptoms, that we must look for the satisfactory solution of the majority of the questions, still so obscure and uncertain, both as to the properties and the diseases of the different nervous centres.

It is in this spirit of *ensemble* we think that the pathology of the brain ought now to be considered, and that we have been led to begin this work by a brief exposition of the anatomy and physiology of the cerebro-spinal nervous system, whereby we may be able afterwards to shew more clearly, what belong to the functions, and what to the diseases of the brain solely.

We shall sketch the ancient classifications of these diseases, pointing out one which we deem more conformable with our present knowledge of the anatomy and physiology of the brain, and afterwards describing the general character of these affections.

The grand divisions laid down in the *Traité de l'Aliénation Mentale* are well known: the disorders of the intellect are there arranged into four principal classes. 1° Mania, or general delirium, with furious excitement, more or less continuous; 2°

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melancholy or melancholic delirium, directed exclusively to an object, or a particular series of objects, with moroseness and depression; 3° dementia, or demency, characterized by a peculiar debility of the operations of the understanding and will, and by a species of senile reverie; 4° idiocy, or stupidity, more or less decided, and nullity, more or less complete, as regards the ideas and feelings. No matter how modified, these fundamental distinctions have prevailed in all the classifications that have been since propounded.

Fodéré substituted the word "mental alienation" by "delirium," of which he admitted an acute and a chronic state, but still held to the general division already adopted, viz., 1° melancholy, embracing several subdivisions founded on causes; 2° mania, with or without delirium; 3° demency, partial, or complete; 4° idiocy. He would not comprehend hallucinations, and hypochondria in delirium. He was wrong, as regards the former; but as regards the latter, he even then had an idea that this affection is rather a lesion, a perversion of the instinct of life, than an intellectual delirium; the hypochondriac is above all things apprehensive about his health, his life; this is the pivot on which all his ideas, and all his actions revolve.

Georget (*Treatise on Insanity*, 1820) establishes five kinds of mental alienation. 1° idiocy, or the defect of development of the intellectual faculties; few, or no ideas, a few sensations, a few propensities; 2° mania, or general delirium, continued, or intermittent; 3° monomania, or a small number of fixed and dominant ideas, either with excitement, or depression; 4° stupidity, or delirium, acute, transitory, and peculiar to young persons, who become suddenly stupid and dull, and who recover after a lapse of time, varying in duration. This state, as we shall see in the sequel, corresponds to a particular kind of infiltration of the brain, cerebral œdema; 5° demency, which in more than half the cases, according to Georget, is complicated with muscular paralysis. We see that paralytic demency, or the so called general paralysis, did not escape his observation; and, in fact, he might have reasonably made use of it, as a sixth genus of mental alienation.

Esquirol in his writings, frequently varies in his use of the words "insanity," "alienation," "mental disease," and of some of their divisions, but in his *Traité des Maladies Mentales*, published in 1838, he was enabled to resume, with all the advantages of maturity, the results of his long experience. He describes five genera: 1° lypémanie, tristimanie, melancholy or delirium on one object, or a small number of objects, with predominance of sadness; 2° monomanie, or delirium with expansion, or, as he might have termed it, in accordance with his definition, and in contrast with the preceding, *amenomanie*; 3° manie or general delirium with excitement; 4° demency, or enfeeblement of the organs of thought; 5° idiocy, or imbecility, in which the brain had not been duly conformed, to allow of thinking rationally. He has, besides, adopted the words "illusions" and "hallucinations," to describe the disorders of sensations,

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which may, or may not, be accompanied by delirium. With the exception of some changes of words, this classification rests on the divisions previously established. It must, however, be acknowledged that the distinction of "hallucination" was a happy innovation, as it put us on the trace of all those illusions of the senses, which form so remarkable a feature in the commencement and in the progress of insanity. He did not think proper to make a separate order of paralytic demency, or general paralysis, which he was one of the first to notice, and whose exact history comprehends the most serious disorders of the intellect, as well as the most various and profound alterations of the brain. Nor does his classification contain, simple epilepsy, nor the epileptic demency of men, nor the hysterico-epileptic demency of women, an inevitable consequence of inveterate attacks. In a word, with the immense materials he had collected, and with the assistance derivable from other sources, to which he did not always render justice, Esquirol might have raised himself to the height of a luminous and fruitful generalization, if, instead of contenting himself with a symptomatology of details, he had acquired on the functions of the nervous system, notions of which he does not seem to have suspected the useful applications.

Rush, of Pennsylvania, has closely followed Esquirol's classification. He divides the diseases of the intellect into particular and general. The first comprises the delirium of sadness, tristimanie, or the delirium of gaiety, amenomania; the second, furious mania, and submania, or mania in a diminished or chronic state, and manalgia.

M. Foville's definition is much more physiological. This author considers "mental alienation" as a generic term, which comprehends several particular states, of which the chief symptoms are, derangement in the exercise of the intellectual, moral, and affective faculties, with or without alteration of the sensations, perceptions, and voluntary movements. In the action of the nervous system, three orders of phenomena succeed each other; sensations, intellectual combinations, movements; three orders of corresponding symptoms present themselves, either isolated or combined, in mental diseases. As the disorders of the intellect are the most constant, the particular cases in which they alone are observed form a first division, in which are arranged, idiocy, demency, mania, monomania, without complication. The second division includes under this quadruple form, intellectual derangements, complicated with those of the sensations. To the third belong, cases in which there is lesion of movement, known under the designation of general paralysis.

M. Ferrus, in his Clinical Instructions, at Bicêtre, has greatly improved all these divisions, by giving to them more definite characters, and more rigorous precision. In the first place, he does not confine himself to mental diseases solely, but he addresses himself to the diseases of the nervous system, and this innovation opens up the general views developed in his clinical demonstration. He then arranges cerebral diseases into two di-

ting classes: one comprehends the varieties and degrees of enfeeblement of the faculties, intellectual, moral, and effective, such as idiocy, with its shades, simple demency, paralytic demency, and a new variety,—stupidity, or maniacal stupor; the second class, under the name of maniacal delirium, includes all perversions of the intellect, mania, monomania, with their ordinary complications such as: hallucinations, illusions, suicide, homicidal, and incendiary monomania, &c. This classification possesses the didactic advantage of making use of the terms already current, the meaning of which is well known, and unequivocal.

In all these classifications, the disorders of the intellect, form their chief foundation: the lesions of the other nervous functions, seems to be set apart for a different order of study; the lesions of the instincts and propensities—those of the senses, and of the sensibility, as well as of the motive powers,—either occupy a very secondary place, or are even entirely overlooked. But the labours of those very investigators forbid our confining the pathology of the brain within its ancient limits; they have themselves enlarged these boundaries, not only by those investigations in pathological anatomy, which have tended to establish the correspondence between cerebral alterations and the varied characters and phases of cerebral derangements, but also by the results of a more precise observation of those lesions of motility and sensation, which they have described as paralytic insanity, epileptic insanity, and lesion of the senses. Three grand functions are combined in the brain: intelligence, motility, and sensibility, each having a distinct character and locality; but the relations of structure and functions are so intimate, that the study of these three grand operations can no longer be separated, either in their healthy, or in their diseased state.

If for a moment we could have the courage to forget all that has been written on the subject, and enter as impartial observers into the vast assemblage of nervous affections under all the varieties of forms and degrees, in which they present themselves in the two large establishments devoted to their reception in Paris, what would be the first thing to strike us? Some cases of furious delirium; many of calm delirium; a still larger number of simple demency, and of paralytic demency and entire sections of the imbecile, idiotic, epileptic, hysterico-epileptic, presenting one continued aspect of the most singular lesions of certain faculties, or certain propensities; of the most serious disorders of the senses, the sensibility, motility, and contractility. Such would be the spectacle viewed at a general glance. But if we bring them nearer to our view, and follow the patients from their entrance into the hospital to the time of their death, through their successive degradations, we shall see the majority passing insensibly from the state of fury to calm delirium, then into the state of demency, paralysis, convulsions, contracture, epilepsy, imbecility, and, finally, of physical and moral nullity. A person who has had such a spectacle under his eyes for upwards of twenty years may be enabled to raise himself to the height of some generalisation, and to think that these successive disorders, constituting, as they do, distinct affections, may be nothing more than periods, more or less prolonged of the same disease, the mere expression of a series of cerebral alterations, which, in the acute stage, exalt all the sensorial and motory properties of the brain, as in the state of fury, hallucination, acute delirium, and mania; which, in a more advanced stage, gradually undermine these properties, thus slowly giving rise to loss of memory, confusion, and obliteration of ideas; which, penetrating subsequently into the motory and sentient fasciculi of the interior of the brain, produce all the symptoms, general or partial, of paralysis, contracture, and insensibility; and which, reaching at last the more irritable and sensitive fasciculi, such as the optic tracts and lobes, the crura, the protuberance, and the medulla or spinal bulb, produce those convulsive and epileptiform attacks, the occurrence of which but forbodes, too certainly, the melancholy end of that slow succession of disorganising changes that have worked through the whole mass of the brain. True it is, that the affection of the brain does not

always proceed with the regularity just described; it may exhibit itself, first by epilepsy, or what is more rare, by paralysis, or by any other disorder of the intellect, the motility, or sensibility; it matters little whether it ascends from the base to the periphery of the brain, or descends from the periphery to the base, the general results are the same, and the rapid sketch we have traced shows the connection and succession of all those cerebral affections so unnecessarily isolated from each other.

On these general considerations, we have adopted the following classification which comprehends all the affections of the brain. All the alterations of the brain, be they slight or serious, are betrayed externally by functional disturbances, which may be arranged in four different orders, isolated, or combined:—

- 1° Lesions of intellect.
- 2° Lesions of propensities, and of instincts.
- 3° Lesions of the senses, and of the sensibility.
- 4° Lesions of voluntary motions.

Under this general arrangement, the disease appertaining to each, may be arranged as follows:

1° Lesions of Intellect.

These include the lesions of the perceptions, of memory, and of the will, three functions appertaining to each of the hemispheres of the brain.

They exhibit themselves in the state: 1° Of exaltation: acute delirium, furious mania, certain monomanias of the ideas, which we must distinguish from monomanias of the propensities; certain hallucinations, which must also be distinguished from illusions. 2° Of extacy: in the state of enfeeblement, as chronic mania, stupor, or œdema of the brain, simple demency. 3° In the state of abolition: idiocy and imbecility.

2° Lesions of the propensities and instincts.

The lesions of the propensities are characterised by the change of certain instincts, and more especially of the affective passions, such as the love of self, the instinct of life; they comprehend in a first degree, hypochondria; next, suicide, homicide, and mania, without delirium; certain perversions of the propensities, the monomania of fire-raising and theft. Certain oddities of disposition, taste, and inclinations, may also be classed under this head.

3° Lesions of the senses and sensibility.

These lesions comprehend all the exaltations, partial or general, of the sensibility, characterised by the perversion or abolition of this function, including the illusions of the senses, as well as those which arise from reactions in the viscera.

These illusions differ altogether from hallucinations, properly so called, which are cerebral phenomena. These illusions are particularly remarkable as being accompanied by cutaneous sensibility, which seems to follow all the degrees of exaltation, or enfeeblement, presented by the lesions of the intelligence, or of calorificity.

The illusions of the senses are almost always the forerunners of attacks of mania, or of cerebral congestion.

Hallucinations are diseases belonging to the brain alone; they occur as recollections, images produced spontaneously in the brain, and which produce all the consequences of their apparition.

4° Lesions of voluntary, or cerebral motility.

The lesions of motion present themselves as lesions of the intellect in the state of exaltation, or of enfeeblement; but they also form a group of diseases, characterised by periodicity and intermittence of the attacks, and hence three divisions of this class.

1. In the state of exaltation, the lesions of motility comprehend maniacal muscular super-excitation, tetanus, convulsions, chorea, and the movements of particular muscles.

2. In the state of enfeeblement, they comprehend general paralysis, a subject on which we shall have some new ideas to propound; common paralysis, hemiplegy, and paraplegy, with all their varieties, from mere numbness to the most rigid contractures, senile tremor, and the paralytic tremor known under the name of delirium tremens.

3. The phenomena of epilepsy, and of hysteria, belong to the state of periodicity and intermittence.

This classification of the diseases of the brain, it will be perceived, is based on its most characteristic functional derangements, and as such will compel us to look for the relations which subsist between these derangements and the pathological alterations which we find in the dead body.

In speaking of the physical causes of these affections, we shall, therefore, have to consider in succession the state of injection, and of inflammation, acute or chronic, of the membrane, and of the grey and white substance of the brain; its softening, suppuration, and induration; the atrophy or hypertrophy of its convolutions; its effusions, and serous infiltrations, cerebral hæmorrhages, organic degenerescence; and, in short, all the appreciable lesions of the nervous pulp, connecting them as well as we are able, with the progress and nature of the symptoms on which they depend.

We shall, therefore, no longer take an isolated view, as we have been doing hitherto, of some few of the diseases of the great encephalic function; we consider that all the functions, as well as all the diseases of the brain, have a mutual dependance and intimate relation with each other, and that the intellectual and moral faculties, as well as the sensitive and motory functions, and consequently all these disorders, whether isolated, or combined, constitute but one and the same branch of pathology. This will suffice to shew, that we are of opinion we should be opposing the progress of knowledge as regards the diseases of the brain, if we were to follow in too absolute a sense, that distinction of mental diseases, which now possesses no other real utility than its applications to forensic medicine, for the purpose of confining the insane for their own benefit, as well as for that of the public. But, in a scientific point of view, there has been so wide a separation made between these and other diseases, as if they had no dependance on the ordinary laws of the organism, that when pathological anatomy had penetrated into the substance of the brain, it seemed almost as if we could not have an idea that there was any relation between the material alterations of the organ and the disorder of its functions. To cling still to this error, would be only to follow in the beaten track, in which there remains nothing more to be gleaned. Where can this distinction, this isolation of a few of the properties of the brain lead us? In our times, it has only served to build up a symptomatology without end, without physiological meaning, or any rational therapeutic indication.

In order to shew the defect of such a mode of proceeding, let us consider for a moment what we should think of the pathologist, who, in order to resume all he might have observed in the diseases of the organs of respiration, would fix on their most common symptom, cough, and proceed to divide and subdivide this one symptom, into as many species as it presents different characters, dry, humid, continuous, periodic, wheezing, hoarse, spasmodic, &c., and then should elevate the symptom seriously into a speciality in medicine, and finally, to crown the absurdity, would attempt to support and demonstrate that there existed no relation between the cough and the bronchial, or pulmonary alterations. Yet this is the mode of reasoning and observing which prevails, even now, in reference to the study of the diseases of the brain. We have for so long a time regarded the acts of the intellect, as phenomena of so elevated a nature, that the application of the laws of animal physic was not allowed in its cure, as if every thing in our organism was not wonderful! As if it was not as difficult to comprehend the act of the will, as the act of the stomach, whereby a morsel of food is, in a few minutes, converted into life, becoming part of ourselves!

As it is with other organs, so it must be with the brain; we must, in regard to its disorders, apply the same principles that govern ordinary pathology. We must, then, at once begin by rescuing nervous diseases from the vagueness of sense in which they are still allowed to remain. Not to do so, would be to shut our eyes to the facts, which chemical and experimental observation is daily bringing to light.

In our view, no nervous disease can be anything else than the result of a material modification of

the nervous tissue itself; every nervous symptom depends on a lesion, evanescent or durable, an organic change, superficial or profound, of the structure of the nerves, or the nervous centres; and when the morbid state has lasted for some time, there will be always an alteration appreciable to our senses, either by the microscope, or by chemical analysis from the state of super-excitation, irritation, or inflammation of the nervous pulp, to the most complete and incurable transformation.

This opinion is the irresistible expression of the results arrived at, within these few years, by conscientious observers; the natural consequence of the researches of Magendie, Lallemand, Rostan, Bouillaud, Andral, Ferrus, Parchappe, Foville, Calmeil, Longet, and of all those, who, in studying nervous diseases, without bias, have attained to something beyond explanations, commonplace in themselves, but very commodious for indolence.

And what has the vitalist theory to oppose to the most obvious facts, or to a necessity of progress that disturbs its long established traditions? It affirms that, in many cases, it cannot discover, in the dead body, the cerebral lesions, which would account for the serious symptoms observed during life. But is the case different in regard to other diseases? Are we to deny that the skin has been the seat of erysipelatous inflammation, which we have observed while the patient lived, because, from its being slight, its traces have been dispelled by death. But, in the case we suppose, the absurdity would be still more flagrant.

These clear-sighted investigators, then, who pretend they can discover no lesions on the brain—who affirm that the organ is normal and healthy, know exactly what a sound brain is? To affirm that it has undergone no change of structure, they know, of course, what this structure is; they have set out by demonstrating, definitively, whether it is fibrous, or arranged in layers, globules, spirals, tubes, or rings? They have compelled anatomists to agree on this point; they are also perfectly well acquainted with the mode in which its different plans of composition, peculiar to the nervous centres, are arranged from the spinal marrow, medulla, the protuberance, and cerebellum, up into the interior of the hemispheres! They know the regular arrangement of each of these plans; and, in their autopsies, it is only after recognising this structure, and arrangement to be perfectly healthy, that they tell us, that there has been disease without lesions? It is on such positive data, doubtless, that their theory rests. They have never thought of all these questions, which they ought to have begun by first solving; they know no more about the structure of the brain than other people—often less; they assume as a term of comparison, a subject they do not possess, and which eludes them; their facts therefore are incomplete, and their inductions valueless.

Without prejudging the questions of pathological anatomy which will arise in the course of this work, we may state unhesitatingly, that in the brain and throughout the nervous system, the material lesions are less difficult to be appreciated than is commonly imagined. With attention and long habit, we are enabled to recognize in the nervous centres, changes and modifications, even slight in degree, of form and structure which escape an ordinary examination, and to connect with an almost constant series of functional disorders, the continual variations which the brain presents in the number, size, depth and form of the convulsions, as well as in the colour and consistence of the different parts of which it is composed. It must also be acknowledged, that the ordinary language is often incapable of expressing, with sufficient clearness, all those pathological modifications, of which it is easy to feel the value; but which the vulgar comparisons, to which we are restricted for want of better, express so very imperfectly. Now, in all these diseases, which we still call nervous or mental, these changes of structure, these material lesions constantly exist; but their form and aspect vary greatly. And it is this variety of form, nature and seat which till now, has been the despair of the medical man, and rendered all his explanations vain, whenever he has attempted to apply to the knowledge of

nervous alterations, the ordinary results which pathological anatomy presents, in the other organs and tissues. There can be no comparison; structure, function, and diseases, everything, is different in the organ of innervation. Since the time of Bichat, we constantly hear, that each organ and tissue becomes diseased in a manner peculiar to itself; this is one of the commonest truths in science, and yet there is none, of which the daily application is more misinterpreted. We must study the alterations of the nervous system by themselves, and without busying ourselves with comparisons with those of other organs. We must, then, reunite a multitude of exact observations before we venture to raise ourselves to any generalization that can be desirable or scientific. If we limit ourselves to the contemplation of a few facts, we can make no inductions; our data are contradictory and discouraging. But, if we contemplate them on a large scale, these contradictions disappear, and we shall even discover in those that seem opposed to each other, points of affinity and connection which could not be discovered when seen apart. It is by following this slow, but fruitful, path, that Foville and Parchappe have been enabled recently to demonstrate, by analysis, and induction, the almost constant relations that observation has established between the alterations of the brain and the different periods of insanity.

But all these alterations, already so variable in the superficial layers of the brain, occur also under forms no less variable in the nervous centres, formed of the white substance. Thus, in the slow, chronic affections of this substance, I have been enabled to discover, by means of very fine vermilion injections, in epileptic subjects, decided alterations, perfectly circumscribed, and which, neither the eye, nor the microscope, could have detected; for, at first view, the color and consistence of the white substance appeared natural, and differing, in no way, from the rest of this substance; but when the injection was pushed with care, I could discover circumscribed focuses, into which the injection could not be made to penetrate, in the hemispheres, the cerebellum, and base of the brain. These focuses must have been diseased portions, in which the capillary circulation had ceased, and which had been changed into an abnormal tissue, no longer capable of performing its natural function. According to the seat of these lesions, or as they affected the nervous fasciculi destined to the intellect, the propensities, to the motility, or sensibility, or to their progress, acute or chronic, we may conceive them to produce those strange and varied symptoms which the physiologist only can expound, by constantly tracing their connection with the special functions of the different nervous centres composing the encephalon.

But here another important consideration arises; if we are to admit, that each of the nervous centres is endowed with an organization, functions, and diseases, peculiar to itself, it is not the less positive that these fasciculi and centres form but one continuous whole without any rigorous separation or line of demarcation. In consequence of this arrangement, they have over and above their peculiar functions, other functions common to them, and which may be termed diffused functions. It is by virtue of this community of action that the cerebral lobes become by their very structure, organs of motility and sensibility, although their special functions appertain to the moral and intellectual faculties. It is by virtue of this arrangement also that when there is a lesion of a cerebral lobe in a point not supplied with fibres from the anterior fasciculi; there will be no symptom of paralysis, notwithstanding the alteration of the brain. This is a rare case, but I have met with it in five instances in the course of one winter in the wards of Bicetre. It is only by means of this reciprocity, this diffusion of the nervous functions that we can explain why in certain decapitated animals, the spinal marrow retains a degree of intelligence and volition which so much astonished Cuvier. This great principle of nervous physiology extends to the smallest details of its pathology, and it is on this ground we must place ourselves to be enabled to discover in many cases, the relations between lesions and symptoms.

These first views intimate in what light we regard the pathology of the nervous system, and of the brain especially, to the special elucidation of which this work is devoted. To produce a general treatise on the subject, it would be necessary to apply the same principles to the history, anatomical, physiological, and pathological of all the parts of the nervous system, the spinal marrow and nerves, the medulla oblongata, the nerves of the senses, the optic lobes, the olfactory lobes, the lobes of the cerebellum, and the ganglionic nervous system. We should then possess what is still wanting a complete practical work on the subject. Let us begin by the brain alone.

PROGRESS OF FRENCH SCIENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Sept. 18, 1844.

On Diseases of the Eye. By Professor Vclpeau. *Keratitis Ulcerosa.* In this species, the ulcer may be considered as the cause, when it is produced by a foreign body in the eye; on the contrary, it is the effect, when inflammation takes place in the cornea, from any other cause than the foregoing. Formerly, ulcers of the cornea were described under a separate head from keratitis, and considered as a peculiar disease; consequently, numerous varieties were admitted, which need not, however, be retained: the inconvenience of too many being just as great as that of too few. In my opinion, ulcers of the cornea may be divided into five categories. 1^o The ulcer may commence under the form of a phlyctæna or cupula, principally the former, but as it is very small, and as the tissues retain their transparency, it is not perceived. The cupula (*bothrion* of ancient writers) presents itself under the aspect of a regular, circumscribed semi-sphere, which retains its form through all the periods of the disease. Almost always it is situated in the centre of the cornea, or at least in the transparent portion of that membrane; is accompanied by a burning pain and lachrymation, and is observed principally in adults of a thin and spare habit. 2^o The serpiginous ulcer creeps, as it were, on the surface of the cornea, and constitutes the *epicauma* of former writers. The superficial layer of the cornea seems in this variety to have been removed, and the surface of that membrane is rugged, like a piece of shagreen, and presents, when the disease has lasted some time, facets similar to those of a cut diamond. The difference which exists between those two varieties is not easily established; the former arises under the form of a small hollow space, perfectly limited; the latter appears at first like a small spot, with an uneven surface, which commences on the edge of the cornea, and gradually extends itself towards its centre. 3^o The lymphatic or plastic ulcers begin by small white specks, with all the characters of a deposit of plastic lymph, or pus in the cornea; they are very minute, sometimes four or five are to be seen at the same time, not larger than the prick of a pin's point, a circumstance which never occurs in the two preceding forms. These ulcers have a peculiar mode of development; they are seated either in the superficial, or the deep-seated, layers of the cornea; when in the former, as soon as the little speck bursts, a greyish ulcer succeeds, and ends in an opaque cicatrix; when in the latter, the case may terminate in a serious ulceration, since the opening may take place in the camera anterior. 4^o The ulcers, which I have denominated *coup d'angle, en arcade*, (a denomination to which I am not so wedded, as to prevent my adopting another, should a better be proposed) offer peculiar characters, and are the most dangerous. Almost always situated near the circumference of the cornea, they present themselves under the form of a crescent, of from one-tenth to four-tenths of an inch in extent, and may even occupy all the outer edge of the cornea, on whose surface a depression seems to exist, as if a portion had been removed by the nail; they are accompanied by a burning pain, and all the symptoms of keratitis and violent conjunctivitis, that is to say, the photophobia, epi-

phora, pain, and burning heat, are often very considerable. 5° The *Nephela*, which is seated in the superficial layer of the cornea, may either be considered as a fifth variety, or may be included under the same head as the plastic ulcer. With a lens, this variety is seen to be characterised by whitish velvety spots, to which the term *nubecula* is applied. These are the different varieties, considered only with respect to the organic lesions they produce, and which are necessary, in order to explain the functional disturbances which take place in the eye. As I stated in my preceding lecture, vision is impaired in the earliest stages of keratitis, whilst in conjunctivitis simplex, let its intensity be what it may, sight is but little, if at all, modified. The ulcers of the cornea suffice to explain the fact, and keratitis cannot exist long without presenting this complication. The other symptoms are: *pain*, dull, obtuse, deep-seated, and not very intense, before the appearance of the ulcer, but, when this has taken place, it differs according to the species; in all, however, it is more or less acute; *epiphora*, *photophobia*: with very few exceptions, as soon as the cornea is ulcerated, these two symptoms are very severe, and have acted an important part, and been interpreted in various ways, in the pathology of the eye. Thus, according to the disciples of Beer, they are the pathognomonic signs of serophulous ophthalmia, and from their frequency, the conclusion naturally ensued that this species was very common. Now, were I to judge from what occurs in other hospitals, and at my consultations at the Charité (I mention only the consultations, because no patient under fifteen is received into the hospital), if I admitted the conclusion of the German school, what would be the result? I should be obliged to conclude that at least five-sixths of these children are serophulous, since almost all present themselves to be examined with intense photophobia and epiphora, their hands covering their eyes, in order to preserve the ulcerated cornea from the light, and offering that blepharospasm which has been indicated as the sign of serophulous ophthalmia. This tends already to prove that inflammation, complicated with these two symptoms, is not peculiar, as has been affirmed, to serophulous patients only; moreover, as I have already stated, I do not admit the existence of serophula, as a special disease, and in these lectures I give this opinion, in order to be understood, because its explanation, if attempted, ought to be given at some length, and, consequently, would be out of place here. However, it may be asserted, that these two signs are met with in individuals in no wise of a serophulous taint, but in whom the cornea is ulcerated; and if this occurs oftener in children than in adults, it is because the former are more frequently attacked with keratitis ulcerosa than the latter. Thus, healthy and vigorous children, whose parents are hale, and in no respect serophulous, may be affected with photophobia and epiphora. Why so? Because keratitis ulcerosa is present. And, if a more conclusive argument be needed in favour of this opinion, consider attentively what takes place when the cornea is injured by the presence of a foreign body implanted on its surface, such as a minute particle of iron, stone, straw, &c.; will not the result be photophobia and epiphora, blepharospasm, in short, all the signs attributed to serophulous ophthalmia alone? These phenomena have been otherwise explained; thus, some practitioners consider them as produced by an irritation of the retina, since they may exist without ulceration, and *vice versa*; others, and among the number, MM. Bérard, Taignot, and Kant, by the excitation of the ligamentum ciliare. I do not agree with these practitioners; for, if photophobia and epiphora accompany sometimes iritis, choroiditis, and retinitis, very often also they are wanting; and with respect to the different species of keratitis ulcerosa, they exist in every case, except before the ulcer is not yet formed, or when its surface is changed, so as to constitute, as it were, a kind of mucous membrane. To resume; in my opinion, the ulcer may be considered as the cause of photophobia and lachrymation.

Prognosis.—In general serious, it, in this respect, differs essentially from that of conjunctivitis. The

latter, when cured, leaves nothing by which vision may be impaired. Such, unfortunately, is not the case with the former; for, if at all intense, suffusion and ulceration speedily take place, and when the inflammation is subdued, and the disease disappears, proofs of its having existed still persist, such as the non-absorption of the plastic matter effused, and spots which vary in extent and in number. Now, it is easy to conceive, how serious an accident an opacity of the cornea is; for, if it corresponds with the pupil, sight is more or less impaired, and even abolished, when the opacity is of sufficient size to hide it altogether; even when it is not so situated, still the deformity is a source of much contrariety, if not of accidents. But this is not all: keratitis may be succeeded by perforation of the cornea, prolapsus of the iris, deformation of the pupil, impaired vision; these accidents, however serious, are, notwithstanding, far less dangerous than those which might supervene, if the iris did not obliterate the perforation made by the ulcer of the cornea, as, in this case, the eye would be emptied, and sight for ever abolished. As to the destruction of the entire cornea, followed by that of the whole organ, mentioning it is sufficient to point out its danger. Thus, you may perceive, it was not without good reasons that I asserted, that the prognosis of keratitis was serious.

Phlegmasia alba dolens.—The following case, which occurred in the clinical wards of Professor Salgues, secondary school of medicine, Dijon, was communicated by M. Daremberg to the *Société Médicale du 12^e Arrondissement*. Roussote, ætat. 38, a countrywoman born of healthy parents, was affected during childhood with rachitis, which prevented the normal development of the bones of the pelvis and inferior extremities, without producing, however, any notable change in the vertebral column. Notwithstanding this deformity, menstruation took place as usual; the woman married, became pregnant, and reached her time without offering anything extraordinary; artificial means, however, were needed to terminate the accouchement. Nothing abnormal occurred on the three days which followed her delivery, except a dull pain in the pelvis; but, on the fourth, she was seized with a shivering fit, the breasts shrivelled up, the lochia ceased flowing, and the pain increased in intensity. In this state, she entered the hospital. The next day (the 5th after the accouchement), she presented the following symptoms: dorsal decubitus; face flushed; features retracted; pressure in the right fossa iliaca produces great pain: uterus, felt above the pubis, insensible; tongue white; no nausea; stools few; involuntary flow of urine; skin moist; pulse rapid, small; pain in the upper part of the right thigh, which offered no other lesion. Ordered: soothing tisanes, emollient enemas. During the night, increase of pain occurred, accompanied with red and elastic swelling of the right nates;—20 leeches.—6th day. Swelling extended downwards as low as the corresponding labium;—more leeches.—7th day. The tumefaction and pain extended to all the right inferior extremity. Ordered nitre, to be added to the tisane; *pilules de Bellote*, No. iij.* From the 9th to the 14th day, the thigh became enormous in size; the œdema extended itself to the leg; the colour of the limb grew whiter and whiter; the skin was semi-transparent; fever with exacerbations every evening; pulse miserable; numerous liquid stools; ideas confused; continual moans; insomnia. Ordered nitre in a decoction of tamarinds, with cherry laurel water 3ij.; emollient fomentations.—15th day. Left extremity affected with œdema of a passive nature, preserving the pressure of the finger, not hot, slightly painful. Frictions, with a camphorated liniment. The state of the patient became every day more serious, the right limb increasing in size, and being the seat of intense pain, colliquative diarrhœa, aphthæ and phlyctænæ, appeared, and death took place on the 26th day after the accouchement.—*Section cadaveris*, 36 hours after demise. Cadaveric rigidity does not exist; abdo-

* *Pilules de Bellote.*—℞. Hydrargyr., pulv. aloet. a.a. 3ij., pulv. rhei 3iij., pulv. scammon. 3ij., pulv. piper. nigr. 3j., mellis q. s.—M. ft. Massa, divide in pilulas a.a. gr. iv.

minal parietes of a blue colour; the finger may be placed in the separation of the symphysis pubis; sacro-iliac articulation mobile; mucous membrane of the vagina of a blackish colour; meatus urinaris widely open; the right thigh of a triangular shape, summit corresponding to the knee, the base to the hip, about thirteen inches in length; anterior surface whitish; part of the epidermis removed, the rest may be easily detached; sphacelus of the subjacent dermis; numerous phlyctænæ on the leg; œdema of the foot. An incision, made in the limb, following the course of the vena saphena, allowed an abundant, reddish, and inodorous serosity to escape; the cellulo-adipose tissue, infiltrated in the foot, appears to be hypertrophied in the remainder of the limb; it is in some places of a dull white, in others of a reddish, colour; in all directions diffuent, but especially opposite the portions of sphacelated dermis. On the foot, the saphena is in its normal condition, from the malleoli to two inches from the knee; is of a dark red tint exteriorly; elastic to the touch; adherent to the surrounding tissues; when divided, fluid black blood, not in sufficient quantity to fill its cavity, escaped; internal membrane highly injected; in the popliteal region, its aspect was normal, but approaching its termination in the cruralis, the walls were so thick, and adherent to the surrounding tissues, that they appeared to form a part of them; the internal membrane of a violet, and here and there greenish, colour, especially superiorly, where the canal was obstructed by pus mixed by semi-coagulated blood; at this spot, it penetrates a brownish cellular tissue, softened, infiltrated with a purulent serosity, and was compressed by an accumulation of glands, bard exteriorly, soft internally; muscles around the cruralis pale, soft, and infiltrated, with a reddish serosity; the vein itself is of a black colour, as well as the neighbouring tissue; it offers numerous dilations, opposite which the walls are yellow and thin; its cavity is obstructed by long, soft, fibrinous clots, and by a liquid similar to the lees of wine; near the ligamentum Poupartii, the clots were converted into pus, and the internal membrane was covered by a similar liquid; the internal saphena, and the deep-seated femoral, present the same characters, to about an inch from their termination. The iliacs, increased in size, blue exteriorly, of a greenish-blue interiorly, are filled with fibrinous clots, hollow in their centre, which contain black blood; the internal membrane uneven, and easily torn. Vena cava inferior presents the same lesions, until it reaches the spot where the emulgers join it, after which it assumes all at once its normal condition. These diseased veins, when cut across, remain open, and their walls do not sink inwards. Nothing peculiar in the veins on the left side.—*Tarso-tibial and femoro-tibial articulations* healthy, but contain a considerable quantity of synovia: the *coro-femoral* on the right side sound; the capsule of the same on the left side and the surrounding cellular tissue, infiltrated with pus, which spreads itself between the obturators.—*Uterus*: its fundus, three inches in breadth, extends half an inch above the pubis; external surface dark red, except where it touches the bladder and rectum; ligamenta lata and ovaria sound; tubæ Fallopianæ highly injected, especially on the right side; parietes of the uterus, half an inch thick; cavity of a blueish black, and from the internal surface, by scraping, a thick black blood may be expressed; mucous membrane thickened, especially to the right; os tincæ presents five divisions, a few lines in length; tissue of the uterus supple, but evidently fibrous; nothing in the sinuses, which were of their normal size.—*Urinary organs*: kidneys healthy; bladder enlarged, walls thinner than in their normal state. *Liver* sound. *Intestines* distended by gases; adherence of the sigmoid flexure with the left ligamentum latum.—*Diameters of the pelvis* muscles not removed: sacro-pubal, three inches, five lines; transverse, five inches, four lines; oblique, five inches, four lines; symphysis three quarters of an inch in breadth; its articular surfaces black and uneven; ligaments black, considerably stretched, and their inner surface covered with pus; left sacro-iliac symphysis mobile, but sound; the right still more mobile, its ligaments softened, and the surrounding cellular tissue,

black and infiltrated with pus; its articular surface widely separated, partly denuded of their cartilages, and the remaining portions uneven, and covered with pus. Right iliac, and sacro-lumbar, muscles, softened, green, and infiltrated with pus. Lungs, emphysematous. Heart, right side enlarged, and containing large fibrinous clots, whose pedicles are adherent to the columnæ carneæ.

Fungus of the Neck of the Bladder.—The following case, which occurred in the wards of professor Velpeau, is curious, from the circumstance of the patient passing in his urine, after the application of a blister on the hypogastrium, a species of pseudo-membrane. This fact, though not so conclusive as those read before the Academy of Sciences, by Dr. Morel Lavellé and, published in the *Medical Times*, shews that cantharides has sometimes a peculiar action on the mucous membrane of the bladder, and that, in all probability, now that the attention of the profession is drawn to the subject, it will be found to be far more frequent than some practitioners suppose. *Case.* Edward Postel, turner, ætat 36; though not of a strong constitution, still enjoys good health; the only disease he ever had was a prurigo, two years ago, which re-appeared last year; says he never was affected with blenorragia, but confesses that about eleven years ago he had several chancres, and suffered from hæmaturia. In 1830, he perceived that the urine did not flow as freely as formerly; no pain; these symptoms increased gradually, so much so that the stream became filiform, and the contents of the bladder were evacuated with considerable difficulty. In this state, he consulted Dr. Ricord, who sounded him, but the operation caused the canal to swell and produced ischuria vesicalis, which lasted 36 hours; he, therefore, entered the Hotel Dieu and was placed in one of Dupuytren's wards. This took place in 1834. There it appears various means were employed, catheters kept constantly in the bladder, irrigations of cold water, but without any beneficial result. Dupuytren, having ascertained the presence of a foreign body attached to the neck of the bladder, introduced a *lithotriteur à trois branches*, and succeeded in removing a soft whitish fungus of the size of the thumb. The urine after this operation flowed freely, and continued to do so until about two years ago, when it began to diminish again, and this increased to such an extent that the catheter was requisite to evacuate the bladder. The patient, while performing this operation, stated that, about a month ago, he experienced a sort of resistance which he attributed to the presence of the fungus, and that he removed, at the same time with the catheter, a portion of this fungus about the size of a pea, offering all the characters of that extracted by Dupuytren.—8th. Blister on the hypogastrium.—9th. About three pints of turbid urine, containing flakes of a substance somewhat similar to that secreted by the sebaceous glands, were removed by means of the catheter.—10th. Nothing new.—11th. Professor Velpeau sounded the patient, drew off some strongly scented urine, and in it portions of a membraniform substance, insoluble in the urine, heavier than water, and which fell to the bottom of the vase under the form of a pseudo-membrane: examined with a lens, it presented none of the characters of pus or mucus. 15th. A considerable quantity of urine, rendered turbid by the presence of numerous globules, like those of pus, but in no respect similar to the substance expelled on the 11th, was removed.—24th. Prof. Velpeau introduced a *lithoblaste*, and after a few attempts succeeded in seizing and extracting a small fungus offering all the characters of encephaloides, and then with the *pince à trois branches* removed several fragments of the size of a pin's head. Ordered a bath. Nothing extraordinary occurred, and the patient left the hospital twelve days after, much in the same state as when he entered.

Syphilis.—In diseases caused by, or complicated with, syphilis, Professor Velpeau prescribes during two months the following pills:—R Protoioduret. hydrargyr. gr. iv., lactucar. 3ss.—M. Ft. pilulæ xx. sumat j. mane nocteque.

Leucorrhœa.—The same Professor prescribes the following treatment against this affection:—1° For a fortnight, inject once a day a decoction of

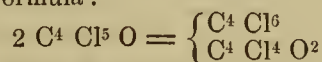
the leaves of the walnut-tree. 2° The next fortnight, instead of the preceding, make use of an injection composed of 3j. of alum in a glass of water. 3° For a fortnight more, employ an injection containing 3j. of calomelas, in a glass of decoction hordei. 4° Support the abdomen with care during the whole treatment.

Academy of Sciences. Sitting of the 16th Sept.—M. Poncetet in the Chair.—Books received: "Address to the Anniversary Meeting of the Royal Geographical Society, 27th May, 1844," by R. J. Murchison, Esq., V.P.R.S., &c., President. "Athenæum," July. "Annals of Electricity, Magnetism and Chemistry, &c.," conducted by William Sturgeon, Esq., February, March, April, May, and June.

On a Solar Tide.—G. B. Airy, Esq., in a letter to Professor Millar, announces the following fact: "I have just discovered a place on the Eastern coast of Ireland, where the solar tide is greater than the lunar tide, although, on both sides of it, the solar tide is (as usual) smaller than the lunar tide. It is near a node, and the place of the node is not the same for the solar tide, as for the lunar tide. The change of phase is not absolutely sudden (as the change of phase at the reflexion of polarized light from glass), but gradual through a short distance, the coeff nearly vanishing (as at the reflexion of polarized light from a diamond). A quarto-diurnal tide, which is sensible in my analysis of all the tides in the neighbourhood (though not obvious to common observation), is not affected by this node, and, therefore, it becomes, in ordinary circumstances, the most conspicuous phenomenon there. It is altogether the strangest thing I have ever seen."

On the Nervous Force developed by an Electric Current. By M. C. Matteucci.—The author proposed solving the following question:—A given quantity of zinc being taken, determine what is the force of muscular contractions it would develop in frogs? The result was that $\frac{1}{4}$ grain of zinc, while dissolving in the voltaic pile, gave rise, during twenty-four hours, to a current, which, passing through the lumbar nerves of a frog just killed, produced a number of contractions, which may be expressed by eleven pounds. In burning the same quantity of zinc, in a steam engine, they would be expressed by about $1\frac{1}{2}$ lbs., and with an electro-magnetic machine, nearly 2 lbs. During the first ten seconds of the operation, the intervals between the contraction were 0°25; in the ten succeeding ones, 0°33; and, afterwards, 0°41, and 0°58.

On Chloruretted Ethers. Memoir presented by M. Pelouze, M.A.S., in the name of Mr. Malaguti, professor of Chemistry at the Faculty of Sciences, Rennes.—When sulphuric ether is mixed with chlorine, it loses part of its hydrogen, which substance is replaced by an equal quantity of the latter. Under the influence of a summer's day, it is converted into sesquichloruret of carbon (Faraday), united to another neutral liquid, volatile, fuming, of a suffocating, disagreeable smell, boiling at from 212° to 221° F., making first a white spot on the skin, and then cauterizing it; from its properties and composition, it may be called *chloruretted aldehyde* = $C^4 Cl^4 O^2$. Mixed with water, it falls at first to the bottom of the cup, but is soon after dissolved and decomposed into chloracetic and chlor-hydric acids, $C^4 Cl^4 O^2 + 2 HO = C^4 Cl^3 HO^4 + H. Cl.$ With absolute alcohol, the temperature is elevated, and chlor-acetic and chlor-hydric acids formed $C^4 Cl^4 O^2 + C^4 H^6 O_2 = C^8 Cl^3 H^5 O^4 + H. Cl.$ As to the simultaneous formation of sesquichloruret of carbon, and of chloruretted aldehyde, it may be expressed by the following formula:—



When perchloruretted ether is exposed to a heat of about 572 F., it is decomposed into sesquichloruret of carbon and chloruretted aldehyde. Potassium, at a degree of temperature near that at which it is decomposed, acts violently on it. Chlorine ammoniacal gas, azotic and hydrochloric acids, are without action. Sulphuric acid acts very slowly, but in an extraordinary manner: at 464° F. vapours are disengaged, which, when condensed and dissolved in water, produce chlor-hydric and

chlor-acetic acids: formula $C^4 Cl^3 O + SH O^4 = C^4 Cl^4 O^2 + H. Cl. + SO^3$. The mono-sulphuret of potassium gives rise to a new compound, *chloroxethose* $C^4 Cl^3 O$; liquid; limpid; smell somewhat similar to that of the spirœa almaria; density at 69°80 F. = 1.654; boils at 410° F.; formula, $C^4 Cl^3 O + SK = C^4 Cl^3 O + 2 Cl. K + 2 S.$ —Mixed with chlorine and exposed to light, it is converted into perchloruretted ether, and, if water be added, chlor-acetic and chlor-hydric acids are formed, probably from the action of the water on the ether as it is generated. With brome, when exposed to the rays of the sun, it gives rise to a compound whose density is 2.500; melts at about 205° F.; is decomposed at about 356° F.; formula, $C^4 Cl^3 O Br^3$ (Bromuret of Chloroxethose.) With ordinary light of the day, another is formed, which crystallizes like the sesquichloruret of carbon of Faraday density at 70° F. = 2.3; becomes volatile at 212° F., and decomposed at about 392° F.; formula, $C^4 Cl^4 Br^2$ (Bromuret of Chloroxethose.) Both are decomposed by heat into chloroxethose and brome. Finally, according to the author, all the researches made on the molecular formation of sulphuric ether may be represented by the three following formulas:— $C^4 H^4 HO - C^4 H^5 O - C^4 H_5 O.$

On a New Class of Salts. Memoir read by M. E. Fremy. From his researches, the author concludes: 1° that azotous, and hypo-azotic acids, have a peculiar action on the sulphites, which action presents no analogy with that of the other oxygenated compounds of nitrogen; 2° that azotic acid converts the sulphites into sulphates, and disengages a reddish gas; 3° that deutoxyde of azote is absorbed entirely by the sulphites, producing nitro-sulphates, whilst azotous and hypo-azotic acids form with the sulphites a new series of compounds, composed of sulphur, nitrogen, oxygen, and hydrogen, which may be converted into sulphuric acid, and ammonia; 4° that the production of ammonia by the reaction of azotous acid on the sulphites, is a fact quite unlooked for; still it might be expected, as it is well known, that when azotic acid acts energetically on certain metals, or organic substances, ammonia is always formed; 5° that, as MM. Pelouze and Boudez announced, hypo-azotic acid produced an azotized body, presenting all the characters of an amide.

Enterotomia successfully performed in a case of Intestinal Obstruction: read by Dr. Maisonneuve. Mrs. —, ætat. 64, had been for the last fifteen years affected with a small bubonocœle, on the right side, about the size of an egg. As it remained stationary, and caused no inconvenience, the patient never wore a bandage. On the 27th April, 1844, on her return home after a long walk, the swelling increased rapidly in size, followed by pains, at first in the hernia, and afterwards extending to the whole abdomen, with nausea and vomiting. Dr. Prevost being called in, recognised instantly strangulated hernia, and attempted the taxis, aided by leeches, baths, purgatives, &c., but fruitlessly; and, as the symptoms increased in intensity, I was requested to see the patient, and found her, on my arrival, in the following state: extreme anxiety; violent pains in the abdomen; bilious vomitings; hernia of the size of the head of a fœtus, surface smooth, skin shining towards the apex; matity on percussion; fluctuation; abdomen tense; convolutions of the small intestines easily perceived through the parietes; pain increased on pressure. The operation, being urgent, was performed in the usual manner. For five or six hours after, the patient was easy, slumbered, and everything seemed to promise a speedy and favourable termination, but, during the night, the accidents re-commenced, and no stools were obtained, although oleum ricini, calomelas, and several purgative enemata, were prescribed; the vomitings, at first of a bilious, and afterwards of a fecal, nature, continued; and increased considerably on the 30th.—31st. The examination of the abdomen indicated that it was not peritonitis, but an obstruction, which was the cause of the accidents; and, as several clysters containing purgatives, combined with the infusion of tobacco, were inefficacious, a second operation was decided upon. At first, I was inclined to form an artificial anus, but, on reflecting that, perhaps, strangu-

lation had taken place a second time at the abdominal ring, I determined, though with regret, to destroy the cicatrix, but, on examination, none was found to exist; consequently, it became necessary to seek the cause higher up. To effect this, some pseudo-membranes were first destroyed, with the right index finger, introduced into the opening; and then a portion of intestine was found adherent to the abdominal parietes, which, from its distended condition, evidently belonged to the portion of the small intestine above the obstruction. The adherences appearing sufficient to prevent effusion, an incision, three quarters of an inch in length, was first made, after which the intestine, seized with a pair of dissecting forceps, was cut transversely with a pair of scissors. A considerable quantity of faecal matter flowed out instantly; but, as the opening appeared too small, it was enlarged, the more so as there was no danger of effusion, the intestine remaining firmly fixed. The patient, considerably fatigued by this second operation, which lasted some time, was replaced in her bed, and emollient poultices were ordered to be applied to the part. The ensuing evening, and the next day, passed without any further accidents; and though very little faecal matter escaped through the artificial anus, still neither vomiting nor nausea appeared. The third day, on a sudden, an immense quantity of feces was ejected by the abnormal anus, and, after this evacuation, the state of the patient gradually ameliorated, the evacuations taking place through the opening made in the intestine, and nothing through the normal anus, with the exception of several scybala, on the 8th, though purgative enemata were administered. On the twenty-second day after the operation, I determined to endeavour re-establishing the natural evacuations, as the state of the patient was in every respect satisfactory; consequently, I ordered the artificial anus to be stopped with a bit of lint, kept in place by means of a triangular bandage, and requested it might not be removed, unless the pain became intolerable. Two days only had elapsed, when, after a copious dinner, the patient was seized with violent colics, followed by an abundant evacuation by the natural opening. From this, the wound gradually diminished, the stools took place by the normal anus, preceded simply by slight colics, and on the 3rd July (33 days after the operation), the patient was perfectly well.

Academy of Medicine. Sitting of the 17th Sept.—Dr. Ferrus in the chair.—Dr. Cornay addressed a copy of a work, just published (*Nouvelles Recherches sur le Traitement des Maladies Appelées Typhus, Fievre Typhoide, Petite Verole, Rougeole, Scarlatine, Suette Miliare, &c.*), in which he points out the best treatment for diseases caused by infection.

M. Beniqué addressed a Memoir for the Argenteuil prize. The President informed the Academy that the Commission would be named in the next Sitting, instead of the present one. It is impossible to say, whether this decision was taken before or after the publication of the last Tuesday's *Gazette des Hopitaux*. Still, in all probability, the idea arose in the minds of the members of the *Conseil d'Administration*, on reading the *feuilleton* published in that periodical.

Dr. Leroy d'Etiolles presented the details of a case of Stricture of the Urethra, complicated with hypertrophy of the central lobe of the prostate, ischuria vesicalis, catarrh of the bladder, acute splenitis, ending in suppuration, effusion of pus into the peritoneal cavity, and death.

Gun-shot Wound of the Brain.—By Dr. Blaquiere, of San Pablo, Mexico.—The son of a cavalry officer, while playing with one of his father's pistols, shot his brother; the ball penetrated the skull at about 1½ inch from the external angle of the one eye, and, following a straight line, came out at an equal distance from the opposite eye; a probe, introduced, entered to a depth of twenty lines, shewing that the brain evidently was pierced. For several days, nothing abnormal appeared, the little patient sitting up in bed, and playing with his toys; unfortunately, this did not continue, for, on the twentieth day, symptoms of cerebral inflammation declared themselves, and carried off

the patient on the twenty-ninth day.—*Section:* The ball had crossed both of the anterior hemispheres of the brain; hence, the symptoms of cerebritis and meningitis.—Professor Moreau related a similar case. A grenadier, during the Spanish war, was shot through the head, the ball entering by the temples, and, in its passage across, dividing both of the optic nerves. The patient recovered, retaining all his intellectual faculties, but having, as may be supposed, lost his sight: besides which, an ankylosis of the articulation of the maxillaris inferior was produced, to such an extent, that the patient was fed, after having his incisor teeth filed down to a level with the gums, with soups and liquid aliments, by means of the oesophagian sound. In all probability, the ball passed under the anterior lobes of the brain.

Hydrophobia, Epilepsy, Gout, Tænia.—M. Bouley read a report on a Memoir of M. Sivan, addressed by the Minister of Commerce.—Conclusions: that none of the remedies, therein recommended, are worthy of approbation. Adopted.

Secret Remedies.—M. Chevallier read sixteen reports on different remedies proposed. Conclusions: that none are of any utility, and, therefore, ought not to be authorised. After some remarks from Drs. Delens, Moreau, and Martin-Solon, the conclusions were adopted.

On the Secretion of the Sebaceous Follicles of the Skin.—Memoir read by Dr. Delille, corresponding Member, Professor of Botany at the Faculty of Medicine, Montpellier. The author, after examining with a microscope the substances secreted by these follicles, and denominated *tannes*, found them to be formed of hairs, more or less numerous, according to the firmness of the skin.

On Polypi Auris.—Dr. Bonnafont, Corresponding Member, read a Memoir on this subject, in which the author comes to the following conclusions:—1^o That polypi of the ear may be divided into those which are fixed on the walls of the canal, and those which are attached to the tympanum. Both are produced by a lesion of the tissues on which they are developed.—2^o That they are more frequent near the tympanum than the external orifice; and, when adherent to the former, the pedicle is generally larger.—3^o That as to the danger, those whose tissue is spongy, and bleeds easily, are more so than those which are firmer, because the former indicate a lesion of the bones. But, here, the danger is chiefly owing to the cause, to the obstacle they produce to the free passage of the matter secreted by the ulcerated surfaces, and, when voluminous, to the pressure they exercise on the walls of the canal and the tympanum.—4^o That, for the cure, we must adopt extraction, combined with torsion, for those of the parietes; and the ligature, or excision, for those fixed on the tympanum. As to cauterization, it is useless in those of large size.—5^o That after the extirpation, the pedicle must be cauterized with solid nitrate of silver, and the ulcerations must be treated with injections of a solution of nitrate of silver, acetate of lead, or sulphate of alumina. At the same time, any appropriate general treatment must be followed.—6^o That several curious nervous phenomena may manifest themselves during the operation. Thus, when the polypus is situated on or near the tympanum, the patient experiences a sensation on the corresponding side of the tongue, as if it was touched with a cold or acidulated substance; and this sensation is changed into a smart pain whilst the instrument divides the pedicle. After the removal of the tumour, when the nitras argenti is applied to the wound, besides the local pain, another somewhat intense one is felt at the external angle of the eye, followed by an injected state of the conjunctiva, and a copious flow of tears. The nerves explain easily the transmission of the pains. But why does the cauterization affect those of the eyes, and the division of the pedicle those of the tongue?—Professor Velpeau does not agree with the author, that the history of these polypi has been neglected, since such may be found in the various surgical works that have been published. What, in his opinion, is really wanting, and which is not contained in the Memoir,

is the appreciation of the nature and causes of this affection.—The Academy decided on the proposition of Professor Velpeau, that the Memoir of Dr. Bonnafont should be sent to the *Comité de Publication*.

Paris, Sept. 26, 1844.

On the formation of a Pseudo-Membrane consecutive to the application of a Blister.—In my last, I related a case which occurred in the wards of Professor Velpeau, where the patient passed in his urine a substance similar to a false membrane the following case, for which I am indebted to the kindness of my friend and colleague, Dr. A. Latour, is another proof of the fact, first mentioned in a memoir read before the Academy of Sciences, by Dr. Morel Lavallée. This curious phenomenon, now that the attention of the profession has been directed towards it, will, probably, be found of more frequent occurrence than is generally supposed. Case.—M., joiner, ætat. 43, of strong constitution, experienced, of late, rheumatic pains in the arms, thighs, and back, which, at length, fixed themselves in the lumbar region, producing an intense lumbago; he attributed the increase of pain to his having lifted, and carried with his workmen, a heavy beam; pulse full. Ordered thirty leeches, a warm bath, followed by emollient and narcotic fomentations and poultices, and to remain in bed. The affection decreased, and the patient seemed to be in a fair way of recovery, when he was taken with symptoms of pleuritis; dry cough; dyspnoea; pain under the left breast on drawing in a long breath. In spite of an active antiphlogistic treatment, effusion took place in the pleura, for which a large camphorated blister was applied on the left side of the thorax. Eighteen hours only had elapsed from its application, when Dr. A. L. being called in, found the patient in the following condition: extreme anxiety; violent pain in the hypogastrium; frequent desire to make water, the urine flowing drop by drop, with considerable efforts and real pain. The sufferer mentioned, with a species of terror, that he had passed with his urine bits of skin, and, on examination, about a tumblerful of dark limpid liquid was found in the vase, containing small, whitish, flat, thin, ribbon-like bodies, the largest being about one-third of an inch square, and when removed, and placed on a sheet of paper, they offered all the appearance of portions of a pseudo-membrane. Dr. L. then requested the patient to urinate, which he did with considerable pain and difficulty, emitting only a few drops of a liquid similar to that already mentioned; after which, a small pellicle presented itself at the meatus urinarius; it was removed, and, when examined, was identical with those found in the vase. Questioned as to the previous state of his urine and urinary organs, he replied, that he had never experienced any thing of the kind lately, but that, about ten years ago, he had been affected with a disease of the bladder, during which, pus, mixed with blood, was emitted. Ordered to take a tepid bath; afterwards to drink freely of an acidulated tisane; to apply emollient, narcotic and camphorated cataplasms on the hypogastrium; and to omit the blister. Under this treatment, the accidents soon ceased; the portions of pseudo-membranes became more and more rare, and, 12 hours after, they ceased to be emitted; the urine flowed more easily, and, finally, five days had not elapsed, ere all the symptoms of disturbance in the urinary organs had disappeared. As to the pleuritic effusion, it yielded to purgatives and decoction of polygala.

Consecutive Strabismus.—Sometimes, after the division of the rectus internus, for convergent strabismus, the eye is deviated in an opposite direction, either rapidly or gradually. Dr. Jules Guerin considered that this deformity was owing to the divided muscle being inserted so far back on the sclerotica as to be incapable, by its contractions, of controlling those of its opponent, and consequently the eye is drawn outwards. To remedy it, he detached the rectus internus, and to facilitate its adherence further forwards, the eye was turned towards the nose, and kept in that position by a bit of thread passed through the conjunctiva just outside the cornea, and fastened to

the root of the nose. Subsequently, Dr. G., finding that membrane too feeble, passed the thread through the sclerotica. This method, according to Dr. Jobert de Lamballe, is not enough to obtain a cure, because the cause is not removed by Dr. J. Guerin's operation. The deviation is not only produced by the insertion of the rectus internus being too far back, but likewise because the rectus externus, retaining all its force, turns the eye outwards, an action which, the internus being weakened from having been divided, is unable to resist. Therefore, to obtain the cure, the rectus externus must likewise be divided; an operation by which the equilibrium will, in all probability, be re-established. Should this, however, be insufficient, the internus must then be detached, and the eye turned inwards by means of the thread proposed by Dr. Jules Guerin, with this difference however, that instead of passing it through the sclerotica, or the conjunctiva, it must be fixed in the external portion of the divided rectus externus. —(*Gaz. des Hôpitaux.*)

Sarcocoele.—Dr. Cabaret, of St. Malo, has just published, in the *Journal de la Société de Médecine de Montpellier*, the following curious case, which he observed in one of Dupuytren's wards at the Hotel-Dieu. In April, 1833, a child, four years old, was brought to the hospital; he presented a pyriform tumour in the scrotum, the surface of which was quite smooth: its weight, when compared with its size, was not considerable; there was obscure fluctuation, which, added to the vigour and healthy condition of the child, seemed to indicate that it was neither scirrhus nor cancer; nor was it hernia, since it did not communicate with the inguinal ring, and no movement was transmitted to it when the child coughed. It might be considered as hydrocele, but it was not transparent. In order to clear up all doubts, Dupuytren, before proceeding further, plunged a small trocar into the tumour; nothing but a few drops of blood escaped, evidently from the wounded vessels, not from an hæmatocele; the trocar could be moved backwards and forwards with as much ease as if it were in the cerebral substance. Its cancerous nature thus recognized, Dupuytren resolved upon extirpating it immediately; a longitudinal incision was therefore made on the tumour, which, after a careful dissection, was extirpated, the spermatic chord, having been previously tied. The child was then taken back to bed, and, half an hour after, the dressing was applied, but was soon removed in order to tie several arteries, the quantity of blood furnished having been sufficient to imbibe the apparatus. The only consecutive symptoms which occurred, besides those that naturally follow surgical operations, were a considerable degree of agitation and slight delirium, attributed by Dupuytren to the ligature of the spermatic chord; consequently, he ordered it to be removed if these symptoms augmented. Fortunately, they soon ceased, and nothing further occurred to retard the cure, which was complete a fortnight after. The tumour was formed by the testicle converted into a substance of an encephaloid nature, enveloped in a fibrous kyst.

On the Administration of the Chloruretum Argenti in Scrophula.—Dr. Sicard, having administered this substance in an immense number of cases, (of which many were communicated to the Royal Society of Medicine of Marseilles,) and with manifest advantage, concludes, that it may be considered as a powerful anti-scrophulous remedy. It ought to be preferred to the different preparations generally employed, because it produces no excitation in the system, and succeeds in cases where iodine and gold cannot be taken; also, being tasteless, it may be given without creating repugnance. The dose is, for a child, 7 years old, from 1-12th to 1-10th of a grain; the *modus operandi* is that of a violent drastic, as proved by the following fact:—a child, 4 years of age, took, without his parents' knowledge, four lozenges, containing about 1-5th of a grain of chloruretum argenti; soon after, violent colics declared themselves, followed by seven or eight copious liquid stools, which continued for four days, and then disappeared. As to its efficacy in scrophula, the author relates the following case:—Francis E—,

ætat 7, being affected with a ring of hypertrophied glands, extending from the right to the left mastoid process, and with all the symptoms indicative of a scrophulous taint, was ordered: R. chloruret. argent. gr. j., past. theobrom. cac. ʒij. : ft. pastill. No. xij., quarum j omni mane primo sumend. After taking 24 of these lozenges, there was an evident amelioration; the dose was, therefore, increased to 1-10th of a grain, and frictions, with the following ointment, were made on the glands:—R. chloruret. argent. gr. vj., adip. præp. ʒj. : M. ft. unguentum. The treatment lasted 21 months, during which time, the quantity of chloruret taken was about ʒv.; the effect of the remedy was, per diem, several yellow liquid stools, covered with a considerable quantity of froth (a characteristic sign). Eight months after, a small tumour appeared near the right mastoid process, but yielded to the following treatment: lozenges containing about 3-5ths of a grain, and frictions with an ointment containing gr. ij. of chloruret.—(*Clinique de Marseille.*)

On the Best Mode of Preparing the Valerianate of Zinc, by M. Duclou.—This substance, long ago administered in Italy, has, since Dr. F. Devay, of Lyons, drew the attention of the profession to its utility, been frequently prescribed. But the difficulty, hitherto experienced in its preparation, induced M. Duclou to propose some slight modifications in the method: thus, after having obtained, by the usual process, the valerianic acid, take pure oxyde of zinc, recently prepared by precipitation from a solution of sulphate of zinc, by means of caustic potass or soda, mixed with a certain quantity of distilled water, and add by degrees the valerianic acid, aiding the combination by constant ebullition; filter the liquid while hot, in order to separate the excess of oxyde, and a reddish matter of a peculiar nature which swims on its surface; evaporate the liquid, thus obtained, at a gentle heat, removing, from time to time, the salt which appears on the surface of the liquid, in the form of spangles, of a bright pearly white colour, and extremely light. By this process, twenty pounds of the radix valerianæ produced ʒiss. of valerianate of zinc, distilled water alone having been employed to obtain the valerianic acid; besides which, that contained in the essential oil (ʒv.) was not extracted. Valerianate of zinc is soluble in water and alcohol, in the following proportions:—ʒiss. of boiling distilled water dissolves ʒiiss; and the same quantity, cold, only ʒij;—100 parts of boiling, and 105 of cold, alcohol, dissolve six parts of the valerianate;—it is insoluble in ether.—(*Journal de Pharmacie.*)

On the Operation for Phymosis, by Professor Velpeau.—It is a rule, generally admitted, that, after the operation for phymosis, the prepuce must be carefully drawn backwards, and kept there by means of an appropriate bandage, in order to prevent the lips of the wound uniting. This, however, the distinguished professor of the Charité considers useless, because the skin and mucous membrane, composing the prepuce, are so mobile that, when this part is divided, the edges of the wound curl on themselves, to such an extent that their union is impossible. Therefore, the operation performed, the parts may be abandoned to themselves, being simply enveloped in a little lint, besmeared with a simple ointment, and kept in place by a band. The skin naturally tends to draw nearer and nearer to the mucous membrane, and the edges of the wound soon cicatrize, separately. Professor Velpeau has employed this method, with advantage, for the last seven or eight years; he confesses, notwithstanding, that the old plan must be had recourse to in some cases, and that sometimes he has united the two edges of the wound by a suture, so as to obtain a cicatrix by the first intention, or else performed circumcision. (*Bulletin de Therapeutique*, August, 1844.)

Fibrous tumour of the parotidæa weighing 3½ lbs. by Professor Vanzetti, M. D. of Kharkoff (Russia). A peasant, ætat 40, of good constitution, was received in the clinical wards of the Professor, in February 1843. He related that, at 23 years of age, he remarked, behind the angle of the maxilla inferior, on the right side, a small swelling which increased gradually. When about the size of an egg, he applied, according to the advice of an old

woman, poultices made with the ashes of a peculiar kind of wood, which, however, produced no effect; on the contrary, the tumour augmented by degrees, and presented on his entry the form of a triangular pyramid, whose superior edge began near the angle of the mouth, and ended on the occiput, two inches behind the ear; the posterior border ran from the preceding, downwards, to about the centre of the sterno-cleido mastoides; and the anterior from the lower extremity of the second line to the angle of the mouth, where it joined the first. The circumference was 22 inches; height ten: surface uneven; it penetrated under the maxilla inferior, but, to what depth, it was impossible to say; skin, covering the tumour, healthy, mobile, darker posteriorly than anteriorly; from its weight it hangs down so, that its summit nearly touches the shoulder; though mobile, it is still firmly fixed to the deep-seated parts; the lobe of the ear is pulled downwards by the tumour; meatus auditorius diminished in size; the absence of pain, and the firmness of the swelling, indicated its fibrous nature. **Operation.** The lobule of the ear was first detached by means of a semi-elliptic incision and turned upwards; after which, a crucial incision was made, and the flaps dissected, the whole skin being preserved; the operator next proceeded to remove the tumour from above downwards, but was soon stopped by a tuberosity, which extended deeply under the lower jaw, and passed as high up as the meatus auditorius, and as far back as the mastoid process. The enucleation of this portion of the tumour was not so difficult as might be supposed; for, after dividing the aponeurotic envelope which kept it motionless, it was removed by means of strong pulls, prudently performed, aided by two fingers, introduced under the aponeurosis, and a few strokes of the bistoury. This obstacle once surmounted, the rest of the operation was soon performed; no vessel was tied. After the extirpation, a spherical cavity was perceived, large enough to admit the fist, and lined with an aponeurotic membrane; the parts were then united; the portions of the flaps, which were too long, cut off with the bistoury, and the wound was cicatrized on the fourth day. The sutures were then removed, and the patient left the hospital, on the twentieth day, offering only a slight paralysis of the face. (*Annales de Chirurgie Française et Étrangère*—Aug. 1844.)

Otitis Chronica.—Professor Velpeau recommends the following treatment in chronic external otitis, with, or without, discharge:—1° Inject into the meatus auditorius, successively, one of these solutions, each being employed a week: decoctum hordei, sweetened with honey; a weak solution of the plumbi acetat; a decoction of the folia juglantis regiae.—2° Drink, during the whole time, as a tisane, an infusum foliorum juglantis regiae.

Fissure of the Anus.—Professor Trousseau recommends Dr. Bretonneau's treatment in this disease, viz., lotions with an infusion of ratanhia: R. Rad. ratanh. ʒv. aquæ bullient. lbij. M. If the fissure is superficial, the patient may make use of a sponge imbibed with the lotion, but, when it is deep-seated, he must make use of a *clyso-pompe*, allowing the water to flow back, as injected, so as to wash the part: this must be done for about five minutes. A few days are sufficient to obtain a cure. Cauterisation with the nitras argenti is likewise a good means of obtaining their cicatrization.—*Gaz. des Hôpitaux.*

Academy of Sciences—Sitting of the 23d Sept.—Professor Dumas in the Chair.

On the Organs of the Secretion of the Semen (glandes spermagènes) in Salamanders and Tritons.—Memoir read by M. Duvernoy, M.A.S.—From the facts announced in his memoir, the author concludes:—1° That the gland is not multiple, as many anatomists have supposed, but merely divided into two, three, or more lobes, according to the species;—2° that the salamandra atra presents no division;—3° that it is always divided in the adult salamandra maculosa, shewing that the two are separate species;—4° that, in the triton alpestris, it is not divided;—5° that, in the triton à Crete, it is divided into three portions, except during the period of the rut, when the divisions are sometimes increased to seven;—6° that the divisions may vary, in form and number, in in-

dividuals of the same species, and even in the two organs of the same individual. This is easily conceived, when we reflect that the testicle is an organ of secretion, a chemical organ, and that, therefore, its form may differ without affecting its functions; on the contrary, the physical organs, such as the eyes, the muscles, the bones, &c., cannot change their form without their functions being modified;—7^o that there are separations which appear to be prolongations of the membrane of the testicle, analogous to that of the corpus Highmori in the mammiferæ;—8^o that the primitive capsules or glandular cavities are of different forms, spherical, oblong, conical, and are formed by the membrane of the testicle;—9^o that the secondary capsules, or generators, form small balls at the epoch of rut; at other times, they are only granular;—10^o that the development of the spermatozoa, in the tritons and salamanders at the epoch of rut, is not simultaneous, but successive, in the divisions of the gland, and it is this circumstance that produces a diversity of colour in the gland of the *triton à Crête*; when the spermatozoa are completely formed, the part is of a milky white colour, whereas, before, it offers tints which vary in intensity according to the degree of development of the animalculæ;—11^o that an epididymis exists in the *triton à Crête* and *triton alpestris*, and also in the black and common salamander; consequently, the seminal gland is as complicated as in the mammiferæ;—12^o that a certain quantity of spermatozoa may be found at the epoch of rut in the bladder of the *triton à Crête*.

On a New Oxide of Chrome: by M. E. Peligot (Mém. presented by Professor Dumas).—On causing a current of chlorine to pass on a mixture of oxide of chrome and charcoal, a chloruret is formed, which crystallizes in beautiful scales of a violet colour; formula, $\text{Cr}^2 \text{Cl}^3$. This is preceded by the formation of another chloruret, which has not yet been described; it exists in very small, white, silky crystals; contains carbon and oxide of chrome; deliquesces, and becomes green, when exposed to the air, by the absorption of water and oxygen; is composed of one equivalent of chlorine and one of chrome, Cl. Cr. ; consequently, it corresponds to an oxide of chrome, Cr. O. , hitherto unknown. This last chloruret is formed, when a current of hydrogen gas is made to pass on the violet chloruret, heated to a dull red; hydrochloric acid is disengaged, and a white crystalline mass obtained, which, at a higher temperature, fuses, and offers a fibrous texture. The proto-chloruret of chrome, prepared thus, presents the following characters: soluble in water; if dissolved in contact with the atmosphere, the solution is green, whereas it is blue, if oxygen is prevented acting upon it. Consequently, to study its mode of action on other substances, this must be done in water, totally deprived of air by previous ebullition, and under an atmosphere of carbonic acid gas. The green solution has the peculiar property of dissolving, with a considerable disengagement of heat, a certain quantity of the violet chloruret of chrome, and it is owing to the presence of the proto-chloruret in the other, when prepared in the ordinary manner, that so much incertitude has reigned among chemists; some asserting that it is soluble, and others insoluble; in reality, it is, when pure, insoluble in water and in acids. The proto-chloruret, prepared with the sesqui-chloruret and hydrogen, dissolved in water, disengages hydrogen, and this partial decomposition seems to indicate, that a sub-chloruret exists, produced by the action of hydrogen on the proto-chloruret. When potass is added to the blue solution of the proto-chloruret, a brown precipitate, in all probability the hydrated protoxide, is obtained. Ammonia gives a similar precipitate; but an excess re-produces the blue solution, which becomes violet, and ultimately red, when exposed to the atmosphere. The mono-sulphuret of potassium gives rise to a black precipitate. A solution of the acetate of soda, or potass, produces, with the blue solution, small, red, transparent crystals, which soon becomes green, and, when dry, resemble those of the protoxide of copper. This compound is the acetate of protoxide of chrome; formula, $\text{C}^4 \text{H}^3 \text{O}^3, \text{CrO. HO.}$ The sulphate of protoxide of chrome and potass being analysed, its

formula was found to be, $\text{SO}^3 \text{KO} + \text{SO}^3 \text{CrO} + 6\text{HO}$. Finally, chrome offers a protoxide, CrO , a sesquioxide, $\text{Cr}^2 \text{O}^3$ and chromic acid, CrO^3 .

On the Fabrication of Pure Acetic Acid: by M. Melsens (Mém. presented by Professor Dumas).—When an excess of acetic acid, containing little water, is poured on the neutral acetate of potass, part of the former unites with the potass, and the remainder, becoming more aqueous, passes over by distillation; but, as the temperature is raised, the distilled acid becomes stronger and stronger, and, finally, the pure crystallized acid is obtained, provided the heat be not raised above 572° F., for, at this degree, the acid assumes a slight, roseate tint, and emits an odour of empyreuma and acetone, a circumstance which may easily be avoided.

On the Ancient Moors.—Mém. presented by M. Guyon, chief surgeon of the African army. From his researches, the author is led to conclude: that the inhabitants of the banks of the Senegal, and of Sahara, are descendants of the ancient Moors of Africa, driven there by the numerous emigrations which took place from the North and East into Mauritania. In fact, the Arabs, who invaded it in the 8th century, had been preceded by the Vandals and Goths; and the countries which, by their geographical position, were not subjected to frequent emigrations, still retain proofs of their descent from the ancient Moors; for instance, the inhabitants of the south of Spain, the Western Mediterranean Islands, and especially, that of Malta.

On the comparative weight of the Organs composing the Cerebro-spinal Apparatus in man and the Mammiferæ.—Mém. read by Dr. Bourguery. The author, from his researches, concludes:—1. That as in man, so in animals, the development of the intellectual faculties varies according to the quantity of cerebral substance. 2. That these faculties, in animals, are developed more and more, according as the weight of the hemispheres of the cerebrum, and perhaps of the cerebellum, is greater when compared with that of the other parts of the cerebro-spinal apparatus. 3. That life being a constant struggle between organism and the physical world, to perform it, the nervous system—the principal agent of life—presents three kinds of functions:—the first, spontaneous or peculiar to the living being, and which cannot be produced by the general laws of nature; the second, physical; and the third, chemical; united by numerous intermediate ones. The spontaneous indicate the vital properties of the creature; the other two place it *en rapport* with the laws, which govern the physical and chemical world. 4. That these admitted, setting aside the distinctions resulting from the qualities of the nervous centres, it may further be concluded: A. That, for the manifestation of the psychological faculties in man, the cerebral mass must be four times heavier than the rest of the encephalo-rachidian organs. B. That the instinct of animals needs far less than that of man. C. That the quantity of cerebral substance requisite to enable the various organs to perform the functions allotted to them, decreases in the following order:—senses and general sensibility; motions; respiration; digestion; secretions and assimilation. These are the conclusions which result from the comparison established, according to the weight of the nervous centres; but, in order to complete them, it is necessary to add the physiological properties, which give so extraordinary and peculiar a character to the psychological qualities in man.

Academy of Medicine. Sitting of the 24th Sept. Professor Fouquier in the chair.—*On Pestis.*—Dr. Aubert Roche addressed a letter, in which he states that two facts, mentioned in the report presented by Dr. Pariset, on the 15th September, are completely erroneous. 1^o That a young Swede, who arrived at Marseilles, coming from Alexandria, had the plague, and left the lazaretto after having recovered. Now only one vessel arrived at Marseilles, in 1819 (30th April), having the plague on board, and that was the brig Constitution, Captain Anderson. It came from Tunis, and, during the passage, three persons died: during quarantine, two more cases occurred, one fatal. In 1819, no other cases of this disease were observed in the lazaretto at Marseilles, and no ship arrived from

Alexandria with the plague on board, as may be seen from the official documents, and the archives of the lazaretto. 2^o As to the length of the quarantine: the French and English governments have imposed twenty-one days, voyage included. This is not the case; for a passage from Alexandria to Marseilles is eight days, and the quarantine fourteen, in all 22; whereas, to London, it is only 16, no quarantine; from Constantinople to Marseilles, including quarantine at Malta, thirty-one days, to London only seventeen: so that a passenger, leaving Alexandria in an English packet, reaches London in seventeen days, and Paris in nineteen; whilst he cannot arrive, if he takes the French packet, in Paris before twenty-eight days, and in London before thirty-three. From Constantinople by Marseilles, he requires thirty-seven days to reach Paris, and forty-three for London; on the contrary, by the English packet, he is in London in eighteen days, and in twenty, at Paris. In concluding, Dr. Aubert Roche states, that the fear of contagion is a means employed by the council of health at Marseilles to promote their own private interests.

Argenteuil Prize.—The president informed the Academy, that the members composing the committee for this prize were to be named in the sitting.—Dr. Cornac inquired if there were any memoirs written in German; for, if so, it would be necessary to name a person familiar with that language.—Dr. Pariset replied, that a German physician had in fact written to enquire if works in that language were admitted; the answer was in the affirmative; but the period has expired without the memoir having been received.—Dr. Cornac: in future, I think it would be advisable, were the Academy to decide that memoirs written in French or Latin only should be admitted; otherwise, the opinion of the committee might be influenced by that of one of its members. I consider this remark deserving of serious attention.—The gentlemen named to form the committee were: Drs. Jobert, Amussat, Villeneuve, Berard, Lagneau, Begin, Segalas, Civiale, Jourdan. The president, after announcing these names, remarked, that Dr. Merat, treasurer of the Academy, was next on the list, and as several members had expressed the wish of his being joined to the committee, he consulted the Academy on the subject.—Dr. Lagneau: this is quite superfluous; the Academy decided that the committee should be composed of nine, not ten, members; moreover, I do not see what necessity there is for the treasurer's being present, it being a legacy, not the funds of the Academy, which is to be given.

M. Chevallier read a series of reports on secret remedies; the conclusions of all were: that they were not deserving of the favour accorded by the law, promulgated on the 18th August, 1810.

M. Hamont began to read the first part of his researches on the plague: Dr. Rochoux remarked, that the Academy had previously decided, that all the documents and memoirs, relative to this subject, should be sent to the committee named.—This proposition not being seconded, M. Hamont continued. In this part, which is but a sort of introduction to his researches on the plague, M. H. describes the hygienical conditions in which the inhabitants of Egypt are placed, and which explain why the plague is endemic in that country.

M. Dupuy read a memoir, on the changes which take place in the blood of animals affected with anthrax.

On Lithotomy by the high Operation. By Dr. Segalas. I had the honour of presenting, not long since, two remarkable calculi, which I had removed by the high operation, with success in both cases. To-day, I present another, quite as extraordinary: by its weight, 3½ ounces; by its shape, being that of a cake of soap; by the conical asperities it presents on its surface. The patient never passed blood in his urine; presented, when nine years old, symptoms of a calculus in the bladder, which disappeared completely at the age of fifteen, leaving him free from all inconvenience, though he led a very active life, travelling on horseback and in a carriage. About two years ago, when thirty-seven, the symptoms re-appeared, were very intense; felt chiefly in the perinæum, not at the glans penis, and were accompanied by

catarrh of the bladder, and febris intermittens. Lithotrity was attempted three, different times, but unsuccessfully; lithotomy was, therefore, had recourse to; no accident, either primitive or consecutive, has occurred, and the patient is now in a fair way of recovery.—Dr. Desportes: Dr. Segalas mentioned, that the patient experienced the first symptoms when nine years old; that they lasted six years, and then disappeared, to begin again twenty-two years after. To what cause, does he attribute this?—Dr. Segalas: It is not uncommon to meet with old men, affected with calculus, who experience no pain; this is owing to a certain quantity of urine remaining in the bladder, which prevents that organ applying itself exactly on the foreign body; consequently, the irritation is but slight. In the present instance, this cannot be the case, as the contractions of the bladder are very strong, and the urethra is free of all obstruction; the evacuation of the urine must, therefore, have been complete; in all probability, the stone, from its weight, was prevented coming in contact with the neck of the bladder, and by remaining in a part of this organ, less sensitive, it caused no irritation.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

THE PHYSIOLOGY OF MATERIA MEDICA

AS ESTABLISHED BY THE LATEST RESEARCHES
IN ORGANIC CHEMISTRY, PHYSIOLOGY,
PATHOLOGY, &c.

BY THE CELEBRATED
PROFESSOR F. F. SOBERNHEIM.

Translated and prepared for the "Medical Times," by
SIGISMUND SUTRO, M.D.

(Continued from page 488.)

According to the analysis of Lecanu and Denis, the constituents of blood are: structures formed of proteine (albumine, fibrine, globuline, the two former in the serum, the latter in the cells of the blood); colouring substances (the brown, or hæmaphæine, in the serum, the red, or hæmatine, in the blood-cells); extractive matters (soluble in alcohol and water); fats and fatty acids (cholesterine, seroline, cerebrinic, oleinic, and margaritic acids); salts (phosphates and carbonates of lime, magnesia and soda, chlorides of sodium and potassium, oleinates, margarates, lactates, and albuminates of soda, sulphate of potash); gases (oxygen, nitrogen, carbonic acid); iron (in the hæmatine); sulphur, phosphorus, and water. Thus, the blood-cells, consisting, like every other cell, of a nucleus and an envelope, contain a structure formed of proteine (globuline), and a pigment intimately combined with it (i. e. hæmatine). Formerly, the part consisting of globuline and hæmatine was designated as cruor; but Lecanu has shown, that, after extracting the colouring substance, a colourless mass remains, which is globuline, forming the greater part of the corpuscles of the blood. Denis considers globuline to be similar to albumine: Simon to blood-caseine. Since albumine and fibrine are dissolved in the blood, and first brought into contact with the remedies, when absorbed into this liquid, it is probable that most of the changes, undergone by the different remedies, are the results of the combinations which these form with the albumine, the fibrine, the free alkali, and the salts of the blood. Mulder has shown, that hæmatine combines with metallic oxides, in definite proportions. The (black) hæmatinate of oxide of silver consists of one atom of oxide of silver, and one atom of hæmatine; the (brown) hæmatinate of oxide of copper consists of similar proportions. The transformation of the salts, previously combined with organic acids, into carbonates,—as shown by the experiments of Wohler,—is, perhaps, the source of alkalinity in the blood, and the alkaline juices. The salt, more especially subject to this transformation into carbonate, is, perhaps, the lactate of soda, so greatly and so generally diffused throughout the organism. Since free alkali is necessary to the normal composition of blood—for we know that it exhibits alkaline reaction—the acids, in order not to saturate this alkali, either

do not reach the blood, but form salts with the bases of the gastric secretion, or, if they do arrive in the stream of the blood, they combine with but a part of its alkali, and are then delivered to the urinary organs for excretion. The alcaloids are so weakly combined with their bases, that on reaching the blood, in the form of salts, they are disengaged by the alkali of the blood. Hünefeld poisoned a rabbit by chloride of ammonium. When dead, a small quantity of its blood was placed between two plates of glass, and thoroughly dried; crystals of sal ammoniac were separated, but no other change could be perceived. The blood of rabbits, which had been poisoned with hydrocyanic and oxalic acids, and that of cats, poisoned with oxalate of potash, exhibited no material microscopic changes. Even substances which display very strong effects on the organism, as veratrine, strychnine, morphine, camphine, cantharidine, &c., produced no alteration in the corpuscles of the blood. Two grains of coniine, dissolved in half an ounce of water, were given to a rabbit, and before the lapse of two minutes, the animal died. It was immediately opened, and the still liquid blood subjected to the microscope. Not the least alteration of its constituents could be perceived. Still, the material influence of remedies on organic changes cannot be denied. Thus, alkaline remedies act as lithontriptics and antispasmodics, in those complaints which are caused by the presence of a free acid. Further, the utility of nitrate of potash, and of chloride of ammonium, in the treatment of inflammatory diseases, is based on their chemical liquifying effect. When the labourers, employed in the salt-pits of Salzburg, were attacked with cholera, they were restored, by being plunged into hot salt-water baths. The dark skin became red again; the pulse, heat of skin, and consciousness, returned; the suppressed urinary secretion reappeared, and the life of the patient was saved.

The curative effect of borax, in uric acid secretions, must, likewise, be mentioned here. This is to be attributed to the free alkali which it contains. Several salts show, in their action, the combined effects of their acid, and alkaline, constituents. Thus, alum displays the reaction of sulphuric acid; the bi-carbonates of alcalies display the peculiar effects of carbonic acid; the tartrates, those of tartaric acid. Liebig, who divides all remedies, according to their chemical composition, into azotic and non-azotic principles, maintains that the azotic remedies, particularly those with organic bases, take part in the formation or transformation of the cerebral and nervous substances. On the other hand, the same chemist admits, that solanine and picrotoxine, though they contain but a very small quantity of azote, are strong poisons; whilst quinine, which contains more nitrogen than morphine, has a less powerful effect than the latter; and caffeine, and theobromine (the alcaloid of the *theobroma cacao*), of all vegetable substances the most abundant in azote, are not poisonous at all.

Those remedies which are excreted by the urinary organs, after having entered into the blood, mostly increase the action of these organs. This is shown by the diuretic effects of garlic, horse-raddish, asparagus, turpentine, balsam of copaiva, rhubarb, juniper-berries, mezereon, nitrate of potash, carbonates and bicarbonates of potash and of soda, biborate of soda, iodide of potassium, nitric, tartaric, and citric acids. Those substances, which are discovered in the exhalation of the skin, display diaphoretic effects: as moschus, camphine, opium. Spirituous substances, camphor, æthereal oils, &c., increase the activity of the lungs, being also found in the exhalations from these organs. Alcohol is found deposited in the brain, consequently it influences the cerebral function. According to the experiments of Richter, P. Frank, Michaelis, and others, the sulphate and the ammoniacal sulphate of copper have proved very efficacious in pure *neuroses*. The copper very likely combines, in such cases, with the albumine of the nervous substances, forming albuminate of copper, and thus counteracting the unnatural relaxation of the nervous substance, and its tendency to decomposition. The styptic effect of many remedies, such as alcohol, ether, creosote, Binelli's water (which contains a certain proportion of creosote),

soot, alum, sulphates of iron, zinc, and copper, nitrate of silver, substances containing tannic acid, &c., must be ascribed to the combinations they form with the albumine of the blood. Bitter extractive substances and iron strengthen the tone of the structures, and condense the organic fibres. The specific affinity of remedies for certain organs is proved by their producing a similar effect, in whatever way they are introduced into the organism. Thus, arsenious acid, whether taken internally, or applied to a wound, to the vagina, or even inhaled as vapour, always produces inflammation of the stomach; cantharides—inflammation of the urinary organs, particularly of the bladder; mercury—irritation of the salivary glands; strychnine—irritation of the spinal marrow, even inducing tetanic spasms; morphine—narcotism; belladonna—dilatation of the pupils; all these effects are produced, even when the above-mentioned substances are applied only by the endermic method. Tartar-emetic, injected into a vein, nay, even rubbed into the hand, occasions vomiting; aloes and croton-oil, externally applied, cause purging; tobacco and digitalis act specifically on the heart; ergot of rye on the uterine system; iodine on the glands; sulphur on the skin; alcohol on the brain; rhubarb on the liver; iron on the blood; quinine on the sympathetic nerves; assafoetida and castor on the uterine nerves; rubia tinctorum on the bones, &c. The effects of strychnine on the motor nerves of the spinal marrow, are not even prevented by the removal of the brain. This accounts for the successful use of strychnine in all cases of paralysis, proceeding from the spinal nerves. Thus, strychnine proves the decided reverse of morphine, which has a depressing effect on the motor function of the spinal marrow, even inducing paralytic relaxation. On this account morphine is so useful in all spasmodic affections, arising from excessive irritability of the motor nerves. Opium proves a chief remedy against tetanus, and morphine an excellent antidote in poisoning by strychnine. The curative effect of arnica-flowers, in paralytic diseases, has been accounted for by the igasurate of strychnine, which has lately been discovered amongst their constituents. According to Flourens, opium displays a specific action on the lobes of the cerebrum, for, after poisoning animals with opium, he found extravasation of blood in the cerebral lobes, whilst all the other parts of the brain were normal. This specific influence of opium on the cerebrum is intimately connected with its constipating and anti-emetic powers. For, according to Budge's* experiments, there is no longer any doubt that the *corpora quadrigemina* and the *corpora striata* form the central organs of intestinal motion, and the right corpus striatum, more particularly, that of the gastric movement. Opium, when brought into contact with these organs, depresses their energy, and thus arrests the violent intestinal and gastric movements. A similar effect is produced by the mechanical pressure of water on the brain; and thus, in hydrocephalus acutus, obstruction of the bowels forms a material symptom of serous exudation. Stramonium, which, in strong doses, excites the cerebral functions even to furor, displays a specific effect on the sexual organs, which are shown, by the following experiments, to have their central seat in the cerebellum. Budge opened the skull of a he-cat, previously killed; having laid bare the testes and seminal cords, three seconds after, he irritated the cerebellum with the point of a knife; one testicle erected itself, moving from the seminal cord upon which it had previously lain, and forming a right

* Budge rapidly opened the skull of a dog, previously killed, whilst his assistant laid bare the abdominal viscera. The hemispheres were incised, the corpus callosum raised, the thalami optici, corpora striata and corpora quadrigemina irritated, one after the other, with a sharp needle. The irritation of the latter organs always increased intestinal movement, and produced peristaltic action, whilst the irritation of the thalami optici remained without effect. His other experiments show that the spinal marrow communicates the power of motion to the coeliac ganglion, from which it is imparted to the intestinal nerves.

angle with it; at the same time it became more tense and tight. The more he irritated the cerebellum, the more the testicle moved—the right testicle through the irritation of the left lobe, and the left commissure of the cerebellum: the left testicle, on the contrary, by the irritation of the right lobe, and the right commissure; so that he produced at will the erection of both testicles.

The specific effect of calomel on the secretion of the liver was confirmed by F. Simon's experiments. The fifth stool, after the administration of a large dose of calomel, contained (out of 1,000 parts) 21·40 of biline, with some bilifellinic acid. Jaeger and Brodie have shown the specific action of arsenious acid in diminishing the contractility and energy of the heart, by paralyzing the nervous fibres. The immediate contact of remedies, with the suffering organs, sometimes produces the required effects. Thus, A. L. Richter cured a paralysis of the arm, consequent on a fall on the elbow, by the endermic use of nitrate of strychnine. Thompson, a pulsating pain of the right arm, with swelling, by the endermic use of muriate of morphia. In another case, violent pains of the chest, with cough and difficult breathing, in consequence of a cold, were cured by the local application of acetate of morphia, after the inefficient use of blisters, leeches, &c. Eck saw an obstinate case of vomiting with diarrhoea, and Meyer, a case of whooping-cough, successfully treated by the endermic use of acetate of morphia. Ebers succeeded in curing four cases of violent neuralgia by rubbing veratrine ointment (generally composed of five-to ten grains of veratrine to half an ounce or an ounce of lard) into the suffering spot. Most of the remedies, which promote the action of the bowels, do so by immediate contact, whether they operate by causing increased secretions of the intestinal glandular cells, by the withdrawal of water (as is the case with the dry saline purgatives, according to Liebig), or by promoting the peristaltic movement (as is the case with the drastic purgatives). This effect is even produced after death. Budge introduced into the intestines of an animal, previously killed, a few drops of a mixture composed of one scruple of croton-oil, and one drachm of linseed-oil, and the consequence was, considerable peristaltic movement. The experiments, made by injecting different remedies into the veins, gave the following results:—

I. *Substances which act on the contractility of the heart.*—*Nitrate of potash* was injected, by a tube, into the jugular vein of a dog; another tube was introduced into the femoral artery, by which the *hemodynamometer* was brought into connexion with the arterial system. Before the injection, the mercurial column stood at 6". Fifteen grains of nitre were dissolved in six drachms of water, and then injected; ten seconds after the injection, the mercury sank, the tension of the arteries rapidly diminished, and the activity of the heart suddenly ceased; thirty seconds after the injection, the mercurial column stood on 1½". After forty-five seconds, death took place. The chest was immediately opened, and the heart laid bare one minute and a half after the injection. Only the right auricle was found pulsating; no other part of the heart could be caused to contract even on the application of galvanism. *Arseniate of potash*: After injecting a solution of fifteen grains, dyspnoea showed itself in ten seconds, and the function of the heart ceased in twenty. The right auricle contracted by irritation; the left did not contract, even with galvanism. *Carbonate of potash*: A solution of fifteen grains stopped the function of the heart in fifteen seconds. *Ammonia*: One drachm, dissolved in six drachms of water, arrested the pulsations after twenty-five seconds. A concentrated infusion of gall-nuts stopped the pulsation in fifteen seconds. The great dyspnoea, preceding the stoppage of the pulsations, proves that the above substances must have passed through the lungs before displaying their full effects; on that account, the right half of the heart maintained its irritability after death. The most important question, occurring in these experiments, is: what common property do these different substances possess, to produce so similar an effect? Very likely they all cause a chemical change of the blood; and though some of them are frequently

taken in large doses, without any injury (for instance, carbonate of potash and nitrate of potash), it must be remembered, that if introduced into the stomach, they promote the secretion of urine, and are thus speedily removed from the system, whilst, in injection, they remain in contact with the blood.

II. *Substances, which operate upon the nervous system.*—One grain of strychnine, dissolved in a small quantity of acetic acid, was injected into the veins of a dog; after thirty seconds, general convulsions and irregular pulsations of the heart occurred. After a minute and a half, the external signs of life ceased, but the heart continued to beat. Five minutes after death, the mercurial column was still at 1½"; no further diminution took place, the blood having coagulated in the tubes. Strychnine, in small quantities, seems to exert no influence on the heart. *Hydrocyanic acid*, injected into the veins, exhibits as rapid an effect on the nervous system as strychnine, but it also acts strongly on the heart, not by destroying its contractility, but by making the contractions irregular, and so causing considerable variations in the arterial pressure. Five drops of the acid, dissolved in six drachms of water, were injected into the jugular vein of a dog. In fifteen seconds, the pulsations of the heart became irregular. The mercurial column which was 6½" before, vacillated now between 12" and 6". After forty-five seconds, respiration ceased; and a few seconds after, the animal seemed to be dead, but the heart continued to beat. Immediately after death, the mercurial column showed a pressure of 8" being thus, 1½" higher than before the injection was made. Soon after, the irritability of the heart became less apparent, and the arterial pressure diminished; four minutes after death, the mercurial column was at 1·8-10, the pulsations 160 in a minute. After seven minutes, the right side of the heart contracted occasionally, but not the left. The heart was distended with dark coagulated blood.—The effect of conium is analogous to that of prussic acid; one drop exhibited its action in thirty seconds: respiration ceased, and general convulsions appeared; in one minute the animal seemed to be dead; the heart continued to beat for some time after. When the thorax and pericardium were opened, the stimulus of the atmosphere was sufficient to produce general contractions of the heart. This class of substances forms a curious contrast with the preceding; in the former, the action of the heart was disturbed at first, and the nervous functions only stopped in consequence of arrested circulation; in the latter class, the nervous system is first affected, and the heart remains for some time undisturbed.

III. *Substances which modify chiefly the capillary circulation.*—*Tobacco*: before the injection the arterial pressure was 6½". An infusion of ten grains of tobacco was injected into the jugular vein; in ten seconds respiration was difficult: in twenty the pulsations of the heart ceased, and the mercury fell to 2". After some seconds, the heart recommenced beating and the column vacillated between 6" and 12"; after three or four minutes the pressure was again diminished. *Euphorbium* operates like tobacco. An injected solution stopped the pulsations in twenty seconds; the arterial pressure was 4" before the injection, 1½" after; after the heart had ceased beating for thirty seconds, it recommenced again, and after a few seconds the column rose to 15". The oscillations, within one pulsation, sometimes amounting to four or five. After two minutes death occurred, but the function of the heart continued; ten minutes after the apparent death, when the column had fallen to 2½", it all at once rose again after a few pulsations to 8"; slight convulsions took place for some seconds; after twenty-eight minutes the column had fallen to 1½"; it rose again to 4". *Digitalis* also modifies the capillary circulation, but makes the pulsations of the heart slower. After injecting an infusion of one drachm of the leaves, the respiration was affected in five seconds; after ten seconds the pulsations became slower and the column fell from 5" to 2". In a few seconds it rose again to 8", and the pulsations became much accelerated. After injecting an infusion of three drachms of the leaves, the pulsation of the heart was stopped in five seconds, and the arterial pressure quickly diminished to 2½". The

heart was found distended with blood and motionless; when exposed to the air renewed contractions took place; the left cavities contained blood of a scarlet-red colour.

PROTRUSION OF THE LOWER JAW.—Dr. Gunnell states in the *American Journal of Dental Surgery*, that this unsightly disfigurement most commonly occurs soon after the commencement of second dentition, and is caused at this period by the teeth being cut irregularly, so that the teeth of the upper jaw strike either upon or just inside of the edge of those of the lower, the result of which is, that when the jaws are brought together, the lower is forced forward, producing its partial luxation at the temporo-maxillary joint; he remarks that this may be prevented by the early extraction of the temporary teeth. In those cases where deformity already exists, and where mechanical ingenuity is necessary, Dr. Gunnell has employed, with complete success, a small block of ivory tied to the lower jaw teeth, so as to separate the teeth in front about one-quarter or one-eighth of an inch. He then applies Fox's bandage and buckle, which is drawn as tight as the patient can conveniently bear, so as to produce pressure on the chin upwards and backwards. And in those cases where the teeth are irregular, he introduces between the teeth a piece of tough wood of the shape of a narrow spoon handle, which he presses firmly, for five or ten minutes, two or three times a day, on the outside of the protruding tooth or teeth, also on the inside of the upper irregular teeth; the lower end of the wood and hand being below the chin exerts pressure upon the lower teeth inwards and backwards, and on the upper outwards and forwards. By this simple method, he asserts, he has restored the face or jaws to their proper symmetry in one week, although in obstinate cases it may take a longer period, varying from three to six weeks, and even more. If there are irregularities of the teeth in the case under treatment, the remedies for such irregularities, he recommends should be employed with the above operations. He treats deformities of this nature, in like manner, as a luxation of the joint from any cause, and considers that a gradual partial luxation of the joint is generally produced by the protrusion of the lower jaw, by an improper or unnatural pressure of the under and upper front teeth against each other, which, he says, generally commences in such cases about the time of cutting the second set or adult front teeth. The object of the bandage or cap, &c., and block of ivory, is to press the condyles of the lower jaw backwards and downwards, and also to press the chin backwards and upwards, the block of ivory between the back teeth acting as the fulcrum. The bandage should be removed but once a day, and, to prevent the skin becoming irritated by pressure, it should be lined with soft cotton-wool; it should be drawn tighter every day or two, and the cure may be considered complete when, upon removing the block of ivory, the lower jaw is found to close in its proper position, the teeth in front being posterior to those of the upper. He recommends the use of the bandage to be continued at night for a short period. Dr. Gunnell, in our opinion, hardly acts advisedly in seeking to replace the projecting teeth in so short a time; those are, we believe, most likely to be successful in their practice of this operation, who devote a much longer period to carry it into effect. Serious mischief, and at all events, considerable suffering may be produced by forcing the distorted bone back to its place, in a period of time so short as is comprised in from one to six weeks.

ENCYSTED TUMOURS UNDER THE TONGUE.—Mr. Liston advises in these cases that a seton should not be passed, as the texture around is so loose that rapid infiltration is apt to occur. In a case of the kind in which he passed a seton, he was summoned in great haste two or three hours afterwards, as the patient was nearly suffocated. The tongue was of a dark colour, hanging out of the mouth, the swelling had extended into the parts behind, and the cellular tissue was much infiltrated. The seton was withdrawn, and the case did well.

INTRODUCTORY LECTURE,

Delivered at the Aldersgate School of Medicine, by ALFRED SMEE, F.R.S., Lecturer on Surgery at the Aldersgate School, Surgeon to the Royal General Dispensary, to the Central London Ophthalmic Institution, to the Bank of England, &c. &c.

GENTLEMEN,—The solemn occasion for which we are this day collected together, is to inquire into the nature of the studies necessary for the education of a gentleman, to enable him to practise the medical science. You will doubtless consider that it will suffice for me simply to enumerate the views of those associations of great men who, in different countries, preside over the members of the medical profession; but, unfortunately, on a more careful examination into their proceedings, we perceive that the Faculty of Medicine of Paris refused leave to Ambrose Paré to print his work on the application of ligatures to arteries after operation. This invention, I have no hesitation in asserting, is the most important practical application of science for the purposes of the surgeon, which has ever been submitted to the world, and yet, instead of being fostered by the distinguished men of the age, it was opposed, and never would have communicated its benefits to the unhappy victims of amputation, had not private interest been made with the King to allow the work to be printed, and thus confer its blessings on mankind. Nor is this a solitary instance. Did not the College of Physicians of London oppose the Royal Medical-Chirurgical Society—an association of the medical practitioners of this country, unrivalled for the extent of information that it has disseminated amongst those who devote their time to practise the healing art? The College of Surgeons, moreover, have looked with a jealous eye on that great University of London, which promises, by the talent which it has fostered, to effect great results for the improvement of our profession. These extraordinary instances of ill-directed authority, by men of the highest reputation in their day, shew that we must receive with care their edicts, and instead of taking for granted that the medical education they require is that best suited to make a practitioner of medicine, we must examine for ourselves a subject of such fundamental importance to the whole community.

Disregarding, then, the orders of human councils, we must take nature for our guide, and, as a preliminary inquiry, we must study the relation of man to the external world. Now, on a most cursory view of those objects which are presented for our examination, we perceive that bodies divide themselves into two great divisions—one set in which no changes are taking place, and another in which continual alterations are occurring. These two sets of bodies we call respectively things with life, or organic things: things without life, or inorganic things.

Let us take as a type of a lifeless thing, this piece of ice, and consider its qualities. We know that it is a compound of oxygen and hydrogen, in fact an oxyde of hydrogen, the two elements being held together by the force of attraction. No change is taking place between these elements, but it possesses its individual characteristic by virtue of that attraction. As long as that attraction exists, it is still oxide of hydrogen, but a destruction of that attraction, or a supervention of a new one, would cause it to be no longer an oxide of hydrogen, but some other body. I may act upon this compound by external forces, and cause it to assume either the liquid or gaseous states, but it is still an oxyde of hydrogen, and unless I destroy the attraction existing between the oxygen and hydrogen, it remains the same body. I can in the same way make this body hot, luminous, electrical, or vibrating, without any alteration in its composition. I can divide it to its finite particle, or increase its bulk indefinitely, but still its characteristic as an oxyde of hydrogen is not impaired.

An inorganic body, then, possesses matter and force; the force being only exerted between its own particles. Other matter indeed may act upon this matter, but does not contribute in any way to produce its individual existence. To express facts in the fewest words and most comprehensive manner, we may state that an inorganic body is a

body which exists by means of forces exerted between the particles of matter of which the mass is made up.

Proceeding onwards in our investigation, we perceive another class of bodies said to be organic, the particles of which are continually undergoing some change of arrangement. The most simple division of this class of bodies is to be found in vegetables or plants, samples of which I now present to your notice in the India-rubber tree, the black-tea plant, and the beautiful filmy fern. We find that the matter has tenacity and form, from a certain amount of the particles of which they are composed being held together by internal forces similar to those of inorganic bodies. In this respect stones and plants are identical; both having matter of internal forces. In the latter, however, we have continual changes occurring, and the mechanism of this change gives to the vegetable its characteristic property. In all plants we find that it is essential to vitality that it should contain not only a solid portion, but also a fluid; hence a plant is in two physical states, solid and fluid; in other words, the stem and sap. Neither part alone would exhibit any signs of life; a combination of both being required for that object. But the stem and sap, as a whole, will not exhibit change by means of forces generated alone within its own structure, as we find it to be essential for these results that external forces should act upon the whole plant to enable these alterations in the arrangement of its particles to ensue. The absolute necessity for the exertion of these external forces may be learnt by the fact, that if I either increase or diminish the amount requisite for the plant, the actions immediately cease; and if they cease but for one instant, the matter becomes inorganic, and no human power can ever make it take on the changes occurring in the vegetable or plant. If either this India-rubber tree or tea plant was frozen, its action would cease for ever; and in the same way, if this delicate filmy fern, or even the other plants, were to be over-heated or stimulated by light, electricity or force, they would certainly perish. We thus find that a plant is a body held together by internal forces in two physical states, solid and fluid, undergoing certain changes by means of the action of external forces. As a consequence of this arrangement, a plant cannot be indefinitely divided; for to possess the characteristics of a plant it must retain all these essentials, and we cannot divide it if we desire to preserve its individuality beyond a single cell. As a short expression for the difference between plants and stones, we may state that a plant is a body whose particles are undergoing change from the action of forces from without. This property, I shall hereafter shew you, is common to all organic bodies, so that definition can only be used to ascertain whether a body is a mineral or a vegetable. This expression harmonises with the phenomena observed in all the numerous forms of plants inhabiting the globe; one plant differing from another not by its possessing some new attribute, but from a difference in the nature of the matter which composes its structure; the degree of force holding that matter together, the ease with which its particles assume new combinations, and the amount of external force required to effect that change. The great peculiarity of plants is the necessity for a peculiar amount of external force. If the filmy fern which inhabits the cracks and crannies of the rocks at Tunbridge Wells was exposed to the light which this tea-plant requires, it would speedily be killed, and this tea-plant would very ill bear the shade absolutely required by this little fern.

Having thus given you a rapid and cursory sketch of the properties of plants, I must now direct your attention to another division of organized bodies, which we term animals. In the diagrams which cover these walls, every form of animal known to Cuvier is delineated, and I have selected as an illustration of a living animal, this interesting little creature, the English dormouse. Here we again perceive the integral or component matter held together by internal forces, as we have before noticed in plants and vegetables. We observe, also, changes taking place in the arrangement of the particles, through the agency of external for-

ces, as was before exemplified in describing the vegetable kingdom. We not only observe these things, but we notice that external forces acting upon the body of an animal make an impression which is not transitory, but is retained to influence the result of subsequent impressions. This registration of impressions gives rise to the effect of memory, which influences, in an important manner, the proceedings of the animal; for when external forces act upon the body, the effect of these forces is modified by antecedent impressions. The choice of action between the present and past impressions, we call volition, which is to be observed throughout the entire range of animal bodies; you may even observe it in the hydra viridis, a polyp, common in the neighbourhood of London; but an animal whose structure is so simple, that it has been described as a mere fleshy bag.

I will no longer occupy your time by narrating instances of actions from past impressions, in the animal kingdom, but will simply state, as a short expression of these facts, that the animal kingdom is peculiar in acting, not only from present, but from registered or past impressions; this property is common, not only to animals, but to man, and these can only serve as a mark to distinguish the animal from the plant or mineral.

I have now arrived at the more important part of my subject—the study of man himself—and there is as much difference to be observed between man and animals as between animals and plants, or even plants and minerals: examining his structure we find a material frame, the particles being aggregated together, and exhibiting form and volume; these properties are due entirely to the particles of matter being held together by internal forces, as in animals, plants, or stones. We find that he is in two physical states, the solid and fluid, at the same time, and that changes are continually taking place, by reason of the influence of external forces, as we have already observed, in plants and animals. Man, moreover, we notice to act upon registered or past impressions, as animals are known to do. Man, however, exhibits higher powers, and to these powers I have now to call your attention. If I take this piece of potassium and throw it into a basin of water, you perceive that it inflames, which inflammation is caused by its exerting a powerful attraction upon the oxygen of the water, and setting free gaseous hydrogen. In this experiment I am using the power of attraction, and using it to overcome other attractions. Now the employment of this power is far beyond the sphere of any animal, and can only be exerted by man. (Applause.) I could give you other instances of the application of attraction, as the use of a weight to set in motion a clock, but one instance of the exertion of a power will amply suffice for my purpose; I can employ light to give rise to certain actions. On the table before you, lie daguerreotypes, calotypes, cyanotypes, chrysotypes, enuryotypes, photographs, produced by the action of light. Man alone can use light, and in the instances before you, it even required such men as Daguerre, Herschel, Fox, Talbot, and Hunt, to turn the force to account. (Applause.) We all of us use heat; in fact, no meal is prepared without its agency. From the manufacture of the homely bread to the preparation of the most costly viands, this force is equally requisite for man; and yet what animal can or does employ this force of matter. I will show you a somewhat mysterious application of heat, if you will please observe the head of the worthy god which was intended by the builder to be an ornament to this theatre. You will perceive that an explosion will occur. (Applause.) How did that occur? The place where the explosion took place is some distance off—a wire was previous to the lecture placed around this theatre, and when I requested your attention to the head I completed a galvanic circuit, and the force generated in this battery was transmitted through the wires, and produced heat where I wanted it, namely: at the top of that figure. There, before lecture, I had placed some gunpowder, which exploded on the application of the heat. (Applause.)

Now, are these forces, alone obedient to the power of man. I will show you how we can use the

power of electricity; I connect this electro-magnetic machine with the battery, and you will see the result. The rapidity with which it turns is enormous, and it affords a practical application of the power of man to use electricity. (Applause.) You can hardly view that beautiful bas-relief without admiring the sculptor's design; but when I tell you that specimen, the largest yet executed, was deposited, atom by atom, by means of the galvanic force, you will admit the power of man to use electricity. Other examples are on the table; those beautiful solid electro-silver and electro-silver-gilt waiters, made from the natural vine-leaf, show the power of man to employ this force.

We daily use ordinary force. The model of the locomotive engine on the table is brought here to impress that fact on your mind; but, as you must all be practically conversant with railway engines, I have not thought it necessary to set the model in action.

Man can also use the force of sound,—of which a musical snuff-box is an instance;—but perhaps the use of the porter's bell, to signify the commencement of this lecture, suffices for an illustration of man's power to employ this force.

I have thus demonstrated that man can employ attraction, heat, light, electricity, force, and sound, to act upon matter; but, doubtless, you will tell me the electric eel kills his prey by electricity, the glow-worm lights its lamp, animals in their own bodies generate heat, and the merry cricket gives rise to cheerful notes. All these creatures, however, only employ the forces which arise from peculiar structures in their bodies,—man gives rise to these forces. The electric eel uses the electricity generated in the organ, which I now exhibit to you, called the battery; the glow-worm furnishes light by the peculiar organization of the last two segments of the body. Man, however, makes the battery—man makes the candle, so that man causes matter to produce light, heat, and the various other forces which I have enumerated—a power which no animal possesses. (Applause.)

Nor is man's power limited to the application of these forces upon inorganic matter alone, but he can use them also to influence vegetation. Regard these little wild crabs, and see how cultivation has converted the same fruit into this large apple. Look also at these common hedge-nuts, changed by cultivation into the delicious filbert. I need hardly say that this power is only possessed by man.

Animals are as much under the power of man as plants are; he can improve their breed, and reduce them to subjection. The common use of horses is an example of that nature. One animal, however, cannot employ another animal. Who, for instance, ever saw an elephant drawn by camel-leopards? (Applause.) And yet, we might readily forget that the subjection of animals belongs to man alone.

We have now shown that man can employ heat, light, attraction, electricity, sound, the vegetable and animal bodies. Now, what is the nature of these powers which he uses? Attraction is an abstraction of a material property; heat is the same; so is electricity, sound, force, &c. The powers of animals and vegetables are in like manner the results of matter. We may, therefore, class all these powers together by stating, that man can employ matter to act upon other matter; man is not confined to the use of any particular piece of matter to produce these results, but any piece of such matter will equally suit his purpose. We therefore find that man takes a higher stand, for he employs abstractions arising from the properties of matter.

In all human operations, matter must be employed, but man can only use the properties with which matter is endowed; he can neither add a new property, nor subtract an old one. Man's power, then, is confined to the use of the properties of matter; but though he cannot control matter, he perceives there must be a Supreme Power which at the first instance caused matter to have properties, and who, by the exertion of the same power, may will these properties to cease, or new ones to supervene. The contemplation of the

Great Controller of the powers of matter, forms the limit of the investigations of medical science, for at that period medical science ends and natural theology begins.

We are now in a condition to determine the means which are in our hands to act upon the human body. We can act upon it directly, by matter, through its power of attraction. We can act upon it also by heat, light, electricity, force, sound, as in the case of animal, vegetable, or mineral bodies. We have, however, another power by which we can act upon man—we may act upon his mind. The influences of mental impression may be inferred from deaths occurring from joy, fear, or other strong emotions. Let me warn you and entreat you never to employ a false mental impression, as the effects of employing false mental impressions are most dangerous. Here is a charm which is supposed effectually to ward off all ill, physical or moral, from a child so protected. It consists of the berries of the mountain-ash, tied round with red thread, with the following couplet:—

“Rowan tree, and red thread,
Drives the witches at their sped.”

Here are amulets used for a similar purpose. I shew you also an Abraxus, a power presiding over 365 others, which is supposed to have wonderful efficacy. Here are the casts of all the royal-touch pieces known at the British Museum; and I am enabled to exhibit to you, an original coin in the museum of the great London Antiquary, Mr. Charles Roach Smith; this, although as recent as the reign of Queen Anne, has been so much worn, to ward off the dreadful scourge of scrofula, that the impression is quite abraded. Here is a cast of a touch-piece of the Pretender, who, thinking that he had right to the English crown, had, also, equal right to confer the royal cure by touch. Do not think that spells, charms, or superstitions are at an end. In your professional career you will frequently be astonished at their use. I hold in my hand an engine of that character, called Homeopathic Medicine Chest (applause), which has already produced so many cures, according to the statement of its owner, that their enumeration would occupy me till to-morrow. In an examination of the chest this morning, I perceived the bottle, labelled camphor, had no odour; that of musk had lost, in a similar manner, its physical properties—a single grain of musk will fill a large room with odour, for 20 years, and yet, here was not the slightest scent to be discovered. The idea flashed across my mind, that these little globules were all made alike, and I transferred over to the laboratory about 100 globules, containing two or three substances which were not likely to have become injured by keeping, and the presence of which could most readily be detected. The united skill of two or three chymists failed to demonstrate by ordinary means, the smallest trace of the assumed substances. (Much applause and laughter.) The evidence on this point is negative; but yet it appears to me improbable, that 100 globules should contain a substance easy of detection, and yet not give immediate indication to chemical tests.

I do not doubt that the owner really effected cures with this chest; nor do I doubt that the amulets, abraxces, or royal touch-pieces, produced, in some cases, a similar effect; but I do most earnestly warn you never to lend yourself to produce a false mental impression, for the human mind has been in the bondage of astrology and witchcraft, and may again return to its former degraded position. Look, I pray you, at this book; see how accurately it gives the position of the stars for good and evil, when to apply medicine, to stop a flux, or to cause a purge, and let that be sufficient to warn you from the horrible effects of superstition, and deter you from ever using charms, amulets, homeopathic globules, the combination of stars, or other mental abominations.

Man is composed of integral matter, held together by internal forces, so that the first investigation that we must undertake is, to inquire into the nature of the matter, and the character of the forces. This study constitutes chemistry, a class at this school under the care of Mr. Makins; and let me urge upon you the necessity of chemical

knowledge. I speak as one who has been considered by medical practitioners to have devoted too much time to this service; but, I say, on no subject do I now feel my ignorance so much as on this. Chemistry is not only of paramount importance to medical practice, but is an ornament in every rank of life. The manner in which this matter is actually arranged constitutes general anatomy, a subject which is in the hands of Dr. Goodfellow, whose acquirements in this department are so well-known to require no comments from me. The surgical anatomy, another department of the study of the matter of the human body, is taught by Mr. Holthouse and Mr. Chance, and the study of the actions taking place in man, or physiology, is under Mr. Holthouse, with whom you are already personally acquainted. You would naturally expect that, man's characteristic being mind, the study of mind would occupy our especial attention; but perhaps you will not be astonished, when I state that neither the opponents of Paré's discovery, nor those of the Medico-Chirurgical Society, have considered that the study of the human mind is in the slightest degree requisite. The practical effect of their determination is, that madness is of no consequence, its treatment of no importance. Do not believe them; regard the ordinances of nature, not those of man; and make yourselves thoroughly acquainted with the properties of the mind, in health and disease. The agents which we employ to affect the human body, are called *materia medica*, comprising matter, forces, and mental impressions. This department we have entrusted to Dr. Garrod, a gentleman who has obtained the highest honours in the prosecution of his studies, and whom we may also believe will receive corresponding success in carrying them out. The practice of physic, or the exact application of medical agents to particular diseases is, as heretofore, still under the care of Dr. Aldis and Dr. Grant, and now you will have ample opportunities of observing the actual practice of these gentlemen at their respective institutions. The surgery, gentlemen, has been confided by my colleagues to my charge, and when I consider that in this theatre almost every distinguished man in London, of this century, has lectured, I feel deeply impressed with the important duties which I have to perform, but I promise in sincerity and truth, that to the utmost of my abilities, I will endeavour to discharge my duties to your instruction and benefit. There are certain collateral branches, as botany and comparative anatomy, which are under the care of Dr. Brown, and I may state the latter course is gratuitous. Forensic medicine, or that part of medical science which is especially connected with the courts of law, is in the hands of Dr. Sewell, a gentleman whom you doubtless are aware, has, in the prosecution of his studies, received the highest rewards for his industry and talents, and whom we consider a valuable adjunct to our staff. The last class, or that of obstetric medicine, one of the utmost importance to the general practitioner, will be undertaken by Mr. Druitt, known to the world as the author of the *Surgeon's Vade Mecum*.

Gentlemen, the study of our profession divides itself into two departments, science and practice. Science leads to the honours of the profession; practice to the emolument; but the really great man must combine science with practice. The lecturers of this school have been extremely anxious to afford you every opportunity of observing disease, and to further that object they have determined to throw open, without additional charge, the practice of the several institutions to which they are respectively attached. We have opened to you a chest infirmary, an eye institution, and portions of the practice of seven dispensaries. At these institutions, eleven clinical clerks will be appointed from this school. At these charities, you will see diseases as you will have to treat them in after life; you will see them under the same circumstances of position and state, and you will have most ample opportunities of making yourselves acquainted with it in all its multifarious forms.

I trust you will excuse me if I say a few words upon the relation which we are desirous should

exist between the teachers and pupils. We are one and all desirous that free intercourse and communication should continually take place between us. We wish you to regard us as students further advanced in that knowledge, the end of which we can never attain. Whatever you would ask of a friend, ask of us, as your teachers, and nothing will please us so much as continually to contribute to your welfare.

You are about to enter, gentlemen, upon the study of the most exalted profession. Every moment of your life will be spent in the study and observation of nature. The most intimate structure of the human body will be exposed to your view, and the innermost recesses of the human mind will be revealed to you. Every moment of your life will be spent in doing good, and contributing to the happiness and welfare of your fellow-creatures; day by day you will receive the praises and heartfelt thanks of gratitude for your aid in the time of danger and disease. Let me not deceive you, gentlemen; do not think you will attain eminence without the most incessant labour, and the most unremitting attention; and you will find, with all your exertion, your utter inability to master the subject you have taken in hand. Delighted with every step you make, you will, in the language of the psalmist, exclaim, "Such knowledge is too wonderful and excellent for me, I cannot attain unto it."

[NOTE.—The lecture, throughout, was profusely illustrated with specimens of the power of man, and the room presented, generally, an imposing appearance, from a display of beautiful examples of the novelties of science.]

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We have now to consider the subject of *Cholera*, which may be called a flux of the intestinal membrane. There are two kinds of cholera deserving of distinction, and which differ in their nature, their symptoms, and probably in their causes. One is of a bilious form, and the other is malignant or epidemic. The bilious cholera begins with pain in the abdomen, severe vomiting, and purging of a yellow or whitish liquid. The liquid, discharged upwards and downwards, appears to be of an irritating nature. There are severe cramps, not only in the abdomen, but likewise in the thighs and legs, and the effect of this, with the discharge, is to cause great prostration of strength. The distension of the abdomen is much complained of, and there is extreme thirst and often heat in the throat; the tongue is often dry and covered with a slight brown fur, and sometimes it is yellow and moist. The pulse is not much affected at first, but, as the disease goes on, it becomes very quick, small, irregular, and weak. In the more unfavourable cases, this weakness is excessive. There are, besides this, other proofs of the extreme feebleness of the circulation: the face becomes pale and blanched, the extremities are cold, and the breathing is hurried. Sometimes, after these symptoms, the flux will subside, and the patient may get better; but, at other times, there succeeds heat of the abdomen, the pulse increases in strength and becomes sharp, and, in fact, the various symptoms of inflammation of the intestines are developed. We find this with regard to a variety of other affections, also. In some instances, the disease proves fatal from exhaustion, even in the more common form. On examination after death, there has been found no organic change, and no trace of inflammation, nor any material change of the viscera. The intestines are remarkably bloodless, and the only changes to be met with, are ulcerated patches in Peyer's glands, and sometimes also in the isolated glands. This was remarkably the case where attacks of cholera prevailed at a school at Clapham; a cesspool had been opened, and the contents thrown in the garden, and a great number of the boys in the school were seized with this disease, in a very severe form, accompanied by great prostration of strength. Some of them died, and, on ex-

amination, there was found an enlargement and distinctive development of the glands, with these patches. The same thing occurs in malignant cholera. The causes of this disease are sudden changes of temperature, particularly in summer and hot seasons; changes from heat to cold; hence, it comes on very commonly in the autumn; and, as I have mentioned in the case at Clapham, foul air may produce it. Fevers of a typhoid kind often have their origin in cholera. In this case, the affection of the intestinal glands performs a prominent part. The importance of these, as organs of secretion, is not taken sufficiently into account. We are only apt to consider the intestinal tube as subservient to the passage of the fæces; but there is no doubt at all, that the intestines are secreting organs; in fact, if these glands were gathered together into one mass, we should have an organ of large size, which would no doubt attract attention; as it is, they are scattered over a large surface, and have not attracted the attention deserved. Now, air that is deteriorated, specific poisons, such as that of fevers, the foul air of cesspools, and of other bad sources, affects these glands in an especial manner. This appears to be the natural cause of cholera. We find, too, that certain medicines, conveyed into the system, produce diarrhoea, no doubt by a sort of specific action on these glands. I have adverted to the fact that typhus fever affects especially these glands, and all these circumstances point out to us the specific purpose of these glands, which has not been sufficiently studied. I have mentioned that the action of poisons on the intestinal canal, particularly of arsenic, causes an undue development of these glands, just as in the case of cholera. These are very interesting matters, and I put them forward, without being able to draw any certain conclusions from them. The matter is one that will repay investigation.

The treatment of this disease is best conducted under the supposition of its being a flux: sometimes tending to relieve the system of the noxious matters which, if suffered to remain, would be injurious, but, at the same time, controlling the flux, which, when excessive, may exhaust the strength of the patient and prove fatal. Hence, in the mild form, it is necessary to use gelatinous diluents, and to keep the surface very warm. If the disease be excessive, and more particularly if it be accompanied by pain and spasms, it becomes an indication to diminish the excess of the flux, and quiet the pain: therefore, we should give opium. Remember, however, there may be irritating matters in the intestines, and it is not desirable to deaden the sensibility so far as to arrest their function, until these irritating matters have been expelled; generally speaking, therefore, mercury should be cautiously given, to improve the intestinal secretions; then opium may be administered with ipecacuanha, to relieve the spasm. The painful feelings are very much allayed by heat applied to the abdomen and the extremities, particularly by dry heat: bags of hot sand, or any other powdered substance, applied to the abdomen or to the feet.

The next form of this disease, is the *malignant cholera*. It is a question, whether malignant cholera is distinct from the common cholera in its essential nature,—whether it is not rather an augmented degree of the form I have just described. Certainly, there are many cases occurring isolated, and spontaneously, without any epidemic influence prevailing at the time (such as that I mentioned in connexion with the cesspool at Clapham),—cases that resemble in all respects the symptoms of the malignant form, and do not appear to differ in their nature. During the prevalence of epidemic influences, the disease exhibits very alarming characteristics. Now, this subject has, during the last ten years, attracted much attention, and it is necessary to arrive fully at all that is known. There may be premonitory symptoms for a few days: general uneasiness, diarrhoea, often very slight, without attracting much attention, until a sudden attack comes on, usually about the middle of the night, or early towards the morning: the attack is accompanied by violent vomiting and purging, so violent and so sudden as to rouse up the patient

by its severity. At first, the contents of the intestines, which are evacuated, consist of a feculent matter, and so forth; but, after a short time the matter discharged is a dirty-whitish liquid, like thin gruel or rice water; there are with this violent cramps, at first affecting the fingers and toes, or the extremities, and then extending to the whole of the limbs and the entire trunk. These cramps are, perhaps, scarcely to be called tonic spasms; they are not like the cramps that exist in some forms of nervous diseases, but are more of convulsive actions, and occur especially during the action of the bowels. This is accompanied by a great degree of faintness and giddiness, especially during the spasms; the skin becomes cold, shrunken and pallid, and the face not only wan, but shrivelled, and apparently diminished in size; the eyes are often quite hollow in their sockets, and the features completely altered. The limbs, too, are remarkably shrunken in size. What appears, first of all, as pallidity, passes, in the course of a few hours, into a settled lividity; the whole surface becomes of a dull leaden hue, more particularly the limbs, which become of quite an unnatural and unearthly appearance. The whole body is perfectly cold to the touch, sufficiently so to strike horror into the person who feels it. Not only the hands, the arms, and the feet, but even the tongue and breath are cold to the bystander, and the patient seems to pass into the coldness, and even worse than the pallidity and ghastliness, of death. The pulse gradually grows weaker and weaker, and very unsteady, and at last it is no longer to be felt; the respiration becomes very slow, and the voice very feeble. The patient, as you may suppose, in this state has no strength or muscular power. There may be cramps, but they are rather in the early than in the advanced stage of the disease. Singular to say, consciousness remains, whilst there is this stamp of death in all the features; while the cold grasp of death seems to be on the patient, and his appearance is altogether of a most unearthly kind, the patient speaks and converses with those around him, and describes his symptoms with minuteness. The change produced by this disease is most extraordinary. The urine is suppressed. The surface exhibits an absence of feeling so great, that it is totally insensible to the action of heat and blisters, and little impression can be produced upon it. All the sensations seem to be concentrated internally, and the patient, in spite of his cold state externally, complains of dreadful heat and burning pain at the epigastrium. The purging and vomiting, in this extreme state, generally cease; the coldness continues, the weakness becomes greater and greater, and the patient at length sinks, the transition from life to death being scarcely perceptible. In many cases, patients have been supposed to be dead, and taken away as such, and life has afterwards been found in them. It is a strange thing, but the bodies, after death, sometimes begin to recover a degree of heat, and are affected by a degree of movement, cramps, and spasmodic contortions of the limbs; warmth returns in a slight degree on the surface. Strange as it may seem, it has been observed that, in cases of bodies laid out on the table previous to removal, they have sometimes been found off the table, and drawn into various positions from the cramps that occur after death. This is owing to spasmodic irritation of the excitatory system. The different parts of the system die quickly one after another, in ordinary death; and the excitatory system, though it be the last to die, dies nearly at the same period as the others. Here, there is a sort of violence done to the animal functions, an interruption to the circulation, that even anticipates the death of the organic functions, and, consequently, when the latter actually takes place, a change occurs which partially restores the circulation, and gives a little irritability and excitability to the true spinal system. On examination after death, the appearances presented as to the state of the abdomen, are very uncertain. The intestines may only contain a matter, such as that which has been discharged during life: a liquid like rice-water with flakes of albumen in it, and great numbers of epithelial scales. The abdominal viscera

appear much congested, the intestines showing, in many instances, a great amount of *engorgement*. With this state of congestion, there is also ecchymosis, as a sort of complement to it. The intestinal glands are remarkably enlarged. The urinary bladder is found empty, and the gall bladder generally distended. It is, however, uncertain whether bile is secreted during this disease, at least none is discharged. The serous membranes are generally dry and corrugated, and this latter state obviously arises from their dryness. The most remarkable thing, connected with the post-mortem examination, is the condition of the blood; it is found, in all the great vessels, and sometimes even throughout the smaller ones, very black and grumous, and in the heart and large vessels there are large fibrinous masses reaching far into these vessels, and partially blocking them up. This evidently forms a cause of interruption to the circulation, and is one of the common sources of asphyxia in blue cholera. The blood is found to exhibit other changes: it is found to have lost its serum and saline contents; it is, therefore, in a grumous and coagulated state, much thicker than usual; and, on examination of the matter that has been thrown off by the intestines, or by vomiting, it has been found to contain albumen and some saline matters with the serum of the blood; the watery and saline parts are thus thrown off from the intestines, whilst the thicker parts remain in the blood, in a state unfitted for circulation. This, in fact, is obviously the immediate cause of death, and the patient may sometimes be restored by injecting saline water and alkaline solutions into the veins. It appears that the natural tendency of the disease, where the system can hold out, is to re-action, as in other febrile diseases. The symptoms of collapse and coldness, however, generally prove fatal. In typhus fevers and adynamia there is something of the same kind—great collapse and serious prostration—but the changes are slower; here the changes appear to be so sudden and so extensive, that the patient is destroyed by their immediate effect, without the disease going on to re-action. The altered state of the blood, and the stoppage in the circulation, will explain the blue colour and coldness of the skin and the collapse of the whole system. Now, if the patient recover from this state, there are, not unfrequently, other diseases developed in the sequel; fevers of the typhoid kind, and of various descriptions, with a brown tongue, heat of skin, great weakness, and congestions of the viscera. The organs are very apt to become congested after cholera, and inflammation of the intestines is liable to occur in the state of ensuing re-action. The causes of this disease appear, certainly, to be sometimes of an epidemic character, but it is a great question whether they are solely epidemic, or whether they arise at all from contagion. We cannot now enter into the particulars of this question. It attacks weak subjects chiefly, especially those who have been affected with previous disease—disease of the heart and great vessels, or affections of the kidneys. It is particularly apt to occur in those subject to disorder of the bowels. It puts on the more malignant form in damp situations, especially low spots near the borders of rivers. There can be no doubt about the disease being epidemic. It does not appear to prevail during any especial state of temperature, but it is produced at all seasons. It came here, first of all, in the winter, but it occurred likewise in the summer. In India it develops itself in the hot seasons, as well as in the cold, and continues to prevail during both. There was a remarkable fact in the progress of this disease, which seems scarcely explicable, but under the supposition of the disease being propagated by infection, probably originating in the air; yet the manner in which it gradually extended itself, so as to invade a great portion of the globe, very much favours the idea of infection. This idea has been founded on the supposition of its depending on small animalculæ. The disease began in the south-eastern coast of India, prevailing there for some length of time, and gradually spreading itself in the years 1826-27; in 1831 it appeared in Europe, and, in 1836, it extended itself to Great Britain.

This was its general mode of travelling:—from south-east to north-west, and it progressed more in that direction than in any other. It would occasionally branch out of its line, as, for instance, Italy was passed over in the first invasion; but the second invasion seemed to progress both from north and south-east, towards the north-west more particularly, and subsequently it affected Africa, likewise commencing on the eastern coast, and extending in the same way. Now, this fact seems to favour the idea of the disease being infectious, but only so under certain states of the atmosphere, particularly during the prevalence of the easterly wind, which is considered to be very prejudicial to animal and vegetable life; in fact, "blight" is the term given to it by the country people. It being clear that these winds promote it, its cause may be considered either as contagion or infection, which would permit of its passing from one individual to another; or it may be of epidemic, or even of endemic, influence; and among the hypotheses lately advanced, a very ingenious one was proposed by Dr. Holland, who regarded it as of animalcular origin, a notion which seems very plausible. These little beings, originating in some unknown source, may infect the animal body, depositing their progeny within the tissues, and thus rendering them a source of infection, just as we find some kinds of food to be a vehicle for peculiar poisons. But this is a matter too speculative to take up our time. It may be asked: what is the true nature of the disease? It is a flux, and as such I have been considering it. Most of the symptoms may be explained on this supposition. The fluids are, as it were, decomposed; the watery parts are all drawn off, and the colouring matter left in a state too viscid for circulation. This will explain most of the phenomena. But there appears to be something more than this. In the bad forms of the disease, in India, it has been known to prove fatal in a few hours, without causing vomiting or purging: to produce the death-stroke, as it is termed, by the changes on the vital properties.

With regard to the treatment, the most opposite plans have been employed, with perfect failure in some cases, and as complete apparent success in others. It is remarkable that, in those countries which have been successively visited by this scourge, the disappearance of the epidemic has left us in the same uncertainty, as to its treatment, in which it previously found us; but at the outset of the disease, when it rages with the greatest violence, it is then that new remedies are cried up and so loudly extolled. In countries where it prevails more constantly, as in India, from which it has never been absent since 1817, in these situations, practitioners are very sceptical as to the efficacy of remedies; the opinion seems to prevail, that the disease, when once it has taken root and exhibited a decided form, resists every kind of remedy; and this appears to be really the case in the epidemic attacks of the disease. It seems, so far as can be made out from the results of different modes of treatment, that the best plan is that suggested by a rational view of the case itself. In the first stage, the indications are to relieve the internal congestion, and to keep the natural secretions free. Thus, in the premonitory stage, when the patient is suffering from diarrhoea, the treatment recommended for the mild form of bowel-complaint is generally efficacious. I cannot say that this alone is a cure for cholera, but persons with neglected diarrhoea are frequently affected with cholera. It is useful to give an emetic, with gentle purgatives, in the first instance, such as, mustard to produce its emetic action, and calomel and opium to modify the secretions of the canal. When the rice-water evacuations have occurred, and collapse has begun to manifest itself, it seems to have been really useful, in a great number of cases, to employ moderate venesection. This is a matter of some question still; it is supposed to act by assisting the circulation. Heat externally, and cold drinks internally, have had a great number of advocates. They, no doubt, are meant to relieve the internal congestion, and the tendency of the blood to coagulate in the internal parts. So, also, when the blood has become stagnant, you

may set it in motion again by injecting saline solutions into the veins; and the effect of this, in restoring persons from apparent death to life, is most extraordinary. I have witnessed several wonderful cases of this kind. There is a great disposition, after this operation, again to fall rapidly into a state of collapse, and the vomiting and purging, generally speaking, soon recur; immense care is, therefore, necessary in watching these patients. Many die, in spite of all kinds of treatment. Half-an-ounce of salt, and a scruple of carbonate of soda, dissolved in ten pints of water, will form a good mixture for injection: the temperature should be from 106° to 120°; the fluid to be very slowly injected, so as to avoid air being introduced along with it. The proportion of recoveries, after the saline injection, appears to have been greater than could have been expected. It has been tried only in hopeless cases, in which the patients have been reduced to the last stage. A great deal has been said in favour of sugar of lead, as a means of stopping the flux, given in large doses, combined with opium, and repeated every half-hour. It has been asserted that several instances of recovery, even in apparently hopeless cases, have taken place under this treatment. The management of the inflammatory species has been already considered.

REPORTS ON UTERINE DISEASES.

(To the Editor of the "Medical Times.")

SIR,—Having offered some observations on the subject of menorrhagia, I now proceed to that of amenorrhœa, with which perhaps I should have more correctly commenced these reports on uterine diseases.

Amenorrhœa, or absence of catamenia, is a state which occurs under a great variety of forms, many of which require a short notice before proceeding to any practical illustrations and remarks.

It has been by common consent divided under two heads. First: *Retention of the Menses*, where they never have appeared, although the patient has arrived at the time of life at which they ought to have made their appearance; and, secondly, *Suppression of the Menses*, where the menses have appeared, but have again been suppressed by some cause or accidental circumstance.

Retention of the menses may be either a constitutional or local affection. In the first case, the whole series of changes in the grand process of development, which constitutes the process of puberty, may be exceedingly backward and imperfect. Although the patient has arrived at the age, at which the various characteristics of an adult woman should have manifested themselves, she still remains, both in form and size, a child. The growth is stunted, or, if of the ordinary height, she is slender, pale, and feeble, with narrow chest, contracted jaws and face, spare attenuated limbs and muscles; the face and its expression are those of a child, and there is no mammary development;—defective tone and strength are the all-pervading features of this condition. The circulation is feeble and torpid, as evinced by the dry, rough, or cold clammy state of the skin, and flabby muscles, cold extremities, and pale sallow face. The functions of the chylipoietic viscera are equally defective; witness the torpid liver, constipated bowels, unhealthy evacuations, and gastric derangement, with its long train of depressing symptoms and effects—conditions which, if not arrested, must gradually act and re-act on each other until the process of growth and development becomes so defective and imperfect that organic disease, or general cachexy, will be the probable results.

The indications of treatment are, not to stimulate the uterus to greater activity by certain medicines which, however dissimilar in their nature and modes of action, have been brought under one denomination, viz.: emmenagogues. Idiopathic amenorrhœa, solely arising from suspended uterine function, without the concomitant circumstances to which I have just alluded, is, I am convinced, a very rare disease, and increasing experience confirms this view, and leads me to suspect, that where it has been supposed to exist, it has rather been attributable to the circumstance of the cause

not having been rightly ascertained. In most of the cases which I have witnessed, they had been accompanied with one of these two conditions: either that the powers of the system were too much below par, to enable it to furnish this periodical discharge; or, the congestive derangement of certain organs, especially at what ought to have been the menstrual periods, affords a species of vicarious substitute for the absent catamenia. It is in these latter cases, that we occasionally observe the system gradually to accommodate itself to the altered state of things; the functional derangements and periodic congestions yield, or at any rate become more or less modified by diet, regimen, and medical treatment, but the uterine function remains suspended. In this case, the injurious effects may be slower than in the amenorrhœa arising from imperfect development, and a defective state of those changes which constitute the process of puberty. The system cannot bear this irregular and unequal distribution of the circulation with impunity. Congestion, long continued, paves the way to alterations of structure, and organic disease ultimately follows as an almost necessary consequence.

There is another modification of amenorrhœa, connected with the period of puberty, which is worthy of notice, and which we observe in girls who have taken a rapid start in their growth just at this time. The demand on the powers of the system, for the purpose of effecting this rapid increase of stature, renders it unable for the time to establish those functions of the uterus, which otherwise ought to have commenced their periodic appearance.

My stock of recorded cases of retained menses, merely from feeble powers of the system, is but small; for, looking on the amenorrhœa in these instances merely as a symptom of the general state of the system, I have not made notes of what were in fact little else than cases of torpid chylopoietic function and defective nutrition.

April 29, 1839. Miss E. W., æt. 15½. Pale; delicate looking; feeble circulation; cold extremities; much pain at the summit of the head; occasional giddiness and faintness, on rising suddenly, or after stooping; tongue pale and flabby, indented at the edges; little appetite; does not appear to have any great degree of gastric derangement; bowels regular.

R Quinini disulph. gr. ij., extract. lupuli gr. vi. M. Ft. pil. ij. o. n.

R Tinct. ferri ammonio-chloridi guttas xxv. bis die ex aquâ sodaicâ.

June 19. Has improved greatly in health and strength, since last report—no headaches.

R Ferri sulph. gr. i., ext. lupuli gr. iv. M. Ft. pil. j. mane et nocte sumenda.

She left town shortly afterwards to stay in the country, and was directed to continue the above medicine for a considerable time. Her health continued to improve, and the catamenia made their appearance in August.

It is unusual in cases of retention of the menses, to find so little derangement of the stomach, liver, and bowels, as in this instance. So far from the early treatment of the case requiring an active course of alterative and purgative medicine, I was able to put her at once on the use of quinine, with a very mild form of chalybeate, which I have found particularly useful from its being in so palatable a form, and from its agreeing so remarkably well with an irritable or feeble stomach. Twenty-five drops of the tincture of the ammonio-chloride of iron, in half a tumbler of soda water, form an excellent imitation of the celebrated *wein-brunnen* of Schwalbach—one of the most agreeable and effective chalybeate mineral waters known. The taste of the iron scarcely becomes perceptible, until we reach thirty drops for a dose, and even then by no means so much so as to be unpleasant.

In these cases, our object is not to force the system to the point, but to lead it towards the desired end in such a manner as shall enable us to attain our object with the greatest ease and safety. All violent measures retard, rather than promote, the maturation of these various processes, on which the establishment of the catamenial discharge essentially depends; for, by

interfering with the great business of development, in which the system is now so deeply engaged, we derange it more or less, and delay the completion of the very function which we are expecting with so much impatience. It was on these grounds that I prescribed so small a dose of sulphate of iron, when my patient left town, having reason to think, from the absence of the ordinary precursory symptoms of approaching menstruation, that she would still be some time before the discharge appeared, and that, therefore, she would probably continue this medicine for a considerable period.

The following case, although one of suppression of the menses, resembles essentially one of retention, inasmuch as they had appeared but a short time, and again ceased from deranged assimilation and defective nutrition, complicated with rapid growth.

June 28, 1841. Miss C. M., æt. 16. Brunette; tall and gawky; sallow; timid expression; eyes, face, fingers, &c., twitching incessantly; narrow jaws, large hands and feet; much gastro-enteric derangement; obstinate constipation; torpid liver; foul tongue; irregular appetite; great lassitude and inability of exertion; small, feeble pulse; cold extremities; moist and clammy skin; flabby muscles. Catamenia suppressed for some months.

R Hydrarg. chloridi, ext. hyoscyami, aa gr. v., h. s.

Let her take a laxative the next morning, and the following evening.

R Pil. hydrarg., extr. colocynth. co., aa gr. v., o. n.

R Acidi nitrici dil., tinct. hyoscyami, aa 3 ij., Syrupi aurantii 3 ss., infus. gentianæ co., 3 vij. Mix. Ft. mistura cujus sumat. coch. magn. ij. ter die.

July 2. Bowels have acted, but not satisfactorily; she states, however, that she is somewhat better.

R Hydrarg. chloridi gr. j., extr. colocynth. co., gr. iv. Ft. pil. j. om. nocte.

Let her take a teaspoonful of common salt, and half an one of carbonate of magnesia, every morning in half a tumbler of water. Let her sponge her back and loins with cold water, and use active friction afterwards with a towel, impregnated with salt.

July 5. Catamenia have returned without pain; feels very much better; the expression of the face, noticed in the first report, is remarkably altered; complexion much improved. Pergat.

August 12. Since the last report, has been staying in the country, but does not seem to have made the decided progress which might have been expected; although she is evidently much better, she still feels weak, and the circulation is very feeble.

R Ferri sulph. gr. ij.; extracti colocynth. co., extr. lupuli, aa gr. iv.—Mix. Ft. Pil. ij, o. n. sumendæ.

R Mentha viridis, aquæ distillatæ, aa 3 vss; acidi sulph. dil. M. x. syrupi rhæados, 3 ss. magnesiæ sulph. 3 i.—Mix. Ft. haust. primo mane per duas vias sumendus.

August 21. Bowels regular; health improved. Pergat.

During the following year, I again saw her; the symptoms of general torpidity and derangement of the system had in great measure returned.

December 18, 1842. Menses have continued regular, but there is much torpidity of the circulation; extremities cold and purple; the skin moist and clammy; much pain and aching of limbs; turbid urine; bowels confined; the restless twitching of the face, we noticed in the first report, has increased to a state little short of chorea.

R Ext. aloes aquos., 3 ij.; ext. hyoscyami 3 iiss.; mastiches gr. xij. M. Ft. pil. xx., sumat. i.—ij., paulo ante prandium.

R Hydrarg. chloridi gr. ij., ext. colocynth. co., gr. viij. M. Ft. pil. ij. h. s.; semel in hebdom. sumend.

R Pulv. guaiaci, magnesiæ carb., aa. gr. x. bis die ex aqua c. sp. ammon. arom. guttis xxx.

This patient had made a rapid start in her growth shortly before the suppression of the menses; she had, in fact, outgrown her strength;

there was a large frame with feeble powers; every symptom indicated great torpidity and want of functional activity: the system seemed, as it were, clogged from the unhealthy state of the circulation, and required a powerful stimulus to rouse its various excretory organs to throw off the load which had been accumulating. I need hardly say that there is no medicine like a full dose of calomel for producing these effects; it excited the liver and bowels to pour forth a large quantity of excrementitious matter which, from its unhealthy character, must evidently have been a source of much irritation and injury to the system.

The nervous irritability, almost amounting to a state of chorea, was I presume in great measure referrible to this cause. No one pointed out the effects of active purgative medicines, in these complaints, so strikingly as the late Dr. Hamilton, of Edinburgh, to whose admirable work on the effects of these remedies, the profession will ever be greatly indebted.

These are the cases which, when under the use of certain mineral waters, as Marienbad, &c., will go on for weeks to pour forth a quantity of dark, unhealthy, excrementitious matter from the bowels, to an extent which would almost appear incredible; and, bearing this fact in mind, I ordered her a saline aperient at my second visit, which may probably excite a smile in some of my readers. The combination of common salt with carbonate of magnesia, is, however, a medicine of which I have good reason to speak well, in procuring the discharge of dark pulaceous evacuations, which apparently do not consist so much of the previous contents of the bowels from undigested matters, as of the produce of secretion into the bowels. It is on these grounds that I have recommended elsewhere* the use of sea water, to be taken internally as a mineral water, and the reader will easily perceive that the above combination of magnesia and common salt is a rough approximation to it. Few laxatives that I know of produce such a sensation of lightness and general comfort, and such an improvement from the dull sallow hue of the skin to a clear and healthy colour, as saline combinations, into the composition of which common salt enters pretty largely, and when preceded by a little mercurial medicine, I need hardly say the effects are greatly increased.

The last report, fifteen months after the previous one, shows a considerable return to her former state; the catamenia, however, had continued regular, and she had continued to use occasionally some of the medicines which I had prescribed. The torpid state of the circulation, the aching limbs and turbid urine, showed how defective was the process of assimilation. It was partly on these grounds, and partly from bearing in mind the season of the year, which induced me to use guaiacum and magnesia, and to assist the laxative effects of the medicine by a smart purge of calomel and colocynth once a week.

The next case which I propose to give, will be for the purpose of illustrating those forms of amenorrhœa, where the system makes a considerable periodic effort, but which, instead of being directed to the uterus and effecting a discharge of the catamenia, becomes mischievous by assuming the character of congestion or inflammation in other parts.

October 14, 1840. Miss G., æt. 25. Brunette; tall, stout, and phlegmatic; pale; easily fatigued; pulse feeble; cold extremities; pain of forehead and vertex; much dyspeptic derangement; bowels confined; leucorrhœa of some standing; amenorrhœa since April; appetite depraved, or, at least, she has accustomed herself during a long tour upon the continent to live entirely on unwholesome messes of vegetables; drinks, lemonade, eau sucrée, &c. eating no animal food, keeping late hours, and taking little or no exercise; in diet, habits, dress &c., she evidently endeavours to be as French as possible.

R Pil. hydrarg. extr. colocynth. co., aa gr. v. o. n.

R Acidi nitrici dil., tinct. hyoscyami, aa 3 ij.; syrupi aurantii 3 ss., infusi gentianæ co., 3 vij.

* On Dysmenorrhœa and other uterine affections, &c., p. 72.

Mix. Ft. mistura cujus sumat cochi. magn. ij. ter die.

October 21. States that she is not better; she does not, however, complain of headache. I cannot induce her to take a little simple animal food instead of the vegetable diet above mentioned. Bowels regular; is unable to say when the next menstrual period ought to be.

R Ferri sulph. gr. ij., ext. lupuli, gr. vj. Mix. Ft. pil. ij. o.n. sumendæ.

R Tinct. ferri ammonio-chloridi guttas xxv; ex aq. sodaicâ bis die.

November 17. Has been continuing the same medicines, and evidently improving in health and strength; was seized yesterday with severe pain and swelling of the left labium, preceded by pain of back, and other molimina menstruationis, which disappeared as the swelling came on. Hoping to induce a discharge of catamenia, I desired her to put her feet into hot water and afterwards to use a hot hip bath.

R Pil. aloes co. ext. hyoscyami, aa gr. v.

In case these means did not produce the desired effect, I directed her to apply leeches.

November 18 (vespere). Suffering acutely; the swelling is larger and harder, with much tension and throbbing; leeches were not applied until this morning, and then with only temporary relief; slight febrile action. I ordered hot poultice of chamomile flowers, over which I directed a little liq. opii. sedativ. to be sprinkled.

R Pil. hydrarg., pulv. Jacobi veri, aa gr. v; morphiae hydrochlor. gr. ½. Mix. Ft. pil. ij. statim sumendæ.

November 19. Shortly after my departure last night, on rising to apply the chamomile poultice, the pressure of the thighs burst the abscess, and nearly two tablespoonfuls of pus were discharged with great relief to her symptoms; slept well; did not take the pills; pulse good.

Rep. cataplasma; rep. tinct. ferri ammonio-chloridi in aquâ sodaicâ; meat diet and a little wine if she likes it.

December 15. Returned to the use of the steel pills which I prescribed in October, and has continued them ever since; feels stronger and better; has pain of back and abdomen; the period at which the catamenia ought to appear is near at hand.

R Pil. aloes co., ext. hyoscyami, aa gr. v. o.n.

R Pulv. aloes socotri, liquor. opii sedativ. m. xx. Mist. acaciæ, 3ss; aq. rosæ, 3iiss. Mix. Ft. enema cujus demidium in rectum injiciatur, superveniente dolore, et rep. p.r.n.

January 12, 1841. The menstrual period arrived at the time expected; it began with pains of back and loins, which suddenly ceased, and were followed by great pain, throbbing and heat of head, which was succeeded by bleeding from the nose for two successive mornings. She thinks she lost two tablespoonfuls of blood at the first attack; this produced great relief; the following day the discharge was much less; has been improving in health and strength ever since, complexion is becoming of a much more healthy colour. Pulse still weak; expects daily a return of the menstrual period. She states that the aloetic injection produced no heat, &c., in the rectum, but I strongly suspect she did not use it.

R Pil. aloes co., gr. x. o.n.

R Pulv. secalis cornuti, 3ss., sodæ subborat., 3ss, aq. cinnamomi 3iiss. Mix. Ft. haustus. To be taken the moment she feels the pain in her back; let her put her feet into a hot mustard foot bath, and afterwards let her use a hot hip bath.

January 18. She perceived a slight pain of back on the 16th, but not being able to have the hot water when she wanted it, she neither used the bath nor took the medicine, although she had had it made up in readiness; the following day (17th), during an intense frost, she was so imprudent as to go to church, just whilst the *nisus menstruationis* was commencing; her feet and legs became quickly benumbed by the cold, she was seized with intense pain of head, and loss of memory, followed by numbness and pricking of the right arm and leg, and ultimately became insensible; she was taken out of church and carried to a neighbouring house, where she remained in this

state for some hours; she was seen by a French physician, who leeches the thighs, applied sinapisms to the feet, gave her an active purge, and followed it with some diaphoretic saline. I met him the next day, and finding that the pulse was full, and that there was still headache, we directed the medicine to be repeated; as, however, he continued his attendance, I withdrew.

I have classed the two last cases, which are of suppressed menses, with those of retention, because arising chiefly from the same causes, viz.: torpid circulation and defective assimilation; the treatment which they required was much of the same nature as that of the previous ones.

In the present case the patient, both from her habits, and little disposition to follow my directions, gave me but a poor chance of affording the relief I might have done under more favourable circumstances. Her habits were those of confirmed indolence, and a constant state of more or less dyspepsia was present, whether a cause or a result of the peculiar diet which she had chosen to adopt, is perhaps of little matter. During the previous summer she had visited Athens, Constantinople, &c., but not even the interest connected with these celebrated places had sufficed to rouse her to early rising or active exertion, still less to a healthy appetite for wholesome food.

The suppression of the menses appears to have been the result of general debility arising from defective nutrition; for we see that as soon as the powers of the system began to improve under the use of tonics, &c., a vigorous menstrual effort was made, though unfortunately not in the right direction.

I cannot but attribute, in great measure, this irregularity in the returning menstrual function, to the torpid and atonic state of the circulation as favouring local congestion and inflammation; and think that if the system had gained more healthy tone, and the circulation had been roused to a greater degree of activity, even by a moderate degree of exercise, the abscess of the labium would not have taken place. As it was, the leeches were not applied until twelve hours after the pediluvium and hip bath had failed. It is remarkable how completely all the warning pains and symptoms of the approaching catamenia disappeared, as soon as the inflammation of the labium began to show itself; little now remained to be done, but to moderate the attack as far as possible. Cold applications, in this metastatic state of the circulation, might perhaps have brought on a discharge of menses, but they would also have run the risk of inducing abdominal inflammation, as peritonitis, enteritis, &c. It might be a question, how far leeches to the anus might have been preferable. If other circumstances had permitted it, a stimulating injection of liquor ammoniæ in milk, as recommended by Dr. Locock, might have been thrown up into the vagina, so as to have directed the *nisus menstruationis* more immediately to the uterus. These attempts, however, at such a critical moment are not altogether without risk, and finding that an attack of vicarious inflammation was establishing itself in such close vicinity to the uterus as the labium, I think that I was justified in merely using such means as should moderate its violence, when it was evident that the hot semicupium, &c., had failed in bringing on the discharge.

She continued to improve in general health and strength during the interval which succeeded, and, on the approach of the next period, I made arrangements which I hoped would have ensured better success than proved to be the case. Besides giving the dose of pil. aloes co. every night just at this time, I determined to put in practice a plan recommended to me by Professor Schonlein, viz.: of injecting a quantity of powdered aloes suspended by mucilage into the rectum. I have great reason to doubt if she took the pills, and am pretty certain that the injection was not used. It would perhaps have been better if I had assisted the action of these aloetic medicines by the mixture of secale cornutum, which I prescribed at the next period, although I fear that it would probably have had as little chance of being used. The

second began with well marked molimina menstruationis, and I feel convinced that if they had been moderately encouraged by the hot semicupium and foot bath, and by the aloetic medicines which I prescribed, the sudden translation to the head and bleeding from the nose could scarcely have happened.

The approach of the third period was marked by an act of folly for which I was wholly unprepared. Having neglected the hot semicupium and mustard foot bath, and also the medicines which I had ordered, even although by her own account she had felt distinct warnings that the time was come, she actually sat out a long service at church during an intense frost, her feet and legs became icy cold, her head intensely painful, followed by great cerebral congestion and insensibility.

ON THE PROXIMATE CAUSE OF TUBERCLE AND TREATMENT OF PULMONARY PHTHISIS.

BY J. H. TOSSWILL, ESQ., SURGEON, LEICESTER.

To the Editor of "The Medical Times."

SIR,—The opinions I entertain respecting the origin of tubercle, I hope to develop in the course of the following pages; but I am desirous of anticipating the declaration of a fact, whose truth it will be my endeavour subsequently to substantiate, by stating the conclusion to which I have arrived with reference to the true and proximate cause of tubercular deposit, as consequent upon the deposition of the insoluble carbonate and phosphate of lime entering into the chemical composition of tubercle.

I am, Sir, your obedient servant,
J. H. TOSSWILL.

OF THE ORGANS CONCERNED IN THE EXCRETION OF CARBON.

There are certain organs connected with animal life, the results of whose functions are collectively centered in one end. It matters not by what operation such results are brought about, the end effected is the same, and the purpose identical. The intention of nature seems to be this—that each organ engaged has a certain amount of function to perform, which, when performed in obedience to this intention, constitutes a healthy condition of the organ so engaged. Such healthy condition of organism, occupied in effecting the same results, must be considered as a state of equilibrium; and when the performance of any one function preponderates over the others, it must be presumed that this state of equilibrium is disturbed, so that whilst certain organs are reduced positively or relatively to a condition of function below that which is natural to them, that organ whose functional powers is increased, is engaged in an amount of duty superior to that for which it was originally designed.

When an organ has become diseased from any cause, and when, consequently, its functions have ceased to be carried on in their natural manner, the other parts of the animal structure engaged in the same operations take on increased energy, and effect, by their increased activity of co-operation, that intention which would otherwise have been interfered with by the diseased condition of the organ affected.

When the increased activity of the organs, co-operating in the production of the same function, an activity induced by the diseased condition of one of them—is unable to accomplish the amount of function essential to life—the animal perishes. Death, in this instance, is not absolutely the result of disease and functional derangement in one particular organ; it likewise results from the non-ability which other organs, engaged in the production of the same intentions, possess of making up by their joint efforts that amount of function, which nature has predetermined must be accomplished in order to preserve life: short of this, a deranged condition of health *merely* is the consequence.

When any individual organ performs more than its natural amount of function, it is generally at the expense of others fulfilling the same purpose, and its function becomes disordered; if this be

carried still further, the disorder becomes organic, and permanent diseased condition of function is established.

The decarbonisation, or rather the oxygenisation of the blood, is the result of the co-operating functions of numerous organs actively engaged in the production of the same end.

The intention of these various functions is the elimination of carbon and hydrogen from the system, and the absorption of oxygen into it. As a result of these intentions fulfilled, animal heat is generated, and a venous circulation is changed into an arterial fluid.

The generation of animal heat must be regarded as the result of chemical changes, and not as the absolute function of any organ. The true functions of any organ where this phenomenon occurs, being the *production*, and not the *result* of chemical changes.

The organs concerned in the excretion of carbon from the body are—the Capillaries—the Liver—the Lungs—the Skin—the Kidneys—and the Bowels.

The distinctive part which each of these organs plays in the evolution of carbon from the system, as well as the general result, will be best understood by a reference to the phenomena of the circulation.

Two great systems of functions co-exist in the animal body, which, during life, appear in continual operation. The functions of one consisting, in the application of nutritious matter taken *into* the body—those of the other, in the excretion of waste and innutritive material from the body.

The nutritious matter taken into the system, in the shape of food, must *ultimately* be regarded as nothing more than a material for the application of oxygen. It is deposited as a part of the living body: it is eliminated as waste material, under various conditions and combinations with oxygen; so that, in fact, the simple intention of every function in the body may be classed under two heads: first, the application of food as a means of nutrition or deposition; secondly, the application of oxygen as a means of excretion or waste.

In the production of these intentions, as I have before observed, two great and opposite powers appear to operate; the one recognised as vital force, the other as chemical affinity. When food is taken into the stomach, it undergoes digestion. In the duodenum, it mingles with the bile, and becomes chyle. Both chyme and bile are absorbed and enter the circulation as chyle, whilst the effete and innutritive part of the food passes from the bowels as excrementitious matter, in combination with mucus and other secretions from the lining membrane of the intestinal canal. In the lungs, the carbon of the bile, together with hydrogen, combines with the oxygen of the air, and carbonic acid and vapour of water is formed. The elements of the food taken contain in themselves all the elements of the tissues, which are to be redeposited. The new blood circulates—the azotised portion of the food depositing new material, to make up for waste resulting from the "metamorphosis" of organic tissues—the non-nitrogenised forming fresh combinations (as fat and bile), evolving heat in the act of combination, by a process the result of such new combination, and independent of the function of the lungs: If oxygen be not in quantity to consume the elements of these non-azotised principles, they are deposited in the cellular tissue as fat. The venous circulation, as it passes back to the heart, undergoes the filtration of the liver, which separates the carbon from it, in the condition of bile, to be poured anew into the duodenum, there to mingle with fresh chyme. Whilst the liver thus acts as an organ which secretes carbon from the venous blood, the kidneys perform a similar office as regards the arterial fluid, eliminating from it the nitrogen which has been thrown off or parted with, from the body, and which reappears in the urine.

Whilst the liver and the lungs are thus materially dependant on each other, great changes likewise occur in the capillaries, by means of the blood-globules. These bodies contain iron, which arrives with the venous circulation at the lungs, in the condition of a carbonate of the protoxide; hav-

ing in the lungs parted with the carbon to the atmosphere, in the form of carbonic acid, they absorb oxygen and assume the character of peroxide of iron in the arterial circulation; arriving at the capillaries, they meet with that carbon, the result of the metamorphosis of tissue; this they combine with, giving off a portion of their oxygen to form carbonic acid, which, uniting with the iron in its reduced form, constitutes a carbonate of the protoxide of iron, evolving heat in the change. As carbonate of the protoxide, these globules return to the lungs, where they commence anew those changes we have just described. Every portion of the decomposed tissues, which escapes oxygenisation in the capillaries, is sent back into the circulation to be eliminated by the liver in the shape of bile to be consumed ultimately in the lungs.

(To be continued.)

EXPERIMENTS ON THE FORMATION OR SECRETION OF CARBON BY ANIMALS, THE DISAPPEARANCE OF HYDROGEN AND OXYGEN, AND THE GENERATION OF HEAT DURING THE PROCESS.*

By ROBERT RIGG, F.R.S.

(To the Editor of the "Medical Times.")

SIR,—In a former communication, it was described how experiments may be made which prove that animals secrete carbon. On this occasion, I purpose describing experiments, from which it may be inferred that this formation or secretion of carbon is accompanied with the disappearance of hydrogen and oxygen, and the generation of heat.

Two young mice, the one weighing 210 and the other 218 grains, were placed in a round wire trap, five inches in diameter, and supplied with bread and water only. During the first six weeks, they were supplied each day with 110 grains of bread slightly moistened with water, and containing 29.7 grains of carbon. The mean weight of carbon per diem in the respired air given off during this period was 38.8 grains. The animals increased in weight respectively to 242 and 268 grains.

Desirous of reducing the weight of the carbon comprised in these animals as low as possible, without depriving them of life, they were placed under experiment for eighty-four hours, fed daily with only 24 grains of bread made into a thin pulpy mass with 50 grains of water, a mixture which has a very reducing effect upon this kind of animals. They were also placed between the hours of five, a.m., and ten, p.m., at intervals of half an hour, near the top of an inverted glass jar, content 206 cubic inches, atmospheric communication being cut off by mercury. During the first day they were kept in this situation for half an hour, and during the rest of the period for an hour each time.

In the morning, when the animals were in a state of repose, the volume of carbonic acid they gave off was comparatively small. In the night, when they were always most active, the volume was comparatively great. The mean volume was for the

	Per hour.	Per diem.
First 24 hours,	8.9 cubic in.	213.6 cubic in.
Second „	6.6 „	158.4 „
Third „	5.4 „	129.6 „
Fourth 12 hrs.,	5.0 „	60.0 „

Total, 561.6 cubic ins.,

containing 73.4 grains of carbon. The weights of the two animals were, after the first 32 hours, 205 and 217 grains; and at the expiration of the 84 hours, 178 and 194 grains—the one having lost 64 and the other 74 grains in weight.

For six days from this time, they were supplied, three times a day, with as much bread in its usual state of moisture as they would eat, and as much water as they would lap from a deep tub. In the six days, they consumed 780 grains of bread, containing 210.6 grains of carbon, and from 100 to 110 grains of water; increased in weight to 256 and 276 grains, and imparted to the atmosphere 249.7 grains of carbon. The increase in weight,

and the weight or carbon in the respired air, in each 24 hours, was as under:—

	Weight of Mice.	Carbon in Respired Air.
First 24 hours,	227 and 242 grains.	33.9 grains.
Second „	230 and 248 „	39.5 „
Third „	240 and 255 „	43.4 „
Fourth „	246 and 259 „	43.3 „
Fifth „	252 and 268 „	44.0 „
Sixth „	256 and 276 „	45.6 „

249.7 grains.

At the end of the sixth day, the heavier animal, which was of comparatively quiet habits, was killed, by placing it in a small tube standing over mercury. It was then exposed to a temperature varying from 200° to 220° for two days, by which it was reduced in weight to 86.6 grains. The whole animal was reduced to one mass in a mortar, and an average sample, on being analysed with oxide of copper, gave for the constitution of the

Dry Mouse.

	Per Cent.	Whole Weight.
Carbon	53.02	45.91
Hydrogen	7.19	6.23
Oxygen	18.50	16.02
Nitrogen	11.19	9.69
Ashes	10.10	8.75
	100	86.6

Mouse before drying.

Carbon	45.91 grains
Hydrogen and Oxygen as in water..	207.45 „
Hydrogen in excess	4.20 „
Nitrogen	9.69 „
Ashes	8.75 „
	276

The other animal, which was of active habits, was allowed to remain at rest two days, having as much bread and water as it would consume, but did not increase in weight. It was afterwards put upon a very sparing quantity of food, consisting of ten grains of bread and ten grains of water, each day for four days, and kept one day and six hours without any food. During this period, it was kept as above described within a glass jar, atmospheric communication being cut off by mercury, and gave the following results.

	Weight of Mouse.	Decrease.
First 24 hours.....	235	21 grains.
Second „	217	18 „
Third „	196	21 „
Fourth „	182	14 „
Fifth 30 hours.....	169	13 „

	Food.	Carbon in the Respired Air.	Increase.
None.		21.3	21.3
2.7		15.9	13.2
2.7		11.8	9.1
2.7		7.7	5.0
2.7		7.0	4.3

The animal, in this reduced state, was killed and dried in the manner above described, when its weight was 51.5 grains, and was constituted of the

Dry Mouse.

	Per Cent.	Full Weight.
Carbon	43.70	22.50
Hydrogen	5.82	3.00
Oxygen	20.72	10.67
Nitrogen	13.36	6.88
Ashes	16.40	8.45
	100	51.5

Mouse before it was dried.

Carbon	22.50 „
Hydrogen and oxygen as in water..	129.50 grains.
Hydrogen in excess	1.67 „
Nitrogen	6.88 „
Ashes	8.45 „
	169

These experiments were conducted in the following manner. All foreign supply of food was cut off, by keeping the animals in a wire trap, out of which they were never taken, except for the purpose of being weighed, which was performed in a few minutes. They were fed with average

samples of crust and crumb of bread, weighed when new, and kept in its moist condition under an inverted glass, which also covered a cup containing water. These samples of bread were not separately analysed; but the highest per centage of carbon, obtained by analysing other samples of this kind of bread, was calculated for in these experiments. The weight of carbon in the respired air was obtained by calculation, from the volume of carbonic acid, which was determined by removing, with a syringe, samples of the air from within the inverted glass jar, at the end of each period of the animals' confinement in the limited atmosphere, transferring this air to an apparatus standing over mercury, in which 1-1000 of its volume could be read, absorbing the carbonic acid by liquor potassæ, making the necessary bar. and ther. corrections, and an allowance for the carbonic acid in the common atmosphere of 1-200 of its volume.* The weight of the animals was obtained by placing the trap in a gauze bag, in which they were separately weighed after removing the trap. The trap was then cleaned, and the animals returned to it again. The weight of each element was determined by a method of ultimate analysis, which combines expedition with ease and accuracy.

By placing the results thus obtained in tabular forms, those features which more particularly claim our attention at this time will be brought more prominently before us.

	Weight of mice.	Weight of bread.	Weight of Carbon in		Increase.
	grs.	grs.	Bread.	Respired Air.	grs.
At the commencement..	210				
After six weeks moderate supply of food..	213				
After 84 hours limited supply of very reducing food....	212	4623	1247	1630	383
After 6 days abundant supply of food..	268				
After 5½ days sparing supply of food, 1 mouse only.	178	84	22.7	73.4	50.7
	191				
	256	780	210.6	240.7	39.1
	276				
	169	40	16.8	63.7	52.9
Total increase 525.7					

From what is shown in this table, it may be inferred that these animals have the power of forming or secreting carbon, and that this power is constant, whether the animals are kept upon a sparing or plentiful supply of food. The total weight of carbon, secreted during the period they were under experiment, forms 99 per cent. of their greatest, and 141 per cent. of their least, united weights; and when the weight of carbon in the respired air is compared with the weight of the carbon in the food consumed, they are to each other: carbon in the food consumed 100; carbon in the respired air 136.

That this secretion of carbon is effected by the disappearance of hydrogen and oxygen, is inferred rather than directly proved by the experiment. We cannot, as with plants, in proving that carbon and nitrogen are vegetable secretions, keep the animals in the same limited atmosphere, for many days or weeks together. When the evidence, however, sought out of these experiments, is taken in conjunction with that of other experiments, which prove that the change effected upon the atmosphere, by animal respiration, is principally confined to that of changing a volume of atmospheric oxygen into a volume of carbonic acid, we may safely draw the inference that some of that hydrogen and oxygen, which forms a portion either of the food of the animal itself, or of both, undergoes some process of natural chemistry, having this secreted carbon as a result. This will be more fully illustrated by calculating for the weight of the elements in the two animals, at the different periods, agreeably to the results

obtained by the analysis, and by drawing lines of comparison in the following manner, viz.—

The two mice.	Carbon.	Hydro. and oxy. as in water.	Hydro. in excess.	Nitrogen.	Ashes.	Total.
At the commencement..	71.2	316.6	6.1	17.9	16.2	428
After six weeks.....	81.8	382.4	7.7	17.9	17.2	510
After eighty four hours..	49.5	256.4	3.7	15.2	17.2	327
After six days.....	39.5	399.5	8.1	18.7	17.2	532
After five days and one quarter, one mouse...	22.5	122.5	1.7	8.4	8.4	160

Which, upon a recapitulation of the carbon, the hydrogen and oxygen as in water, and the hydrogen in excess, gives for the

First six weeks' moderate supply of food.

At first.	Carbon.	Water.*	Hydro.
Animals	71.2	316.3	
Bread	1247.0	3234.0	6.1
Water		630.	9.2
At last:			
Animals	84.8		
Respired air	1630.0		7.7
	+ 396.6	- 3797.9	- 7.6

Eighty-four hours, reducing food.

At First.	Carbon.	Water.	Hydrogen.
Animals	44.8	382.4	7.7
Bread	22.7	58.0	3
Water		170.0	8.0
At Last.			
Animals	49.5		
Respired Air	73.4	286.0	3.7
	+ 15.4	- 324.4	- 4.3

Six days' abundant supply of food.

At first.	Carbon.	Water.	Hydrogen.
Animals	40.5	286	3.7
Bread	210.6	546	2.6
Water		100	5.3
At last.			
Animals	83.5		
Respired air	249.7	333.2	8.1
	+ 78.1	- 532.5	+ 2.8

Five days' and a quarter very sparing supply of food.

At first.	Animal	Carbon.	Water.	Hydrogen.
	42.6	53.1	192.6	3.9
Bread	10.8		28	
Water			40	2.6
At last.				
Animal	22.5	86.2	120.0	1.7
Respired Air	63.7			
		32.8	131.6	2.2

From these results we may fairly draw this inference—that the secretion of carbon, by animals, is accompanied with the disappearance of water and hydrogen; and these results would have appeared in a still more favourable light if the excrementitious matter had been taken into account, which, in these experiments, was always mixed with small crumbs of bread. This matter was not analysed, but its quantity, when the animals are plentifully supplied with food, forms about 7 per cent. of the weight of the bread, and contains about 35 per cent. of its weight of carbon. It formed a considerable portion of the weight of the food consumed during the 84 hours, when the animals were supplied with food of reducing tendency, but a very small proportion when the animal was fed with dry food. If we add to the plus quantity of carbon, in the above table, as much carbon for that contained in this matter, as will make the weight of the secreted, during the first six weeks, 500 grains, during the eighty-four hours, 24 grains, during the six days, 96 grains, and during the five days and a quarter, 35 grains, we may consider this body fairly represented in these experiments.

Until we have other experimental evidence, which more fully proves that, when animals secrete carbon, hydrogen disappears in a proportion exceeding that in which it forms water, let us, as in this instance, calculate as if water only disappeared in these experiments: we shall then have in the

* Animals and birds die in a few hours, on being kept in an atmosphere from which all carbonic acid is immediately removed.

* A considerable portion of water would evaporate from the bread, when in the trap, and before it was eaten.

	Hy. and ox. in the animals, bread and water.	Carbon secreted therefrom.	Hy. and ox. passed off by other means.
In first 6 weeks..	3798	500	2398
„ 84 hours..	324	24	300
„ 6 days ..	533	96	437
„ 5 days & ¼ (1 mouse) }	131	35	96

The secretion of carbon resulting from the disappearance either of hydrogen and oxygen, in the proportion in which they form water, or from the former in a higher proportion, our knowledge of the specific heats of bodies, leads us to infer that heat will be generated during this secretive process; and, by calculating for the heat generated by the formation of the carbonic acid in the respired air, and for that generated by the formation or secretion of the carbon in these experiments, we have the two heats bearing the following proportions:—

	Heat generated by the formation of the carbonic acid.	Heat generated by the secretion of the carbon.
In the 6 weeks ..	100	325
„ 84 hours..	100	346
„ 6 days ..	100	412
„ 5 days & ¼	100	590

Hence, we infer that these animals generate from three to six times the heat, by the formation of the carbon they secrete, as by the formation of the carbonic acid they respire; and that this secretion of carbon, and, consequently, generation of heat is influenced by the quality and the quantity of food, exertion, and quiet or active habits.

I might further observe, that since all my experiments, whether made with animals or with birds, prove that carbon is secreted by them, in proportions varying with the circumstances under which they are placed, I conclude that the formation or secretion of carbon is essential to the support of animal life, and that it is a great source of animal heat.—I am, Sir, your obedient servant,

ROBERT RIGG.

Greenford, Middlesex, Sept. 27th, 1844.

DR. COSTELLO'S CASE OF LITHOTRITY.

(To the Editor of the "Medical Times.")

As I am sure Dr. Costello would not willingly mis-state or have a false construction put upon any case, but, on the contrary, would gladly have an opportunity of knowing and imparting the whole truth, I take the liberty of making a few additions to his first case—the one from Leeds—as reported in his paper in the *Medical Times* of last week, which may, perhaps, tend to elucidate it. The last few weeks of his life, during which he was entirely confined to bed, I was resident in the house, in constant attendance upon the patient. For two years he had passed no urine, save through a flexible catheter, to the introduction of which there was no obstacle, as it was done by a poke, giving but little pain. At a *post mortem* examination, conducted by Dr. Pyemont Smith and Dr. Mayne, Dr. Hobson and myself being present—the latter having been in attendance a short time—our first attention was, of course, directed to the bladder, which, to our utter astonishment, contained neither a stone nor a particle of gravel, nor sac, nor pouch, but was perfectly healthy in structure in every part, without the slightest mark of any morbid action. The prostate gland was much enlarged, and cartilaginous throughout. As there was a flow of pus from the right ureter, it was traced upwards to its origin in the corresponding kidney, where was found—what was never suspected—a considerable chronic abscess, which, from certain data, had probably existed some fifteen years. The insertion of this in your next number would greatly oblige,

T. HOWITT.

Lancaster, 25th Sept. —

The preceding note, which, through the courtesy of the editor of the *Medical Times*, has been shown to me, refers to a case incidentally mentioned in my communication to the journal of the 21st instant. Mr. Howitt's account of the *post mortem* examination enhances the interest of the

case amazingly. Both Mr. Smith and myself were fully satisfied, by our examination of 1830, that there was a stone in the bladder. The result of the autopsy suggests two different explanations; the first, that the calculus existed at the remote period referred to, and was either voided without being perceived, and this supposes its being very small, or that it was disintegrated by the course of alkaline water he was then taking. 2. That we had both been deceived by the cartilaginous hardness of the prostate, and this is assuming the fact of such hardness, or alteration having existed for a period of 14 years, without interfering much with the patient's enjoyment of life. In either case, the fact makes for the argument I was then pursuing, namely, that, since the introduction of lithotomy, by operating, no deaths occur in cases where the symptoms are mild, or the existence of the stone doubtful.

The existence of the abscess in the kidney, presumed of so ancient a date, is highly interesting, as suggesting a further *rationale* of the symptoms referred to the bladder.

WM. B. COSTELLO.

10, Golden-square, 25th Sept., 1844.

OBSERVATIONS ON THE GENERAL CAUSES OF DROPSY.

To the Editor of the "Medical Times."

SIR.—I beg leave to offer the following remarks for your disposal, hoping they may throw some light on the causes of dropsy in general.

The pathology of dropsy is still in an unsatisfactory state; indeed, when we see so many different theories advanced respecting any subject, we may conclude that that subject is still open to much discussion.

The cause assigned by most authors is debility; however, the term debility does not explain anything; others say, that the dropsical effusion is caused by a deficient equilibrium between the absorbing and exhaling vessels; others, that the dropsy is caused by the retrograde action of the absorbent vessels, in the same way as the stomach throws back its contents in vomiting. These theories are certainly plausible and scientific, notwithstanding which, however, their correctness is very doubtful; others again say that the cause of dropsy depends on inflammation, which theory I believe comes nearest the truth of any, and yet it is not exactly the term which is most applicable, to define the general cause of the effusion of fluid into the cavities of the body.

The general cause, then, of every kind of dropsy, is a rupture of the membrane which forms the sac or cavity:—of the *peritonæum* in ascites; of the *pleura* in hydrothorax; of the *pia mater* in hydrops capitis; of the *tunica vaginalis* in hydrocele; of the *ovarian tunic* in hydrops ovarii; of the *pericardium* in hydrops pericardii; and so on of the eye, spine, &c. In anasarca, however, the cause becomes somewhat different, as the cellular membrane is a congeries of sacs communicating with one another; but still the cause of the effusion is much the same, and that is a rupture of the cellular membrane, by which a communication takes place between the urinary system and the general cellular membrane of the body; indeed it is very probable, that the above theory of deficient equilibrium is also applicable to this form of dropsy.

The *peritonæum*, *tunica vaginalis*, *pleura*, *pericardium* and *pia mater*, form a closed empty bag like a double night-cap, the inside of which is empty, and yet when it is folded or doubled into itself, it encloses the organ and at the same time lies on its outside; it is in this way, all the viscera lie behind and on the outside of the *peritonæum*, and yet they are all invested by it in a most beautiful manner. When fluids are taken into the stomach, they cannot enter the *peritonæum*, because that membrane is a closed bag, destitute of the porous structure which composes the skin, muscles, cellular tissue, &c., but the moment an opening is made into it from the urinary cellular system, the fluid flows rapidly into its cavity. The fluid in hydrocele is almost always identical with common urine, which proves that it is a mere infiltration, through

a rupture in the upper part of the *tunica vaginalis*, from the urinary system. The fluid in ascites sometimes contains chyle, sometimes almost pure water, sometimes bile, sometimes mucus and sometimes urine; now, what does all this variety prove, but that the rupture of the *peritonæum* has taken place by a lacteal vessel, by an adipose membrane, by a biliary vessel, by a mucous surface, or by an urinary branch? The fluid in *hydrops capitis* is always beautifully limpid, which proves that it is an extravasation from the neighbouring *cellulæ*.

It is generally believed that the fluids, which enter the stomach, enter the blood before they can leave the system; however, I presume that the following considerations will shew, that there is no necessity whatever to overload the bloodvessels to such a degree, as the blood and its vessels form but a part of the hydraulic department of the body.

The cellular membrane of the body forms a more important part of it, than is generally supposed. The urinary system is but a part of the common cellular system, which always abounds in aqueous vapour; this vapour exhales from the cellular system by the skin and by the lungs; but it cannot escape in that form from the interior of the body; therefore, an adequate provision is made in the urinary system; the cellular exhalation of all the abdominal organs is condensed (perhaps by the cold air in the lungs acting on the diaphragm and kidneys) and conveyed into the bladder, being the ultimate reservoir of the abdominal cellular system. Probably the kidneys serve as glands to secrete ureal soap, to lubricate and keep the ureters and bladder in proper order, in the same way as the liver secretes a biliary soap, to lubricate and keep the bowels in order; and that all the water in the bladder does no more come through the kidneys (and much less the blood), than the *feces* come through the liver; the bulk of the urine is the condensed vapour of the cellular system of the abdominal organs, tinged with a peculiar secretion poured into the pelvis of the kidneys from the *tubuli uriniferi*.

Having just glanced at a new view of the urinary conduit, I shall revert to the chief subject of these observations, viz. the cause of dropsy, and conclude it with a case of ascites.

While the serous cavities remain closed and entire, no fluid can enter them; but if, from inflammation, tubercles, hydatids, worms, or some other organic visceral disorder, there becomes an inlet for condensed vapour from the contiguous cellular system, the sac, that was closed and empty in health, becomes, in disease, a reservoir of condensed vapour;—dropsy is then a mere hydrostatic phenomenon.

CASE.—David Owens, æt. twenty-three, applied to me in April last; complained of the usual symptoms of ascites. Took jalap \mathfrak{ss} , with one-third gr. elaterium, every other morning for three times, also blue pill and squills with a diuretic mixture. After the first dose of jalap and elaterium, he was much relieved, but the others produced no effect; the swelling increased. He was tapped, by which means 22 pints of urinary fluid were evacuated. I then acted on the theory above advanced, by attempting the cure with pressure. I took three bands of adhesive plaster, each a yard long, and six inches broad: placed one on the epigastric region, which was drawn very tight, and the ends met at the back; the next was placed on the umbilical region, likewise drawn as tight as he could bear it, and the ends of which, also, met on the back; the third band of adhesive plaster was applied on the hypogastric region, with a hole cut in it opposite the incision in the *linea alba*; this also was drawn gradually as tight as he could bear it; and the remaining fluid was allowed to flow through the orifice which was left open, covered only with lint. In the mean time, the patient took oil of turpentine, incorporated with honey; in a mixture with nitrate of potash, spirits of nitre, and a saturated infusion (in spirit) of horse-radish; for a few days, the swelling threatened to return, and overpower the constitution in bearing the pressure caused by the bandages; however, all symptoms of dropsy soon went off and never returned.

In the cure of dropsy, pressure must be effec-

tually done or not attempted at all; and there is no doubt but there are many cases that would not bear the cure by pressure.

Should you think the above loose remarks worthy of a place in the treasury of the *Medical Times*, I should be glad if the little labour in writing them be not made in vain.

I am, Sir,

Your obliged humble Servant,
JOHN WILLIAMS.

Cerwen, September 24th 1844.

BRITISH ASSOCIATION.

THE meetings of the Medical Section have been this year of less than customary interest, and the attendance more than ordinarily thin. The unfortunate time chosen for the meeting—the very eve of the medical session—explains this circumstance in a great measure; while, on the other hand, it cannot be denied that medical men have not taken that interest in the society they might have done, and consequently, want that influence in its general management which the importance of their science would lead us *a priori* to have considered likely. The Medical Section held its meeting at the County Hospital, and was thus constituted:—

President.—Dr. Prichard.

Vice Presidents.—Dr. Belcombe; Dr. Goldie; Dr. Alison; Dr. Simpson.

Secretaries.—I. Erichsen, Esq.; Dr. Sargent.

Committee.—Dr. Hodgkin; Dr. Black; Dr. Stewart; Mr. Bevan; Dr. Laycock; Mr. Williams; Mr. Husband; Mr. James Allen.

Mr. Erichsen read a paper on the phenomena of asphyxia, for experiments on which the association had made a liberal grant. The following are the author's conclusions.—First That, although the pulsation of the respiratory movements has some influence in maintaining the circulation through the lungs in expulsion, yet that their arrest is not by any means the sole cause of the cessation of the circulation. Second, That a diminution in the force and frequency of the contractions of the heart, consequent upon the altered quality and lessened quantity of the blood circulating through its muscular substances, is one of the principal causes of the cessation of the circulation in asphyxia, as is evident from the fact, that when the force of the heart's contraction is maintained by a supply of arterial blood to its muscular substance, it is enabled to propel black blood through a collapsed lung. Third, That the obstruction which has been found to take place in the pulmonary and systemic circulation is due to the venous blood exciting the contractility of the minute divisions of the arteries and pulmonary veins, by acting upon their special sensibility. Fourth, That the cause of the stoppage of the circulation in asphyxia is, therefore, threefold, depending—first, upon the arrest of the respiratory movement; secondly, upon the weakening of the heart's action; and thirdly, upon the obstructions offered to the blood (propelled with diminished force) by the refusal of the pulmonary veins and minute arteries to receive venous blood. The treatment of the disease formed the subject of the second division of the paper, and the author's principal conclusions, so far as treatment is concerned, were that it was of much importance to expose the skin to the action of the air, so that its respiratory functions might be excited; and, secondly, that although it was impossible to restore the action of the heart by the inflation of the lungs with common air, yet that this might be accomplished after its contractions had entirely ceased by the inflation of oxygen gas. The author had determined this by a long series of experiments, and he exhibited the drawings of an instrument by which this object will be more readily accomplished. The author further stated, as the result of a considerable series of observations, that he had incontestibly determined the important fact that the inflation of air would arterialize the blood in the pulmonary vessels, and enable this arterial blood to find its way into the left auricle and ventricle after the action of the heart had entirely ceased. If this were done very

rapidly, as by the inflation of the lungs with oxygen gas, so that it might gain admittance before the heart's irritability was altogether extinct, the action of that organ might be restored, although its contractions had ceased.

After a brief discussion, Dr. G. D. Hemming read a paper on a peculiar disease of the tongue.

At the next meeting three papers were read, "On the Bitter Principle of Vegetables," by Dr. Perette; "On the Tape Worm," by Dr. Hodgkin; and "On the Comparative Frequency of Uterine Conception in Women," by Dr. Merriman. Our notices of these papers are postponed to a subsequent number.

The paper of most interest to the medical profession was the following:—

On the Reflex Function of the Brain, by T. Laycock, Esq., M.D. of York.

The author of this communication stated that, four years ago, he adduced arguments in proof of the opinion he then advanced, that the brain, although the organ of consciousness, was subject to the laws of reflex action, and that in this respect it did not differ from the other ganglia of the nervous system. He was led to this opinion by the general principle that the ganglia, within the cranium, being a continuation of the spinal cord, must necessarily be regulated, as their reaction on external agencies, by laws identical with those governing the functions of the spinal ganglia, and their analogues in the lower animals: and he was confirmed in this opinion by finding, after the investigation and collocation of known facts, that observations and arguments, like those satisfactorily adduced in proof of the existence of the reflex function of the spinal ganglia, may be brought forward in proof that the cerebral ganglia have similar endowments.

Previously to stating these facts, which in his opinion prove the doctrine he brought forward, Dr. Laycock gave a general summary of reflex phenomena, illustrating it by special facts. He showed that re-action to external stimuli, exhibited by motor acts, took place when the cerebral ganglia were removed by decapitation or bi-section of the animal, and that the motor acts thus excited were adapted to purposes conservative of the individual. He also showed that isolated sections of the spinal cord had similar endowments. The stimuli acting as excitors of these acts, although productive of the most perfect results when applied to the periphery, excited movements when acting on the trunk of the nerves, or on the centric axis. Hence, the divisions of reflex phenomena into those of centric or peripheral origin.

Although the reflex acts can and do occur altogether independently of sensation, or perception, or volition, yet the patient may be conscious of the irritation that excites, and may bring the will to bear upon, in a vigorous attempt to resist, them. Dr. Laycock took the phenomena resulting from irritating the incident excitor nerves on the soles of the feet, as an example. In individuals perfectly paraplegic, irritation applied to those nerves excited involuntary jerks of the legs, the patient however feeling no sensation, and being only conscious that his legs moved by seeing them move. But in individuals in health, the same kind of irritation excites the sensation of tickling, while it excites the same motor phenomena as in paraplegic patients, the movements being strictly involuntary, that is: the will, although strongly exercised, being unable to control them. Dr. Laycock stated that this fact was of some importance in understanding the nature of those reflex acts, which he intended to adduce as of cerebral origin; for, if any movements of this kind could be shown to be strictly involuntary, they must necessarily be considered as reflex excited acts accompanied by sensation.

Dr. Laycock noted especially the harmony of movements—the adaptation to a purpose—of the purely reflex acts, and maintained that they depended upon a special arrangement of the constituent fibrils of the spinal cord, or of the brain. A certain machinery was put in motion, when an irritation impinged on the cerebral axis; the series of changes commencing where the irritation first impinges, namely: on the posterior grey matter, and there exciting, what Dr. Laycock terms, deagenous changes. From thence, the series of

changes extend to the anterior grey matter, and kinetic changes (*κίνησις* α *κίνησις*, *moveo*) result, in virtue of which, the muscular movements are harmonized. In this way he thinks the reflex instinctive acts may be explained.

Dr. Laycock then stated the points he had to prove, namely: that the cerebral nerves are incident excitor, and the brain an excitor of movements analagous in all respects to the reflex. He previously observed, that every nerve has its particular endowments, and its own machinery of action, within the central axis. This is true, even of those of the surface—the true spinal nerves that carry the sensations of touch; they are as insensible to light or sound, as the optic and auditory nerves are to mechanical irritants. The nerves of the surface have, however, been experimented on with the greater ease, because general irritants, such as heat, cold, mechanical violence, &c., are suitable to their endowments, whereas none of these can cause reaction through the cerebral nerves. Dr. Laycock, therefore, seeks in pathological phenomena such facts as will best illustrate the functions of the latter. He finds these in the symptoms of hydrophobia, and quotes cases in which the sound of water dropping, or the sight of water, or a reflected light, or even the idea of water, excited convulsions, and the gasp peculiarly observed in hydrophobia, when water or cool air touches the surface in general, but more particularly the surface of the face, pharynx, &c. Dr. Laycock observed, that the gasp of hydrophobia was the result of a strong expiratory act. These he maintained as examples of the incident excitor action of the cerebral nerves; and concluded by referring to the influence of odours in exciting convulsions, &c., as observed at Rome.

To show that the brain is the excitor of reflex acts, he quoted the case of chorea recorded in the Medico-Chirurgical Transactions, and analysed its phenomena. These at first appeared as of centric origin from the true spinal system. There was, in succession, neuralgia of the fifth nerve, rapid spasmodic action of the orbicularis muscle of the same side, convulsions of the arm of that side, then of all the extremities, then action of groups of muscles in the extremities, producing rotation, supination, malleation, &c.; next action of groups of muscles in the trunk, irregular chorea, and at last graceful dancing to the air of the "Protestant Boys." The production of this air was owing to the ideagenous changes excited in some part of the cerebrum or cerebellum, by the morbid change in the centric axis, which had extended upwards from the origin of certain twigs in the fifth nerve distributed to the orbicularis muscles. That the ideagenous changes exist, and may be thus re-excited by centric changes, he attempted to show by those examples in which the loss of memory from disease of the brain was only partial. Dr. Laycock argued that pricking or tearing the brain would not re-excite then, and consequently that the experiments of Flourens did not admit of the conclusion, Dr. Hall drew from them, namely: that the brain is in-excitator. The action of poisons on the brain, when taken into the circulation, would more distinctly show whether the brain was excitator, and Dr. Laycock adduced an example of poisoning by stramonium, in which, in addition to the symptoms of hydrophobia, there were those of mania.

Dr. Laycock, in conclusion, referred to cases of insanity exhibiting reflex rythmical acts, and to examples in which hemiplegia was accompanied by involuntary laughter, and by the involuntary substitution of one word or letter for another. He also discussed the instinctive acts of animals, and maintained that they were essentially reflex acts, induced by suitable stimuli received through the cerebral nerves.

The Chemical Section

Held its meetings in the room of the Architectural Society. It was thus constituted:—

President.—Professor T. Graham, F.R.S.

Vice Presidents.—Marquis of Northampton, F.R.S.; Professor Grove, F.R.S.; Dr. Daubeney, F.R.S.

Secretaries.—Dr. L. Playfair; E. Solly, Esq., F.R.S.; T. H. Barker, Esq.

Committee.—Professor Liebig, F.R.S.; M. Faraday, Esq., F.R.S.; M. Matteucci; Rev. W. V. Harcourt, F.R.S.; Robert Hunt, Esq.; W. West, Esq.; Rev. J. Walton; W. Lucas, Esq.; W. S. Ward, Esq.; R. Warrington, Esq.; F. M. Jennings, Esq.; J. B. Ibbetson, Esq.; Dr. Tilley; Dr. Percy.

Papers were read by Mr. West, Professor Daubeney, Mr. R. Hunt, Dr. Batson, Dr. Tilley, Matteucci, and the Rev. Thomas Exley.

The Statistical Section

Held its meetings in the Savings' Bank.

President.—Colonel Sykes.

Vice Presidents.—Sir John V. B. Johnstone, Bart.; Sir C. Lemon, Bart.; T. Tooke, Esq.; G. R. Porter, Esq.

Secretaries.—James Heywood, Esq.; Joseph Flecher, Esq.; Dr. Laycock.

Committee.—His Excellency Chevalier Bunsen; His Excellency Mr. Everett; Colonel Everest; Dr. Alison; Dr. Kay; L. Horner, Esq.; H. Stratford, Esq.; John Thurnam, M.D.; Samuel Turner, Esq.; Dr. C. Taylor; E. Chadwick, Esq.; T. Barstow, Esq.; — Bullen, Esq.

NOTICES TO CORRESPONDENTS.

"An Old Hand."—By the new Bill, the London College of Physicians will be able to give the M.D. license to all Licentiates in Medicine and Surgery, who are forty years old. The privilege is not extended to the Scottish or Irish Colleges, but we understand that the Scottish Universities have agreed to grant a certain number of degrees to practitioners similarly circumstanced.

Corvenius will appear next week.

"Another Subscriber" on Medical Qualifications is under consideration.

M. D. (Suffolk), will have to enter one of the Colleges of Physicians, if he would be registered as an M.D.—one of the Colleges of Surgery, or Apothecaries' Halls, if he would be registered as a Licentiate of Medicine or Surgery. In our correspondent's case, a small fee will be all that will be necessary if the Bill pass. How far the Council of Health will restrict the practice of gentlemen registered as Physicians we cannot say. We are not aware of the London Hall's habits in exceptional cases. We should advise a letter to the Secretary.

A Rural Practitioner.—Sir James Graham declared in his speech that of the six members of the Council of Health to be chosen by the Crown, he considered that two should be selected from the body of country practitioners, but the selection is not made compulsory in the Bill. The charge for registration to the General Practitioner will be 5s. The charge will be levied but once, although it is understood the list will be published annually.

Our Melrose correspondent shall be "protected." We have spoken to the publisher.

"Excito-Motory."—We shall attempt to collect a brief summary, but we anticipate little success. Valuable cases, containing a point, are always acceptable.

Chirurgus in our next Number. He has employed a sensible pen to much advantage.

Chirurgus, Niagara, writes in a very delightful mood. The remarks on Canadian Medical Statistics will be acceptable.

A correspondent from Marlborough thus writes:—"Many able sentiments are put forward by the Profession, in your valuable Journal, respecting this great medical movement. But the opinion of the Profession is well known regarding Sir James Graham's New Bill. That there are some points in it absolutely essential to the Profession, and others to be discarded entirely, is the sentiment of every medical man."—Our correspondent proceeds to regret that the county meeting, to be held in Salisbury, cannot be attended by many practitioners—who, he hopes, will take means to make their opinions known to Parliament.

Mr. Sprucer.—The new list of Fellows is not yet ready for publication. Our correspondent thus expresses himself on the former list:—

"In looking through the last list of members published by the College, I find there were about 666 members who returned their names to the

College, whose diplomas bore date previous to the year 1815, of whom 93 had, I believe, agreeably to their engagement, paid for practising in London, the additional sum of fifteen guineas; and paid the annual contribution of one pound to the College, so long as the College chose to demand it in 1815? Now, it would have been no great stretch of their power, or respect for the Council to have paid to seniority, to have chosen as fellows all before 1815, and then have added as many as they pleased."

A correspondent sends us a few suggestions on Medical Reform. He says, that on quackery the worst thing that can be done is not to legislate, and proceeds:—

"Apprenticeship on the present system, is, in many cases, little better than a dead letter. The question arises, how can this be remedied? It seems to me a practicable and useful plan would be one by which licentiates of medicine from an examining board might have a liberty, granted by testimonial, or otherwise, enabling them to take apprentices, who should be instructed by the licentiate himself, by lecture, in the rudiments of a professional education, such as skeleton anatomy, or that of the dry bones; chemistry, materia medica, and botany, in the country, if required. (Of course these studies need only be pursued superficially.) The acquirement of the student might then be tested, prior to being admitted to London studies, by a slight preliminary examination, in the branches of study before mentioned. The rules for a student's final education and examination, I would propose as follows:—1st That no 'grinder' be allowed; 2nd, that the prices of subjects be reduced; 3rd, that operative surgery be taught practically; 4th, that the examination take place every year, thus; after the first year, let him be examined on chemistry, materia medica, anatomy, (superficially) and botany, (if deemed requisite as a part of his education.) After the second year, on surgery, anatomy, midwifery, jurisprudence, and medical practice (superficially). After the third year, a general examination; on surgery (embracing anatomy and physiology); and medicine (including pathology and the collateral sciences); 5th, that the age of the student be twenty-one years, before his final examination. There are, alas! two points in hospital studies open to amendments, viz., dresserships and clinical clerkships. Were these made posts of merit and distinction, the patients would be better attended, by men who took a delight in their profession, and the students better qualified, by the study required for the attainment of those offices. Increasing the expense of the education could be of no avail, since many a clever man is in reduced circumstances, while many an affluent man has not sufficient mind, or industry, to fill the responsible duties devolving on a medical life."

Mr. John Thompson would be bettered by a short course of philosophy. Small matters seem to affect him grievously—a really alarming symptom in some cases. "Truly, to be great, is not to stir without great argument."

Mr. Kemp.—We believe there is no such institution. Application should be made to one of the private medical schools.

B. (Paris).—The exchange can be made to any prudent extent: the copies can be kept.

Medicus draws our attention to certain disgusting advertisements, occupying nearly a page of "The Age and Argus," soliciting practice to Curtis and Co., Perry and Co., Lamert, and Franks. Our correspondent thus proceeds:—

These disgusting allusions to certain affections the young of both sexes will probably read, since they are especially directed to them, and should any one fortunately not understand their import, nevertheless, curiosity will be excited, the result being that the minds of youth are thereby corrupted. This is very bad, and although the public press often declaims against cruelty to animals; about slavery, both white and black, and also belabours sage justices when declaring war against old women for selling apples on Sunday, and even gibbets ghostly bishops because they thunder anathemas against poor toil-worn mechanics, who go to breathe the pure country air in a cheap railway train on the Lord's day, still

the press winks at its own gains, and that of Government, by quack advertisements; thus proving that it can see clearly the failings of others, but is blind to its own. The medical periodicals are, however, exceptions, and as your journal is one of the most influential, I have taken the liberty of drawing your attention again to the subject."

A few papers, we had hoped to have inserted this week, have again suffered postponement. Those of Dr. Costello and Mr. Dermott will be resumed in our next Number, when we hope to give the first of Dr. Corrigan's lectures.

"In Nubibus" is witty, but we see by our copy of the *Pharmaceutical Journal*, that Mr. Bell's scripture reference has been misprinted. The subject, besides, is unsuited to a jest.

D. W. G.—No such work has been published.

Many other correspondents are unavoidably postponed.

THE MEDICAL TIMES.

SATURDAY, OCT. 5, 1844.

Amicus dulcis, ut æquum est,
Quum mea compenset vitis bona, pluribus hisce,
Si modo plura mihi bona sunt, inclinet.

WITH this Number we open another Volume. The occasion recalls to us, with the catalogue of our faults, the consciousness of our responsibilities—and we seize it to make to ourselves and readers renewed pledges of increased fidelity to our vocation. Improved by the experience of our two years' laborious management, let us hope that each day will see in our pages less of those blemishes,

"quas aut incuria fudit,
Aut humana parum cavit natura,"

and that in our labours for the general and elevated well-being of the whole Profession, we may so temper our zeal by prudence, as to exhibit daily increasing forbearance to the individual.

If, in our past career, we have felt an anxiety pre-eminently strong, or which ought to shew out as a characteristic distinguishing us from our predecessors of the Medical Press—it was that of lending our humble energies, and seconding them with all the help we could enlist, to raise to the highest possible pitch the science of our Profession. It has been our desire to keep prominently before our readers the fact that their's is a Profession, not a trade,—to divest them, from the lowest to the highest, of that merchandizing spirit which an ingeniously-bad mis-government has done its best to infuse into them,—to enkindle, in the discharge of their duties, a sense of sacredness akin to their nature,—to make them look on their mutual struggles for professional distinction, not as inammon-competitions for mere private gain, but as so many ennobling exercises of a classic rivalry out of which much human good is evolved: and to urge them in all their agitations for reform and change, to labour mainly for our establishment in the State as a republic of science, in which all distinctions would be but so many prizes for merit—prizes open and attainable to all who enter the lists in a proper spirit. In one word, if our wishes could take effect, or our labours secure the inestimable boon, the Profession to which society must entrust its dearest and most momentous interests, would be the highest, the most respected, the most influential in the State. To be one of its members would be to be, a man of letters—a practitioner of high science—and a gentleman: to live for utility, and to be crowned with honour.

Actuated by this strong desire—which in all humbleness we would put forward as the dominant principle of the MEDICAL TIMES—we have been compelled to differ with, at least, some of the hardest worked and worst paid of our medical friends in the temper with which we have looked at that no wall absorbing subject, Sir James Graham's New Bill. We do not, as our readers know, deny to the measure the demerit of great defects and greater deficiencies; we have even pointed them out unsparingly at the hazard of augmenting that indiscriminate hostility which we believe to be so mischievous, and which at one time appeared so threatening; but, looking at the whole proposal in the light offered by the principle we have named as governing our opinions we cannot conceal the fact that the measure will introduce a great and therefore most acceptable improvement; and in the most important of matters—our scientific character.

Abstractedly considered, there is no doubt that each of us could easily conceive the provisions of a bill far more perfect than that now offered us; but it is rarely in this world we have the gift of things exactly in that form our own fancy would have suggested as the best. We must assay, unfortunately, the value of proffered boons not by the standard of what might be, but what is—a standard in few cases high, and in our's lamentably low. If the new bill make our relative position to each other more unsatisfactory or perplexing: if it render our numerous governing bodies more anomalous or irresponsible: if it have any tendency to depreciate our scientific attainments, or place us before the public in a more disreputable character—by all means let it be opposed. But if its effect be much the contrary: if it even partially relieve us of many of the evils we have so long suffered under,—let it be welcomed with the qualified gratitude its qualified amendments warrant, and let us—like the prudent, the deliberate, and strong minded practitioners of Birmingham, Leeds, and Bedford—unite our best exertions to add to it the further improvements of which, unfortunately, it is but too susceptible.

A singular opinion is his—of the medical profession—who thinks that in its public aspect there are improvements it can wisely lose!

No one can deny—and far less we—the evils of illicit practice; but we affirm that they much more concern the public than ourselves, and we have little doubt that when exposed in all their unveiled deformity, society will share our conviction of the necessity of efficiently meeting them. The scientific dentist gets much of his practice from the blunders of the advertising swindler: the nomadic tinker, making more leaks, than he stops, is the great friend of the iron-monger: and, in this way, it may be doubted whether we do not gain on one side the practice which illicit rivalry robs us of on the other. To suppose otherwise, indeed, would be to attribute to quacks a healing power we should be loath to give them credit for, and which would hardly justify the restriction we ask. We repeat, that anxious as we are to see empiricism suppressed, and glad as we are to encourage the growing feeling against it, the business of interference is more the public's than ours; and that when the vice is seen in all its glaring hideousness without the disguises which Apothecaries' Acts afford, it will be speedily put down.

The management, again, of the corporations, in reference to their received members, though full

of injustice becomes from a great grievance absolutely, but a minor one relatively. Serious as are the inconveniences it causes, and numerous as are the other evils we labour under, the greatest of all is, beyond doubt, that which affects our general educational efficiency. Give us but a Profession of highly accomplished Practitioners, among whom no man can get access under the showy plumage of a forged or purchased diploma, or without clearly establishing a moral and intellectual title to the distinction, and we will claim to have a Profession relieved both of many of its worst practical grievances and largest impediments to scientific progress, and which will not only have the power of doing much that is right, but of recovering itself from much that is wrong. Now the arrangements of the new Bill to secure a high standard of qualifications may be thus briefly explained: Each class of medical men will undergo uniform examinations in every part of the empire, and in the Council of Health there will be a Board of Control to secure that the examinations shall be of the best kind. The curricula of study will also be uniform, and laid down by the same supervising body. In reference to licentiates of medicine and surgery, there is a special clause in the Bill which allows of the union of two examining boards. Thus the Board, formed by the College of Physicians and the Society of Apothecaries, to examine the Licentiates of Medicine, may unite with the Examining Board of the College of Surgeons, and testing the candidates' qualifications, in one or more sittings give the double license for Medicine and Surgery. In Edinburgh, we have the best reason to believe preparations have already been made for some arrangement of the kind. Dublin, Glasgow, and London, there can be little doubt, will follow the example. Much time and some expence will be thus spared: and the license or diploma will at the same time carry with it more weight.

Before leaving this subject for the present, we would take leave to urge on that large proportion of our brethren who have as yet held back from any active interference about this measure, that they have a duty to fulfil, in now giving their brethren and the country the benefit of their opinion and active services. The Bill, whether it pleases, or displeases, importantly concerns them: and it is not because they think that its good points ought not to be lost, that they should avoid an expression of their sentiments. It is to be remembered that the Bill is susceptible of many improvements—that Sir James Graham, in publishing it at the heel of the session, invited suggestions to warrant advisable changes,—and that if we act with the prudence and care that are open to us, we may not only secure what is offered, but reach more that is desirable. It is the unwillingness of respectable people to protrude themselves before the public, that has caused us those occasional outbursts of wholesale opposition to the New Bill, we some time since had occasion to notice; and, unless it be conquered, it is to be feared that the opinions, and with them the character of the Profession will be much misunderstood by the public. *If the whole of our body—the thinking as well as the acting portions—speak out, we shall not only have a Bill, but a very good one.*

*Insanis et tu, stultique prope omnes,
Si quid Stertinius veri crepat.*

THE case of Mr. Campbell, the son of the deceased poet, presents a point or two of interest. Our readers know, that about fourteen years since, this young man was confided to the care of Dr. Allen,

of High Beach, on the score of certain symptoms of insanity, which made acts of personal violence to his father seem anything but improbable. After a short time, he was thought sufficiently recovered to be restored to his parents' care; but renewed probabilities of danger caused an early return to Dr. Allen's asylum, where he remained till about a fortnight since, when the disposition of some property coming to him, made it necessary to ask for a jury's opinion on his sanity.

The principal witness was, of course, Dr. Allen; and from his testimony, supported by that of others, it was gathered that Mr. Campbell was allowed to wander about during the day where he pleased; that he would frequently walk from thirty to forty miles—that he was fond of rural and forest scenery—that having taken several of Ching's lozenges in earlier life, he considered them to have been composed of noxious ingredients, and that he could eliminate their poison from his system by lying exposed to the sun—that he disliked woollen clothes—hated some of the inmates, particularly one, whose smell, he affirmed, was so offensive, as to be enough to drive him mad; and on one occasion had positively eaten a portion of the raw brains of an ox. Mr. Campbell replied to this evidence with the greatest good sense and cleverness; explained away, as far as possible, and with much ingenuity, the facts and opinions delivered against him, and the jury, though three medical men had affirmed his insanity, were so satisfied with his defence, that, out of sixteen jurors, fourteen were of opinion that he was of sound mind. The verdict of course restores Mr. Campbell to society, and gives him the free use of his property.

The verdict has startled the public. It is, we believe, the first time in such cases that a jury have decided in the teeth of every opinion, medical, or non-medical, pronounced; yet we are not disinclined, from the review of the evidence as it has been placed before us, to think the verdict a proper one.

That the evidence was sufficient to establish tolerable proof of insanity on some former day, we are by no means disposed to dispute. But this is the most we can concede. As the conduct of Mr. Campbell approached the period of the enquiry, the weaker were the symptoms of insanity deposed to. And when we consider, on the one side, the harmless eccentricities into which a sensitive nature, and rather imaginative mind, necessarily impel their possessor; and, on the other, the tendency by habit and interest of one in Dr. Allen's position, to see madness in every deviation, from that certain jog-trot course, within whose narrow limits he is accustomed to confine the existence of sanity, we cannot but conclude that the jury did well to give full force to the good sense of Mr. Campbell's exposition, and to decide, that he was, scarcely less fit for society than the rest of the foolish and eccentric people who compose its moiety.

The counsel for the Commission appears to have laid much stress on the fact, that a fond father had felt the seclusion necessary, and that the Commissioners had sanctioned its continuance. But it must be mentioned, that "the great consoler" *Time* is also the great physician. The insanity which never assumed but the mildest character, seems to us to have recently betrayed no decided manifestations of its continuance. And as regards the Commissioners, if they did not feel authorised to take, in such doubtful circumstances, the extreme step of ordering his liberation, they, at least, registered

opinions which would induce us to accept Dr. Allen's opinions with some little caution. They thus express themselves of the High Beach Asylum in their last report:—

"At our first visit to the house of Dr. Allen, at High Beach, in the county of Essex, in September, 1842, we found a gentleman, residing as a boarder, without certificates, whom we had known as a certified patient in one of the houses in the metropolitan district; this person was evidently unfit to be at large. Dr. Allen stated, that he had been in the habit of sometimes receiving low-spirited and desponding persons as boarders. He also said, that he had, on several occasions, permitted patients into his establishment to execute deeds affecting property, but that before doing so he always satisfied himself that the act was proper. There are three different houses belonging to Dr. Allen at High Beach, which are licensed, and also a cottage which is not licensed, but to which patients are nevertheless removed. These houses, at the time of our visiting them, were not in a good state of repair."

Mr. Campbell's case furnishes us with a striking instance of the necessity of vigilantly superintending our lunatic asylums, and of securing arrangements by which the tendency to recovery of mild cases, may not be checked by association with the more dreadful forms of insanity. It offers also suggestions on the necessity of medical men making themselves fully acquainted with a subject on which they are often called to give, by certificates, opinions on which a fellow-subject's liberty, health, and happiness depend, and which, if given erroneously, may entail, with moral, serious legal responsibilities. Considered in this aspect, our Course of Papers by PINEL will, we hope, be no small boon to the Profession.

BIRMINGHAM MEETING.

[We noticed, with approval, a short time since, the formation of a most respectable committee in this town, to deliberate on the actual clauses of the bill. The following excellent resolutions, proposing additions to the bill, instead of any indiscriminate hostility, are the result.]

On Tuesday, Sept. 10th, a numerous and highly respectable meeting of the medical profession of Birmingham and the neighbourhood, was held at the Public Office, for the purpose of taking into consideration the bill lately introduced by Sir James Graham for Medical Reform.

Among those present were the following gentlemen:—Dr. Fletcher, Dr. Birt Davies, Dr. Skerratt, Dr. Mackay, Messrs. Thomas Chavasse, Pye Chavasse, Swinson, George Elkington, Crompton, Holbeeh, Wickenden, Russell, Knowles, Crompton, F. Elkington, Ryland, Partidge, Bindley, Taylor, Cartwright, Allarton, A. Baker, Saunders, Bracey, Simons, Archer, Wilders, Harmer, Hadley, Chesshire, Sproston, Parsons, Watson, Hind, Green, Parker, Lawrence, and Mash, of Northampton.

Dr. Bell Fletcher was called to the chair, and among the resolutions passed were the following:

"That this meeting, having had its attention called to the provisions of a Bill which has been submitted to the House of Commons by Sir James Graham, on the subject of Medical Reform, is of opinion that there are some very important objects not provided for in that measure, to which the attention of the Legislature should be earnestly and respectfully called.

"That in the opinion of this meeting the system at present pursued in this country by druggists, and unqualified persons, of prescribing for and attending patients, is fraught with serious danger to the public at large, and more particularly to the poor; and that the absence of all restrictions in the Bill now before Parliament, beyond the mere disqualification for holding public appointments, is deeply to be lamented, as it is evident the mass of the population cannot discriminate between the ignorant pretender and the regularly educated

practitioner—the fact of registration being utterly insufficient for that purpose.

“It appearing to this meeting that the direct sanction given by Government to quackery, by legalising the sale of stamped medicines, has a tendency greatly to deceive and to prejudice the minds of the public, and is fraught with danger to the lives of her Majesty's subjects: Resolved, That in the opinion of this meeting it is expedient that Government should provide some measure for the suppression of the sale of stamped medicines.

“That petitions, embodying the foregoing resolutions be addressed to both Houses of Parliament; and that a deputation do wait upon the Earl of Dartmouth and the Borough Members, to request them to present the same, and to use their best exertions to promote the success of its prayer.”

ROCHDALE MEETING.

A meeting of the following Medical Practitioners was held on the 26th ult.—Mr. Dunlop, chairman; Dr. Edwards; Messrs. Wood, F.R.C.S.; Bower, Dicken, Barker, Sellers, Lamb, Lawton, R. Baker, Schofield, N. Buckley, Collingwood, Coventry, Taylor, and Thomasson, and a petition to the House of Commons, condemnatory of that portion of Sir J. Graham's measure which proposes to repeal the Act of 1815, without the substitution of any other equally stringent enactment for the protection of the legally qualified practitioner, was unanimously agreed to.

SALISBURY MEETING.

At a meeting of the following medical practitioners in Salisbury, held on the 21st ult. Dr. Grove in the chair, Dr. W. C. Finch, H. Coates, Esq., W. Andrews, Esq. G. Taunton, Esq. John Toone, Esq., John Winzor, Esq. W. M. Coates Esq., T. R. Moore, Esq., J. A. Lush, Esq., A. Middleton, Esq., G. Senior, Esq.—It was resolved that a general meeting of the Medical Practitioners of the county should be convened at the Council Chamber, Salisbury, on Tuesday, the 8th of October, at two o'clock in the afternoon.

SHREWSBURY MEETING.

A meeting of medical men was held at Shrewsbury on Tuesday, Oct. 1. It does not appear to have been numerously attended, four resolutions having been divided between two gentlemen. The speakers were:—Messrs. Coley, Arrowsmith, Webb, Keate, Cartwright, Clement, Brookes, Crawford, Mott, Dickin, Millington, Griffith, Wilson, Gill. The following resolutions were carried:—

That this meeting views with pleasure the attention which has been bestowed by Government on the subject of Medical Reform, and whilst it hails with satisfaction some of the provisions of the bill about to be introduced into Parliament, yet this meeting is firmly persuaded that the profession, wherever its voice may be heard, will be unanimous in protesting against the unconditional repeal of the Apothecaries' Act, as a measure fraught with danger to the public, as well as to the profession, by throwing open the practice of medicine to unqualified persons.”

“That this meeting do resolve that a Petition be presented to the House of Commons, signed by the Medical Profession of Shropshire and North Wales, praying that if it be deemed expedient in the proposed Bill to repeal the Act of 1815, such legislative enactments may be introduced as shall prevent all unqualified persons from engaging in the practice of medicine and surgery.”

“That whilst it is admitted, that it may be exceedingly difficult entirely to suppress Quackery, this meeting is decidedly of opinion, that some measures more stringent than are contained in the proposed bill may, and ought to be, adopted for the protection of the public and the profession against irregular practitioners.”

“That—it being very desirable that the voice of the profession should be heard in the proper quarter,—a deputation therefore be formed to wait upon each of the County and Borough Members,

for the purpose of explaining the glaring objections to which the bill as now proposed is subject, and to request the said members to watch carefully over the interests of the profession, while the bill is under the consideration of Parliament.”

“That the Members for the County of Salop, and the Members of the Borough throughout the said County, be requested to form a deputation to wait upon the Home Secretary, to endeavour to obtain the introduction into the present bill of proper protective clauses against unregistered practitioners, and that the medical gentlemen appointed to wait upon the different Members of Parliament do solicit them to form such deputation.

The whole concluded with a request that we should insert the proceedings, and a very extraordinary resolution of thanks to Mr. T. Wakley.

MEDICAL REFORM.—A most important meeting, numerously attended, was held yesterday, at Liverpool, Dr. Jeffreys in the chair.—Resolutions, in general commendation of the New Bill, were unanimously passed.—A resolution was judiciously added, pressing on Government the necessity of farther efforts to restrict quackery.

DEFORMED NOTIONS OF MEDICAL REFORM.

To the Editor of the “Medical Times.”

SIR,—It is truly ridiculous, or, if you will, the drollest sight ever seen by laughing or crying philosopher, the odd, the contradictory, the vague, the absurd notions, every day advanced under the sacred garb of medical reform. We are bad enough off as we are: we shall not be much, or rather very much better, with the new bill, unless Sir James Graham be a little complacent, and we be a little courteous and sensible—but something, a myriad-fold worse than the evils we have, or may have, would be the state of the profession, if the schemes gravely propounded here and there, were worked into legislative shape. One man tells the *Times* that it has crushed the bill on the quackery clause, yet insists that quackery is universal, as it is; so that the new bill is crushed for doing nothing. Another wants the Apothecaries' Hall all powerful, yet admits that it has degraded medical men's position—another wants it knocked to pieces, yet insists that the new bill is bad for touching it: and both want reform, and so it goes to the end of the chapter. Dr. Johnson, of the *Quarterly*—respectable as he is—is a good type of the class. In page 567, he reviles Dr. Davies as “a sapient doctor,” for not agreeing with him that quackery should “be held up to general reprobation by penalties,” and in page 573, two pages further, we have the editor himself exclaiming, “When legislators can be found who are not to be caught by quackery or quacks, then we may think of law, but not before;” and in this comprehensive and large minded manner do men of respectability dull the palm of their minds, by giving entertainment to all sorts of mutually conflicting and self-contradictory opinions.

But does the fact mentioned furnish no moral? Does it not teach us that we cannot safely leave the question of our own adjustment to our own labours? Is it not clear that our diversities and oddities of opinion would make agreement among ourselves utterly impossible; that we could neither think nor act in sufficient unison to achieve any measure of reform, good, bad, or indifferent? If so, is not the only prudent course to improve the present bill as much as possible, and on no account to trust fortune and ourselves for another?

I am, Sir,

Yours, obediently,
SENEX.

PENCILINGS OF EMINENT MEDICAL MEN.

PROFESSOR SYME.

LISTON, with his limbs of giant mould and mind, which might meet ten thousand such on a needle's point without a jostle, underwent our last operation. 'Twas rapid as one of his own, but a millionfold less merciless. The table he has left (improved and—will it be believed?—grateful) is now to be occupied by his slim, little relative, and

rival lecturer—Syme. The transition is violent, if the distance from matter to mind be as infinite as the schoolmen say: but the fault is not our's or Liston's—but Nature's. One country shews us volcanic Vesuvius, and the Parthenopian paradise: one play contains Caliban and Ariel: and one school of surgery has produced us Liston and Syme. Nature delights in contrasts—bodily and mental—physical and moral.

Syme sprung—about the year 1800—from the godless loins of law; and thus “his quiddities, his quilllets, his cases and his trieks,” are hereditary. His father was a writer to the signet—*anglicé*, an attorney—who carried on his career with the usual profit to his clients—they only lost about £20,000 by him—and with less than the usual gain to himself—he retired from the Augean stables of legal iniquity—a bankrupt and a beggar. He was accustomed to assure his friends that he would attend to their concerns as he would to his own, and, honest man that he was, he kept his word. His own wealth lost was not inconsiderable.

James, however, having a good Scotch mother—before her marriage, Miss Spotswood—and, by that side, a wealthy Scotch grandfather, who, by a peculiar adaptation of men to external things, or external things to men, had cut his way to fortune, in India;—James, I say—by these advantages, extended to him by a wise and foreseeing Nature—was so carefully schooled in his young days that he could construe “*propria quæ maribus*” with decent facility, when, at about nineteen, he was bound apprentice to his second cousin, Liston. The latter's house gained no addition of comfort by the new visitor. The neighbours never indicted it, that we know of, for its broils, neither did they strike any medal to commemorate its existence as a temple of concord. Whatever Syme's sensitiveness suffered from Liston's frank rudeness, was, I dare say, repaid by that humourously-cordial malice by which the former can suppress into publicity the record of a friend's fault, or weep (with laughter) over the detailed narrative of an instructor's mischances. Professor Syme overflows with benevolence, just as a hot frying-pan spits back the cook's gift of water: but if one occasion more than another wins from him an extra large outlay of the unprized commodity, it is when circumstances compel him to detail the celebrated adventure in which his preceptor escaped the peril of a five-bar gate, while hunting, by a well-adjusted fall on a dung-hill. Lord Kennedy, a witness in both cases, affirms that, with the Professor's charitable adornments, the tale is richer than the adventure.

The small acrimony that subsisted between master and pupil became greater—it is strange to say—when the two had separated, and were known to each other less. This was the more wonderful, as Syme did his preceptor the compliment of following so servilely his example, as to set up for a teacher of anatomy also,—no small homage to the success of Mr. Liston's teachings. Both lecturers, however, as if inspired by a common instinct of their calling, devoted a great part of their sessions' course to the anatomy and physiology of each other's faults; and, in this labour of love, it is said that Syme verily grew bold, and Liston as positively warmed into eloquence. Æschines and Demosthenes saw themselves revived, in one part of their public exertitions, by the two surgeons of the Modern Athens, who, by their practice about this time, have added prodigiously to the strength and copiousness of our language in its vituperative department. It is said that both had carefully gone through all our dictionaries, weeding out for use with painful solitude every word of a depreciatory character; and rumour goes that the lexicon of one was so rich, that a weekly contemporary purchased the sole copyright at a large expenditure of promissory payment. Hunting in the North after the picturesque was not in those days fashionable, or we should reproach the fair habitants of Billingsgate for having lost so brilliant an opportunity of enriching their vocabulary. A visit to the two Professors would have saved Billingsgate from all peril of a rival. The severities of Syme seem to have told most in this way; for Liston, on one

occasion, became so nettled, as to insist on a fight with him. The meeting, after surviving a hundred dangers, unfortunately went off. After Patrick Robertson, the judge, with friendly solicitude, had done his best to promote the quarrel: after Liston, yielding to much persuasion, had given the challenge: after the secret had reached the police, and the police had refused to interfere, confiding in the known pacific character of the belligerents: after all these dangers were passed, and when things looked most promising—Mr. Syme, in plain language, declined to fight. Mr. Syme acted on principle: for when Mr. Fergusson gave him a similar invitation, and seconded it by exhibiting a formidable horsewhip before the hospital doors, Mr. Syme again wisely exhibited that portion of valour which secures one the possible privilege of shewing fight “another day.” He handed Mr. Fergusson to the care of the laws, which secured the safety of the “beloved liege,” Mr. Syme, on so much coin of the realm as the liberal magistrates thought it worth; viz., £1,000.

To explain his accession to the surgical chair of the University, it may be necessary to premise a few words of explanation.

Until 1830, or thereabouts, there had been no chair of surgery in the University of Edinburgh. Dr. Munro, the Professor of Anatomy, regularly doled out the few observations about the art, considered necessary for the graduate of the University to know, and the private, or extra-academic lecturers, thus had opened a most lucrative field; of which Liston, Lizars, and Syme availed themselves. None of them were so promising as the subject of this sketch, whose attention to the interests of his pupils far more than compensated for the indifferent delivery of his lectures. He was, in short, rapidly attaining a class from one to two hundred in number, when the Whigs came into office, and Dr. John Thomson, who had been for years excluded from the University, under the Tory regime, at once became general distributor of Government patronage, not only in Edinburgh, but throughout the other medical schools of Scotland. It was soon whispered that he contemplated a grand change connected with a surgery chair in Edinburgh; but whether for his own benefit, or that of a friend, remained for some time doubtful. The Doctor had written, as our readers know, a very respectable work on Inflammation—had witnessed a good deal of practice in military surgery on the Continent, towards the close of the war, and written an able treatise on the subject: but as he was a full-blown M.D., specially attending to medical practice, and associating himself as little as possible with surgery, it was generally considered that he was not the appropriate man for the post; and the Doctor, after a painful struggle, we may suppose, quietly yielded to the general opinion. But his son had graduated: yes; but he, too, was a physician, and knew little or nothing of surgery. The Doctor was in Frankenstein's condition; he knew not what to make of the monster, or chair, he had created; but he bethought himself of another son, who, though still at school, would in a few years be fit for a chair, if a friend would act as warming-pan in the interval. To the vacant post, therefore, a Mr. Turner—who had scarcely before been heard of—was appointed; and, to render its prospective advantages more certain, attendance on the course, or at least purchase of the ticket, was made imperative on the candidates for all future degrees. But another party, not counted on, stepped in. Turner, ere he had lectured above a session or two, was removed by death: the boy at school could not in decency be appointed to the berth: the great chair-maker, Dr. Thomson, had secured himself a place; he had, besides, got several of his friends similarly installed: and, by a deviation that cannot be too much praised, a man of merit was for the first time selected. Sir Charles Bell was appointed to the vacant professorship. If Sir Charles Bell's merits, as a discoverer, were a little overrated, his abilities, as a surgeon, were assuredly, in London, overlooked. “The buddie draws,” was all the encomium which his brother, John, (the man of talent *par excellence*) would bestow on him; but the fame which had preceded him to

Edinburgh was great, and the attendance rendered indispensable on the surgical course, at once put an end to all the hopes of the private lecturers. Syme had, twelve months before, seen this result, and, like a provident man, had made preparations to avert the catastrophe. He took Minto House, an old establishment in the Old Town of Edinburgh, with the view of converting it into a sort of sanatorium, or private hospital, in which persons who might object to receive eleemosynary aid in the public Infirmary, might obtain it at a tolerably easy rate in this private *maison de santé*. But the patients who came (and paid) were somewhat of an angelic order in their few and far between visits; and but for the convenient event of an uncle's death, which secured Syme a considerable fortune, there is little doubt that the result of the speculation, would have been the speculator's ruin.

A professorship to the University was now the only thing that squared with his qualifications, or was worthy of his attention. The chairs were all filled; his own influence in the dominant quarters was not very great at a contested election; yet Syme, with an adroitness that belongs to his character, and explains much of his great surgical skill in diagnosis, secured his point without exacting—we mean waiting—the death of an incumbent. An old gentleman, known as “Old Jamie Russell,” had slept in the chair of clinical surgery for a good half century, and as there was no retiring pension, promised no alacrity in deserting it. Syme saw here an opening, and feeling, with his intuitive tact, that it was one of those cases in which a plain, blunt, overture outweighs a world of diplomacy, (for in some circumstances even Syme admits, that *rectissima* and *brevisima* are the same,) he at once proposed to the town council to pay the professor a retiring pension equal to his annual receipts, on condition of obtaining the chair. The offer was accepted, and the old gentleman living only five years, the present professor has acquired his present profitable and honourable post, by the small advance of what the newspaper advertisements would call “1500 thanks.”

Justice, however, owns with pleasure that, despite the shabby mode of his appointment, he does credit to this University, rather than receives credit from it. He is an admirable surgeon—sensible, practical, clever—complete, rather than great. One sees nothing to idolize in his surgical craft, but the higher homage is willingly paid him, of confiding him our lives. He is safe, not brilliant: a man of sense and industry—not of genius. He possesses all Charles Bell wanted, and wants all Charles Bell possessed. He is eminently the surgeon of practice—the man of business: the acute attorney of health, to whom, from his skill in looking after his own main chance, you undoubtedly confide your own. What is the result? Bell was without a practice; Syme has one too large. Edinburgh shews no such business as his. What an argument have we here for state munificence to men cultivating the higher fields of our science? To be nobly intellectual in medicine is, by the present constitution of our society, to be without a decent income. Barren and grudging fame is the only recompense. The spinner's son did a noble thing in pensioning poor Bell's widow. Peel's mind is not wholly the slave of a heartless aristocracy. He can occasionally forget the hereditary inanities, God's titled cyphers, that smile wooingly around him, to pay a passing homage (albeit small) at the altar of that intellect that made him all he is.

Syme has not been idle as an author. He has published works on Diseases of the Rectum, on the Excision of Diseased Joints, and on the Principles of Surgery. The last is his great work: his *monumentum ere perennius*. It has now reached its third edition, which (to signify a happy reconciliation) is dedicated to Liston. “The Principles of Surgery” is, perhaps, the most complete book we have on the subject. As a manual for the general practitioner, and surgeons engaged in the public services, it will perhaps never find its equal. It is a book not as well known in England as it should be.

Our Professor has entered “the holy bonds of

matrimony” twice. The first lady was the sister of Dr. Willis, well known for some clever scientific works; the last of which, his translation, with notes, of Marx on the Decrease of Disease, has deservedly made much noise in the world scientific. The second lady was Miss Burns, who stood in a similar relationship to an Edinburgh architect, of eminence. He has had no family, we believe, by either ladies. He looks about forty-five, or a trifle more, his appearance giving no inaccurate indication of his age. He is a little man; of pale, sallow, saturnine aspect; short neck; hunch back; contracted brow; long snub nose; large, heavy hanging lips, and a mouth whose size suggests visions of oxen roasted whole. We mistake him, or he could swallow without difficulty every appointment in the University's gift. This picture portrays no very handsome man, and Syme—conscious of the fact, we verily believe—has worked through life as though convinced that the notice each one's vanity would have, was only to be got for him by turning towards the world, “the silver lining” of his brain. No man has made a better, we mean a more active use of his mind than he. Till recently, when the extent of his success has inspired him with some of its full-blown heedlessness of vanity and purse proud consciousness of worldly importance, no act, no word, was shown the world, that was not first poised in the scale of thought, and meted by the measure of worldly policy. As the poet sings, “the trail of the serpent was over them all.” He is the Rashleigh Osbaldiston of surgery; Edinburgh's shrewdness has well named him “the serpent.” With the eye and slippery skin of the Epidaurian monster; the appetite of the boa, and guile of the whole creeping creation, there is no simplicity or harmlessness of the dove. We would not be his enemies! Were we Aberdeen or Palmerston, we would secure his diplomatic aid at any price he fixed on it. National diplomacy will never be at its acmé till it enlist the Edinburgh Professor of Clinical Surgery.

MEDICAL PROTECTION SOCIETY.

A MEETING of this body was last night held in one of the smaller rooms of Exeter Hall, for the purpose of opposing Sir James Graham's plan of Medical Reform. From a hundred to a hundred and twenty members of the Faculty assembled on the occasion, amongst whom we recognised Mr. Wakley, M.P., Mr. Carpué, Mr. Hodson Rugg, and Dr. Lynch,—or, as the *Times* has it, the *élite* of the Faculty.

Shortly after eight o'clock, the President of the Association, Mr. Davis, rose and explained that the object of the Meeting was to oppose the contemplated measure of the Home Secretary by every means in their power, and these, he stated, would be sufficiently detailed to them by the various gentlemen who were to propose and second the different resolutions.

Mr. Asbury submitted the first of these to the meeting. Its object, he said, was to protest against Sir James Graham's Bill in the very outset, as an attack upon the Medical Profession, as laying it open to quackery, and inflicting an injury upon it more pernicious than “the plague of London.” It was a measure of universal suffrage, which he called upon every medical man, of whatever “political hemisphere,” to unite in pulling down. The thirty thousand medical men, of whom the Faculty in this country consisted, would never submit to such a scheme; as, while £30,000 a-year were granted for the purpose of education, and thus qualifying the people for universal political suffrage, it was absurd to suppose that the Medical Profession would consent to be at the expense of registering or qualifying themselves.—[The learned gentleman was proceeding to illustrate this peculiar species of logic, by detailing some particulars which occurred in his own private practice, when the meeting exhibited decided signs of impatience; the president called him to order; and he somewhat abruptly sat down. A Mr. James, however, seconded the resolution; and a few hands, without any dissentient, being held up in its favour, it was declared to have been unanimously carried.]

Dr. Lynch proposed the second resolution, which was, he said, to protest against so much irresponsible power being lodged in the hands of any Minister of the Crown, as that proposed by his Bill. The Bill was a conjoint result of a strange compound formed by a union between Free Trade and Oligarchy, which he called upon the twenty-five or thirty thousand medical men of the empire to combine in opposing. It would open the flood-gates of quackery upon them; and that ignorant theorist, Mr. Warburton, had, in supporting it, displayed ignorance only equalled by his impudence. Quackery was patronized by the upper as well as the lower classes; as St John Long, Morrison, and others, might be called on to bear witness; but Napoleon had evinced a greater spirit than Sir James Graham, in putting it down. No lawyer, clergyman, military officer, or pilot, was allowed to practice his profession without previous education and qualification; and yet, by this precious Bill of the Home Secretary, every quack was to be allowed to do so. Jenner, Harvey, and others, had never been ennobled for their discoveries; though these had conferred greater benefit on society than the battles of Fontenay, Actium, or Philippi: and would be more estimated, three hundred years hence, than the battle of Waterloo. Yet there was no gift in the power of a Minister to offer, worth the acceptance of a medical man in good practice, although thirty out of the fifty-four medical professors in England never lectured at all. To attack the medical man was "sacrilegious" on the part of Sir James Graham; and he loudly called upon all medical men to unite in opposing his sacrilegious hands. All the great discoveries of the day, gas, electricity, &c., had been owing to medical men; and yet it was on these men the Home Secretary was going to lay his unholy hands! The learned Doctor concluded a long speech—cut short by an unhappy substitution of "toast," for "resolution" by a glowing eulogium on Mr. Wakley, and a scheme proposed by this gentleman for uniting the whole Faculty into one body; and he implored the meeting to lodge money in their hands for this excellent purpose. A Mr. Mitchell, seconded the resolution, which, like the preceding, was carried.

Mr. Hillis, who proposed the next resolution against Sir James Graham's plan of Registration, also strongly inculcated the necessity of putting their hands into their pockets. The Bill, he said, would be supported by the universities of Scotland and the chemists of England; but it would be opposed by Mr. Wakley, who had supported Graham's views originally, but had magnanimously since changed his opinion. Great encouragement was given by it to quackery, and the protection it afforded to the regular practitioner was like Falstaff's half-pennyworth of bread to three and sixpence worth of sack. Its proposed Council of Health ought to be called a Council of Death;—at all events, it would be a Council of Death to the Faculty, and reduce the Profession to the level of brokers and auctioneers, to which they had already been sufficiently brought by the Poor Law humbug. It was nothing less than a humbug; for it proposed that they should expend £5, in order, by registering, to qualify themselves for offices of £30 or £40 a-year; and, if passed into a law, it would lower professional remuneration.—Mr. Cooper seconded the resolution, though he did not disapprove of the registering scheme; but Sir James Graham, he said, was insane, ever to propose such a Bill, though he had got a lawyer to draw it up.

Mr. Edwards proposed the next resolution, which was directed against Quackery, an evil, which he proposed, should be rendered penal. He would not only have quacks punished, but would also inflict penalties on those who consulted them. (Hear, hear!) Frederick the Second, "the Emperor of Germany and King of Naples," had first taken the field against them; and he hoped to see those good old days revived.—Mr. Edwards was proceeding to comment, in very lively terms, upon certain erudite productions, entitled, "Manhood," "The Silent Friend," "Manly Vigour," &c., when he was called to order by the President, and contented himself

by a sweeping denunciation, which Mr. Curtis seconded; remarking that the public were the more inexcusable in employing such persons, as, though physicians were scarce, general practitioners were to be found in "every hole and corner of the empire."

The next resolution was proposed by Mr. Cockburn, who called on the meeting to subscribe, not only for the purpose of quashing Sir James Graham's Bill, but to obtain one of their own; and it was seconded by an energetic old gentleman, named Dr. Vassall, who addressed the meeting as "Men, brethren, and professors of the noblest art under the sun." The venerable gentleman was proceeding, in very strong terms, to run down the unhappy Home Secretary, calling God to witness that he was perfectly sincere, when he made the unlucky slip that he himself had, by the misconduct of some court official, been rendered a "beggar," and he was, therefore, very unceremoniously coughed down.

The proceedings of the evening were wound up by a fierce tirade by a Mr. Rogers, against the Scotch universities; and by a speech in favour of the whole resolutions by Mr. Wakley, M.P., who expressed his determination to oppose the introduction of the Bill by all the forms of which the House of Commons would permit: the honourable gentleman, in conclusion, counselling medical men, throughout the empire, to oppose all Parliamentary representatives, or candidates, not hostile to this measure, whatever their politics might be.

(From the "Morning Chronicle.")

Mr. Wakley, or his patron the *Times*, is much to be pitied. Their joint public meeting at Exeter Hall seems to have been called but to notify publicly how much they have miscalculated the feeling of the medical profession. The *Times* told us that "Mr. Wakley's 30,000 medical practitioners" were against the new Bill to a man. Mr. Wakley returns the compliment, by assuring us that the *Times* "has blown the Bill into atoms, torn it into shreds and fragments." After this interchange of services, they jointly convene what they pre-describe as a "great aggregate meeting" of the metropolis to ratify their condemnation: it is well advertised; open to any idler curious to hear the vagrant eloquence of a real M.P.; Exeter Hall is the site, the eve of the medical session the time, for the demonstration, and one hundred and twenty (the *Times* says a hundred and forty) persons assemble at the powerful call! Exeter Hall never before witnessed discomfiture more complete; but, consistent to the last, the honourable member for Finsbury vaunts in the face of his few hearers, that "during a long public life, he had never been more gratified than that night." If such be Mr. Wakley's gratifications, may a kind fate spare us his miseries.

As might be expected, the *Times* and its Parliamentary representative, have both discovered that the Poor Law is at the bottom of all this bad business of the new Bill. "He (Mr. Wakley) had heard that spleen, in a great measure, had been at the bottom of the Bill. He had heard it whispered in another place, that the medical practitioners were complained of for making most exorbitant demands on the Poor Law Unions (laughter). About 1d. a visit (loud laughter); or 5d. a case. Why, gentlemen would not allow their dogs to be treated in the same way. He called on them to labour at all points—to ascertain what progress they made, and to endeavour to obtain pledges of opposition to the Bill from members of Parliament. If twenty members of Parliament could be got resolutely to oppose the Bill, the Ministry would have more difficulty in passing it than they ever had in passing any Bill."

Moderate Mr. Wakley! Only put him at the head of twenty members, and see what he will do! But suppose you do not? The Bill, blown to atoms by the *Times*, will pick up its *dissecta membra* and take its place in the statute book!

The silly and trumpery slander, that "spleen" had seduced a Cabinet Minister to propose a measure of national legislation as a side-wind mode of punishing one of the country's learned

professions, we pass by with one remark. The well-known fact of the honourable member for Finsbury assures us, that he would not have stooped to so unworthy a statement, if he addressed a medical audience of average respectability. We are supported in the belief, by observing, that no one name to which medical science stands indebted, sanctioned the evening's proceedings by its presence. The truth is, the respectable portion of the profession give the Bill a cordial, though modified, support.

PERISCOPE OF THE WEEK.

[The only points of interest to our readers in the two recent numbers of the *Lancet*, are the following.]

DIFFUSED FALSE ANEURISM AT THE UPPER PART OF THE ARM.—Mr. Jukes details a case of this injury, which occurred so far back as the year 1824. His patient was a robust man, 24 years of age, by trade a wood-screw forger, and the formation of the aneurism resulted from a stab received four years previously, in the back part of the left shoulder with a dagger seven inches long. When admitted into the hospital, the tumour reached from the upper and back part of the left shoulder, along the posterior and inner side of the arm, to its lower third. Its surface presented three distinct prominences; a superior, occupying the situation and having the form of the deltoid muscle, which had a firm dense feeling; a middle, the most projecting somewhat below and behind the first, which was very tense and elastic, and was separated from the lower eminence by a superficial channel, and which, when united with the lower one, extended to the inner part of the limb, where they formed one large swelling. This irregularity of surface appeared to depend upon the position of the tumour, which, above, seemed to be deeply situated beneath the deltoid, which was pushed outwards, but presently emerging from the posterior edge of that muscle, it became more superficial and protuberant, evidently lying upon the outer head of the triceps. The greatest length of the mass was rather more than six inches, and its circumference, when most fully developed, fifteen, the arm being necessarily included in the latter admeasurement. The tumour did not pulsate, but firm pressure on the subclavian or axillary, so as to stop the pulse at the wrist, lessened its tension, and by compressing the lower portion at the same time, a still further diminution of its bulk was effected, and it became one inch smaller in circumference than when the circulation was free. Pressure on the brachial artery did not effect any change. The withdrawal of the pressure on the subclavian or axillary caused the tumour to expand to its previous size, the blood appearing to enter it at its upper part. A buzzing sensation was felt at a spot about an inch perpendicularly below the sternal end of the clavicle, and was most distinct when the tumour was compressed below. The impulse of the heart, and the radial pulse were natural, and there was not any marked difference between the pulses at the wrists. The brachial artery could be traced to the axilla unconnected with the tumour. It was free from pain when handled. The arm was deficient in muscular energy. From these circumstances, Mr. Jukes determined that the tumour was a diffused false aneurism, not arising from any part of the direct course of the axillary or brachial artery, but that it was supplied from some branch of the axillary, and most probably the sub-scapular. It was accordingly decided to place a ligature around the axillary artery by which the direct influx of blood would be cut off, although that fluid would still enter in a minor degree by anastomosing branches. The operation was performed, and terminated successfully, the man being dismissed about six weeks afterwards. The tumour was then diminished in size, and much firmer; pulsation had returned at the wrist, but was feeble. The man was seen by Mr. Jukes about six months after, when he found the tumour everywhere firm and solid to the touch, with its particular prominences, formerly so well

marked, smoothed down into each other. The deltoid had also regained its natural situation, so that the enlargement chiefly occupied the posterior and inner part of the arm. There was not any pulsation of the tumour or of the brachial artery; the thrill perceptible on the shoulder was not so strong as before, and was rather more in front; the arm and hand were wasted, but possessed free motion. He was again seen two months later, and the tumour was somewhat lessened in size, and instead of feeling very firm and solid, the part nearest the shoulder alone was solid, the lower and posterior portions being tense and elastic. Near the insertion of the deltoid muscle a little swelling, like a varicose vein, existed, flattened in form, and about the size of a sixpence, and was the seat of the thrill previously mentioned. It was indistinct when the arm was not touched, but if pressure were made upon the lower and back part of the tumour, it became very sensible, and was accompanied with a slight whizzing noise, as if fluid was passing through a narrow aperture. The last report of this case is dated eighteen years afterwards, and is to the effect that the man died four years previously in Stafford gaol, the tumour having disappeared only two or three years, and thus an examination of the parts was not obtained.

ELONGATION OF THE CERVIX UTERI.—Dr. Heming states, that although the possibility of the occurrence of elongation of the cervix uteri has been denied by some physicians, he has met with so many cases in his own practice, as to warrant him in asserting that it is of comparatively frequent occurrence. It is easily distinguished from prolapsus uteri by our being enabled to trace the cord-like elongated neck of the uterus by a finger in the vagina or rectum, and in most instances which have come under Dr. Heming's notice, the cervix has been so elongated, that he has been unable, either by the rectum or vagina, to touch the body of that organ. The tumour, though greatly resembling that of prolapsus, is not exactly like it; when more of the viscera slip down into the pouch formed by the peritoneum, anteriorly or posteriorly to the elongated cervix, the tumour is more elongated and much thinner than that of prolapsus; whilst in the latter case too, under the same circumstances, the tumour has the form of an inverted cone. When the viscera slip into the pouch in front of, or posterior to, the elongated cervix, the os uteri is not, in either of these cases, found exactly at the lowest part of the tumour; if a portion of the intestines slip into the pouch formed by the peritoneum, posterior to the elongated cervix, the os uteri will be thrown in front, and situated a little higher than the most depending part of the tumour, whilst the woman is standing. If the bladder is contained in the utero-vesical peritoneal pouch, the os uteri will be thrown a little backwards, and a little higher than the lowest part of the tumour, and the circumference of the tumour will be increased or diminished, in proportion as this viscus contains more or less urine. In this case the bladder is usually retroflexed, and the finger cannot be passed into the vagina, in front of the tumour, on account of the angle formed by the neck of the bladder. The introduction of a catheter will be effected with difficulty, unless the tumour be first pushed into the vagina. If there be still a doubt about the case, and the patient is not pregnant, a bougie may be cautiously passed through the os uteri, and it will be found that, instead of passing two inches and a half, it will pass six or seven inches. The constitutional symptoms attending this complaint are very slight; pain in the back is complained of, and there is some discharge, as in cases of prolapse. The treatment consists in the use of the stem-pessary, (*vide Medical Times, ante*), as-tringing injections, and the cold hip-bath, the bowels being regulated by occasional doses of castor oil.

POISONING BY PRUSSIC ACID.—Mr. Crisp details the *post mortem* appearances in a fatal case of poisoning by prussic acid, in which the quantity taken could not be ascertained. The body was stout and muscular; bloody serum flowed from the mouth. The skin generally was tinged with a violet colour, especially on the depending part of the body. The left arm (the undermost) pre-

sented a very singular appearance—the cutaneous veins being distended with blood of a purple colour; crimson spots and streaks were also visible on various parts of the body. The abdominal and thoracic viscera were in a healthy state, excepting their colour, which was heightened by the purple and bluish tint of the blood; the heart was empty and very flabby. The odour of prussic acid was not detected in any part of the body by Mr. Crisp, but Mr. Webber, a friend of his, who was present at the *post mortem* examination, thought he could perceive it. The coronary vein of the stomach was distended with air to the size of a goose quill, and, when pressed, gave a crackling sound. The muscular fibre presented a redder appearance than natural; this, Mr. Crisp says, he has often observed in dogs killed by this poison.

LIQUOR POTASSÆ A TEST FOR DIABETIC URINE.—Mr. Moore states, from experiments which he has made, that liquor potassæ, when boiled with diabetic urine, affords a reddish-brown precipitate, and a characteristic rich claret colour. Mr. Palmer, he says, was the first to notice this.

DELIRIUM FOLLOWING THE USE OF TARTAR EMETIC.—Mr. Whittaker was in attendance on a gentleman affected with pneumonia, which he treated with bleeding, and the exhibition of small doses of tartarized antimony. By these means the disease was subdued, but a new train of symptoms set in; the patient became in a half frantic state, with a countenance of health, yet expressive of much pleasurable excitement; tremors of the hands, picking of the bed-clothes, and every thing that came within reach; unusual activity, great volubility of speech, and extraordinary craftiness. This state, which Mr. Whittaker designates delirium tremens, but which appears to us more to resemble mania, was successfully treated by the exhibition of solid opium in large doses.

HYSTERIA.—Dr. Allnatt narrates a case of severe hysteria with ptosis, caused by a flash of lightning, which he cured by purgatives, tonics, and sea-bathing. The complaint was removed in about a month, or six weeks. Dr. Allnatt details the case to urge the necessity of caution in forming a diagnosis, as much injury might have accrued from an erroneous opinion in this case. Cases of hysteria mistaken for inflammatory action are by no means rare.

LARGE DOSES OF CALOMEL IN TYPHUS.—Mr. Burgess states that calomel administered in the treatment of typhus, acts not by its irritant but by its sedative qualities, to secure which large doses must be given. As a sedative he ranks it next to blood-letting to syncope, and after it he places large doses of laudanum, particularly when exhibited after depletion. Thirty or sixty grains of calomel, administered in typhus, act like a charm upon the unconscious and comatose patient, and produce what every other remedy fails to do, a profound and natural sleep, from which he awakens to consciousness and comparative comfort, with a soft and relaxed skin, a free and tranquil pulse, and a tendency to general perspiration; the bowels become washed with secretions, and saline purgatives being resorted to after the benefit of sleep has been obtained, make them patent; and little more is left to remove the most formidable attacks of this epidemic, but to repeat the remedy, and aid its influence by cold affusions over the surface of the body. The agency of calomel in yellow fever, and the other formidable epidemics of tropical climates, which, *cæteris paribus*, are within the same denomination and class of morbid actions, only influenced by temperature, is of a similar character, and totally independent of its irritant agency, or of salivation.

POISONING BY PHOSPHORUS.—Mr. Reedal details the particulars of a case of poisoning, by phosphorus, which appears to have excited considerable attention at Sheffield. Mr. Reedal was called to see a lad about ten years of age, who had been under the care of an unqualified practitioner, for upwards of a month. The boy was then in a dying state, and the day after his death, his father shewed Mr. Reedal the medicine that had been given and which evidently contained phosphorus. From the history it was thought probable that the death was occasioned by it, and

an inquest accordingly took place, at which it appeared, from the statement made by Mr. Rowbottom, the unqualified practitioner previously referred to, that he prescribed the phosphorus on account of a paralytic attack of the right leg which the boy had long laboured under. He commenced with six grains of phosphorus, made into twenty-four pills, with carbonate of potash and extract of gentian, of which one was to be taken evening and morning for a day or two, and afterwards three times a day, if certain symptoms, i. e. sickness, were not produced. These pills were continued for eighteen days, after which he took fourteen to fifteen drops of a saturated solution of phosphorus in sulphuric ether three times a day in milk, the dose to be increased from ten to thirty drops, if it did not cause sickness. This medicine was taken for five days; after which a mixture was ordered, containing half a drachm of phosphorus, and an ounce and a half of olive oil, with a little of bergamot. Of this, eighteen drops were ordered to be taken four times a day in milk, but the dose was to be gradually diminished, instead of being increased as the medicine would become stronger daily. In two or three days time, Mr. Rowbottom was called to see the boy, who was sickly, and inclined to vomit, for which he was ordered calcined magnesia, to neutralize the phosphoric acid which was forming by combustion in the stomach. The boy appeared to be better after this, and olive oil and syrup were substituted for the magnesia, which, however, was again ordered to be resumed, as the patient became worse. The carbonate was used instead of the calcined magnesia, at the recommendation of the druggist, and to that substitution Mr. Rowbottom, at the inquest, appeared inclined to attribute the fatal event. The examination of the body disclosed considerable congestion of the surface of the brain, the bloody spots in its substance not being more numerous than natural. The floor of the lateral ventricles were (was?) of a bright red colour; the redness proceeding into the anterior and posterior cornua on each side: the left choroid plexus was extremely congested. The fornix and corpora striata much softened; no effusion. The inferior portion of the right posterior lobe was of a deep dark red colour: there was also considerable congestion, as well as redness, on the lower portion of the left hemisphere. The vessels on the external surface of the left side of the cerebellum were congested, as well as the internal structure, and the commencement of the medulla oblongata was also congested. The pleuræ costales were of a bright scarlet colour, as was also a considerable portion of the right lung, and the lining membrane of the heart and aorta. On the lower third of the œsophagus was found a dark streak, an inch and a half in length, as if a camel's hair-brush, dipped in a strong solution of caustic, had been applied. At the cardiac extremity, two or three patches of inflammation were found in the mucous tissue. The anterior surface of the stomach externally was injected, of a bright vermilion colour, extending beneath the peritoneal to the muscular coat; the posterior surface was darker than natural; in its interior there were about two ounces of dark fluid, similar to coffee-grounds, and a large quantity of mucus; the mucous membrane was softened throughout. The bowels were healthy as far as the cæcum, but at the commencement of the ileo-cæcal valve, the cæcum was in a highly inflamed state, being much thickened, and converted into ridge-like cords. The colon was very much congested and injected, and presented the same cord-like appearance throughout its entire course, as far as the sigmoid flexure, evidently indicating violent irritation and inflammation of the muscular coat. At the inquest Mr. Reedal attributed the death to inflammation of the cæcum and colon, combined with that of the brain, but did not say positively whether that inflammation was produced by natural causes, or by the repeated ingestion of phosphorus; he was, however, inclined to attribute it to the effects of the phosphorus, or of some other acrid poison.

In our minds, there is not a doubt as to the lethal effect in this case having been produced by the repeated exhibition of large doses of phosphorus, and we consequently do not regard Mr.

owbottom as entirely free from blame. Setting aside the question as to the illegality of his practice, phosphorus is a medicine, which though rarely employed, had been occasionally used, and in judicious hands, its exhibition has been productive of advantage. So far then as regards the actual exhibition of the drug, we hold Mr. Rowbottom blameless; and the error of which we consider him guilty, is one that might, and does happen daily to many pure physicians and surgeons,—that of prescribing a potent remedy to be exhibited in drops, the dispensing of which is left to the friends or relations of the patient, and the want of diurnal or semi-diurnal attendance, to watch and check the symptoms as they may arise. There can be no doubt but that Mr. Rowbottom's directions were good; but there is every reason to fear they were not attended to, and that either from carelessness, or an eager desire to obtain a more speedy cure, larger doses of the solution were given, than was intended by Mr. Rowbottom. We are cognisant of an instance, where a dispensary physician prescribed prussic acid for a patient, a certain number of drops to be taken during the day. The apothecary, to save himself trouble, we presume, gave the patient, an Irishman, a bottle, containing a quantity of medicinal prussic acid, unmixed with any thing else. The man, calculating that if five drops would do him good, twenty or thirty would be much more effectual, took the larger dose, and thereby paid with his life for his rashness. In both these examples, had the medicine been dispensed for the patients in the doses proper to be taken, the consequences, which we have described, would have been avoided, and in this consists one of the many advantages possessed by the general practitioner over the pure, whether physician or surgeon, as he can exhibit the medicine he orders in properly divided doses, can watch and control its effects, and increase or diminish the dose as he deems it advisable, while it is notoriously the practice with the pures, unless when attending in conjunction with a general practitioner, to order medicines to be taken by drops, and of which a quantity is generally directed, sufficient to last for several days or weeks. This case of poisoning by phosphorus is a fatal example of the evil consequences of such proceedings.

VENEREAL NODES.—A case of venereal nodes, occupying the forehead, is reported from the Lock Hospital. The patient had a chancre three years previously, for which he was severely salivated. Four months afterwards he had rupial sores on the legs, and the general health was much impaired; he was treated with sarsaparilla, and placed on a good diet for two months, when he was discharged cured. After the lapse of a year, the throat became affected, for which he was treated in the Middlesex Hospital. The node for which he was admitted into the Lock Hospital, was very painful, and he also suffered acutely from pains in the bones. The iodide of potassium was prescribed to him in ten grain doses, to be taken three times a day, and was gradually raised to two scruples three times a day. An ammoniaco-mercurial ointment was also applied over the node. The effects of the iodine were manifested in the removal of the pains in the bones, and the gradual diminution of the size of the nodes, and its pathological action was marked by considerable diuresis, and, at a time, by headache, heat of the skin, and quick and sharp pulse. The man was ultimately discharged cured; but, as is usual, when the iodide is depended on for a cure in syphilitic diseases, the complaint returned after the lapse of a certain time. In this instance, nodes formed on the sacrum, which are said to have yielded to five-grain doses of the iodide. We do not think the node is yet out of the wood.

REDUCTION OF THE HUMERUS AFTER DISLOCATION HAD EXISTED SEVERAL WEEKS.—Two cases are briefly detailed, from Mr. Mash's practice, at Northampton General Infirmary, in which a permanent reduction of the humerus was effected, after it had been dislocated for five weeks. In the first case gradual and persevering extension was kept up from ten in the morning till six at night.

UPUS.—Mr. Liston says this disease may be cured in all its stages by appropriate local treatment. When the edges assume a sharp appearance,

they must be destroyed by escharotics; the best application, he says, is the chloride of zinc, mixed up dry, with an equal quantity of flour, and then moistened by adding a little water, until it is of the consistence of bird-lime. It may be spread on lint, but the better plan is to put it on a spatula, dip the finger in water, and then lay it with accuracy round the sore, and over the whole of it. It subjects the patient to some pain, but that ceases after a time, and the paste becomes elevated at the edges. An extensive slough forms, and immediately that separates, instead of the old eating ulcer, there is a healthy granulating surface, good matter is secreted, and cicatrization soon commences all around. When the disease is not far advanced, it may be destroyed altogether, and a healthy cicatrix obtained without much deformity.

CONGENITAL LUXATION OF THE FEMUR ON THE DORSUM ILII.—Dr. Carnochan details a case of congenital luxation of the head of the femur on the dorsum of the ilium, which he met with accidentally. The patient was a young man, about 19 years of age, had always had an impediment in walking, had never met with any accident which confined him to bed, nor were there any marks of abscesses or fistula, or cicatrices around either hip-joint, to warrant the belief of previously existing morbus coxarius. In tracing the femur, the upper margin of the great trochanter was seen to be nearly on a level with the crest of the ilium, and the shaft to incline slightly downwards and forwards to the femoro-tibial articulation, which, in every respect, was natural. The pelvis, instead of the usual oblique position, approached more to the vertical direction, the sacro-vertebral angle and upper portion of the sacrum inclining downwards and forwards, while the coccyx and lower pieces of the sacrum were forced upwards and backwards. The ossa innominata were tilted more forwards than natural, and the anterior superior spines were depressed downwards and forwards so far that the convexity of the iliac crests presented almost an anterior aspect. The symphysis and pubic arch were thrown downwards, and the ischial tuberosities ascended slightly upwards and backwards, so as to be nearly on a level with the pubic arch, the rami of the ischia and pubes being nearly horizontal. These bones, however, were not misshapen. Besides the other symptoms, such as shortening of the limbs, slipping up of the head of the bone on the external iliac fossa, and the unnatural relation of the great trochanter, the muscles in connexion with the joint offered some peculiarities worthy of remark. The spinal muscles, which form the sacro-spinal mass, taking their origin from the sacrum, lumbar vertebrae, and posterior part of the ossa ilia, and running along the vertebral grooves on each side of the spinous processes of the vertebrae, were found to be hard, tense, and prominent, particularly in the lumbar region; the psoæ and internal iliaes coming from the lower dorsal and lumbar vertebrae and iliac fossæ, to be inserted into the trochanter minor, being retracted by the ascent of the femur, and stretched over the brim of the pelvis, acting like a pulley, were also found tense and cord-like, whilst nearly all the muscles of the superior part of the iliac region, the gluteus maximus, medius, and minimus, &c., were retracted towards the crest of the iliac bones, where they formed round the head of the femur a kind of cone, the base of which was directed to the ilium, and its apex to the great trochanter. These appearances are principally evident while walking; in the recumbent posture, they either disappear, or become less marked. In walking, the heads of both femurs, ascending and descending alternately upon the dorsum of the iliac bones, and playing, as it were, through a space of nearly three inches, produce a hobbling motion. Thus, while the body is supported upon the right limb in the act of stepping, the right femur ascends, while the left, being freed from the superincumbent weight of the trunk and superior extremities descends, to ascend again as soon as the left foot rests upon the ground, and the weight of the body is transferred to it. This unsteady gait is less observable during running than walking, but the man is unable to take exer-

cise in the erect posture, without evincing signs of discomfort, and complaining of considerable pain, more particularly in the groins and lumbar region. This peculiar injury is by some authors looked upon as in some degree hereditary, and it is said that females also are more subject to it than males. Of twenty-five cases seen by Dupuytren, three only were males; of four cases that came under Dr. Carnochan's observation, two were males, and two females. The remote cause of this congenital luxation, Dr. Carnochan is apt to refer to a morbid condition of the nervous system or centres; the proximate cause, or that which most obviously produces the displacement of the parts, to the pathological contraction (*la retraction musculaire active*), which, acting as the unavoidable result of the primary disease, with more or less activity and diversified combination, ultimately effects the entire dislocation of the articulating surfaces. This connection between a primary disturbance in the nervous system and congenital deformities, as cause and effect, first brought forward by Rudolphi, has been confirmed by Müller, and some other modern physiologists.

CARBON ELIMINATED BY PLANTS.—Dr. Aldridge, from certain experiments which he has performed, draws the conclusion that plants decompose carbonic acid by night as well as by day; in darkness as well as in the light; that the separation of carbon from oxygen, the retention of the former and the disengagement of the latter, is a function performed by all plants under all circumstances, although it is performed with greatly increased energy when vegetables are exposed to the stimulating influence of light.

THE LONG ISSUE IN THE CALVARIUM.—In the *Provincial Medical Journal* is detailed by Dr. Oke, the case of a boy suffering from cerebral disease following scarlatina, in which advantage was derived from the long issue made in the calvarium, according to the directions of Dr. Wallis. Consciousness returned by the third day.

HYDROCYANIC ACID IN OPACITY OF THE CORNEA.—Mr. Walker has published in the *Provincial Med. Journal*, a case of central opacity of the cornea, in which he gave a trial to the vapour of hydrocyanic acid, a preparation being used which was twice the strength of Scheele's, and which was kept in contact with the eyes for two minutes. A sensation of heat was experienced, with a slight uneasiness, scarcely amounting to pain. Increased vascularity was also observable, and the eyes were watery. None of these effects, however, were so intense as after the use of the sulphate of copper to the eyelids, and they disappeared more quickly. The remedy proved to be of no service, and artificial pupils were afterwards made. Mr. Walker says, he has tried it in a few other cases with the same result. He has no doubt it will be useful in some cases, in those where other stimulants would act beneficially; but he is satisfied that a case which does not yield to ordinary stimulants will never be benefitted by it.

INTERMITTENT FEVERS.—Dr. Crawford states, in the *Montreal Medical Gazette*, that intermittent and remittent fevers are extremely prevalent in Upper Canada, whilst they are very rare in the lower division of the province. An extraordinary exemption from this class of fevers is also observable in Nova Scotia, and New Brunswick. At Annapolis, Windsor, and Fort Cumberland, in Nova Scotia, which are situated at the embouchures of rivers, daily exposed to extensive inundations by the rise of the tide, where the banks for several miles exhibit a combination of mud, marsh, and decayed vegetation, so generally considered a prolific source of this class of febrile diseases—intermittents and remittents are extremely rare; and at Fredericton, in New Brunswick, situated on the marshy banks of a river, surrounded by a dense wood and luxuriant vegetation, these diseases are scarcely ever met with; proving that, although, on some occasions, circumstances of this nature may favour the development of this disease, its prevalence or existence is by no means a necessary consequence or concomitant; while, on the other hand, this class of diseases has been very prevalent at Gibraltar, the Ionian Islands, and Bermuda, countries which are destitute of marsh, and comparatively barren of vegetation.

RUPTURE OF THE BLADDER.—Dr. Von Iffland, of Yamaska, near Sorel, has published in the *Montreal Medical Gaz.*, a case of rupture of the bladder occurring in the person of a female emigrant, who was supposed to be in labour, the term of her pregnancy being accomplished. She was admitted into hospital in this belief, and it was reported that the waters had broken the previous morning. The abdomen was enormously enlarged, and so excessively tender, that she could not bear the slightest pressure, or even touch. The urine, which was of a blackish colour, and foetid, drained away continually by drops. The bowels were constipated, the respiration hurried, and there were great anxiety, and continual agitation. The pulse was small and frequent. The diagnosis was, peritonitis, and rupture of the bladder. Half an ounce of castor oil, with a drop of croton oil, was ordered to be taken every hour. The next report, at noon, announced that the bowels had not acted; all the symptoms were increased in severity, and that vomiting was superadded. No indications of labour could be discovered by a vaginal examination; the os uteri was not dilated, and the head of the fœtus could be felt through the uterine parietes. The catheter was used, but only two or three spoonfuls of a black and foetid urine were drawn off. Leeches and cupping were ordered to the abdomen, and aperient injections were to be thrown up every hour. The unfortunate patient died the next day, and immediately after her decease, a fœtus, already much decomposed, was extracted by the cesarian section. The examination of the body disclosed evidences of intense peritonitis, and a rupture of the fundus of the bladder, into which the index finger could be passed with ease. The uterus was firmly contracted, so that the place where the incision was made could scarcely be discovered.

OPERATION OF STRANGULATION OF THE IRIS. In the *Provincial Medical Journal* a case is given in which a penetrating ulcer of the cornea took place at the inner margin, followed by an extensive cicatrix, the pupil being drawn underneath, and nearly obscured by the opaque portion of the cornea, a mere line of the pupillary margin being alone visible. As there was reason to believe that the lens and capsule were transparent, the general appearance of the iris, and of the whole eye being healthy, Mr. Walker determined to make an aperture at the opposite margin, and then draw out and strangulate a portion of the iris, so that the pupil might be again drawn towards the centre. The operation was performed in the following manner:—a puncture was made with an extraction knife at the outer margin of the cornea; the aqueous humour immediately escaped, and the pupil was seen to extend itself across like a fine black line. A pair of forceps was next passed through the wound in the cornea, a piece of iris was laid hold of, pulled out, and left outside the wound, forming a tumour about the size of a very large pin's head. This operation had the effect of bringing the pupil quite across from near the inner to the outer margin of the cornea, and rendering the patient's vision almost as good as ever. A slight degree of inflammation followed; after a few days, the nitrate of silver was applied two or three times to the projecting point, and it disappeared. Some retraction of the iris took place internally, the pupil not extending so far towards the outer margin of the cornea; but what was lost in the horizontal was gained in the upward direction, its size being about four lines across and two lines upwards. Vision was completely restored by operation.

ACUTE LARYNGITIS.—Dr. Nelson narrates, in the *Montreal Medical Gaz.*, a case of acute laryngitis, which he treated successfully by the local application of the powdered nitrate of potash, and of nitre with ipecacuanha internally, while blisters and mustard poultices were applied freely and largely all over the body. Belladonna and opium were also given to procure sleep. He is so well satisfied with the results of his practice in this case, that he is determined in future not to abstract blood in this peculiar case of phlegmasia, except in the plethoric, when there is determination to the head, and a congested state of the

lungs, and when the constitutional symptoms are marked by phlogosis, and then only at the earliest stages, for, he adds, a state of collapse soon supervenes, when the most rigorous revulsives are demanded, to arouse the nervous action, and by the general stimulation over the skin, to create another of a different kind to that which exists.

OZENA AND NEURALGIA OF THE FACE CURED BY THE EXTRACTION OF A TOOTH.—Dr. C. A. Harris, has communicated to the *American Medical and Surgical Journal* the case of a person who had for a little more than two years, been the subject of an obstinate and distressing affection of the left nasal fossa, and of frequent attacks of pain, which he represented as being, at times, almost excruciating; commencing immediately over the first left superior molar, thence shooting back to the angle of the jaw, to the ala of the nose, inner angle of the eye, and not unfrequently to the top of the head. Ulceration had taken place in the mucous membrane of the affected nostril, and as this fetid matter, occasionally streaked with pus and blood, was almost constantly discharged, excoriating the parts with which it came in contact, the cavity of the nostril had become so much closed by the thickening of its membranes, that the passage of air through it was prevented, and the external integuments had assumed a dark florid appearance, and become considerably tumefied and sensitive to the touch. The teeth were carefully examined by a dentist, but were found to be apparently sound. After trying several plans of treatment unavailingly, he placed himself under the care of Dr. Harris, who ascertained that his teeth, at least so far as their crowns were concerned, were all free from disease, but the socket of the first left superior molar, which had been the seat of pain for some time, was considerably wasted, the tooth itself, particularly its outer and posterior surfaces, thickly coated with tartar, slightly loosened and partially protruded from the jaw; whilst the surrounding gum was inflamed and spongy. The tooth had thus, as it would seem, from some cause or other, become obnoxious to the parts within which it was contained, and as it had no antagonist, its removal appeared to constitute the first and principal indication of cure. To this, upon its being advised, he readily submitted. The operation was followed by a sudden gush of thin fetid matter from the antrum, which communicated with the socket of the tooth by an opening sufficiently large to admit of the easy introduction of the end of a small goosequill, and a subsidence of pain. The cause of his complicated malady was now revealed. The fangs of the tooth were found to be greatly enlarged by exostosis. The intervening transverse and longitudinal alveolar walls had been destroyed, and the place which they had formerly occupied was filled with fungus. The edges of the surrounding wall were considerably wasted, and its surface, interiorly, rough and enlarged. A strong solution of argenti nitras having been applied to the diseased socket, by means of a camel's hair pencil, and the antrum syringed out with diluted tincture of myrrh, which last was directed to be repeated twice a day as long as the opening into the cavity should remain unclosed, the cure was entrusted to the restorative energies of the economy. He left the city the next day, and Dr. Harris saw him twice afterwards. He had but one attack of neuralgic pain after the removal of the tooth; the discharge diminished and became healthy; he could breathe through the affected nostril, and when last seen, was entirely recovered. Dr. Harris observes that, the circumstances connected with this case would seem to justify the conclusion, that the irritation produced by the enlargement of the roots of the tooth had given rise to a morbid excitement in the mucous membrane of the maxillary antrum—that this had extended to the left nostril, where the parts being more exposed to external irritating agents, had taken on a new and aggravated form of disease; and that the neuralgia was the result of the irritation in the nose, antrum, or socket, and most probably of the last. How far the deposition of tartar that had formed on the tooth may have been accessory to the exostosis, is a question perhaps not easily solved. That it might produce such an effect can very

readily be conceived, for when the morbid influence the presence of this substance frequently exerts upon the secretions of the mouth, the gums, and alveolar processes, is taken into consideration it will not appear at all strange that it should give rise to it. The disease being dependent on inflammation of the periosteum of the roots of the teeth, may be brought on, when favoured by a constitutional tendency, by any thing producing unnatural excitement in these membranes, and that salivary calculus often does this, is a fully recognised axiom in dental pathology. But how far it may have been concerned, either primarily or secondarily, in its production in this instance, Dr. Harris is unwilling to decide, inasmuch as there was one other circumstance connected with the history of the case, that may have been the primary cause of the whole disturbance. That was, the want of an opposing tooth; and he remarks that, whenever this happens, especially to a superior molar, as in the present case, the surrounding gum is apt to become inflamed, the periosteum of its roots morbidly excited, and the socket to waste, and sometimes to become gradually filled with ossific deposition, as though nature, conscious that the tooth was of no further use, exerted her energies to expel it from the jaw.

The Educational and Subsidiary Provisions of the Birmingham Royal School of Medicine and Surgery. By the Rev. VAUGHAN THOMAS, B.D.

A principal object of this elegant pamphlet, is to shew the capabilities the Birmingham Medical School presents of becoming a Corporate College, of great service in the promotion of morality, and the improvement of science. In shewing this, the reverend author makes a number of judicious suggestions, and does full credit to the integrity, ability, and success, which have characterized every step yet taken in the foundation and management of the school. Mr. Sands Cox, who originated the bold idea, and so perseveringly saw to its realization, may point to the book with an honourable pride, as the record of achievements enough in themselves to sanctify and illustrate any one life. The other objects of the writer's well-deserved encomiums are Dr. Warneford, a munificent contributor; Dr. John Johnstone, and the Earl of Dartmouth. Others of our large towns may, in this particular, imitate Birmingham with great advantage.

OBITUARY.—At Bath, James Dunlop, Esq., M.D.

PROMOTION.—Ordnance Medical Department.—Temporary Assistant-Surgeon I. M. S. Fogo to be Asst.-Surgeon.

Our first full catalogue of new books, including all the scientific works published at home and abroad—will appear next week.

Metropolitan Mortality for the Week ending Saturday, September 28.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	932	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	232	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	114	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	136	159	157
Diseases of the Lungs, and of the other Organs of Respiration	234	233	236
Diseases of the Heart, and Blood-vessels	20	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	72	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	54	56	71
Violence, Privation, Cold, and Intemperance,	44	25	26

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CLINICAL LECTURES ON SURGERY,
Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
By G. J. GUTHRIE, Esq., F.R.S.
During the Winter of 1844-45.

Introductory Lecture, October 9th, 1844.

SINCE I last had the pleasure of addressing you I have had a month's run on the Grampian Hills, whence I have returned almost as dark in colour as a native of Afric's burning sands; I have, however, recovered my health, which had become impaired by my labours of the preceding spring, and am now as strong as one of its lions, and as ready and as willing to work for you and with you and the profession at large as ever.

The publication of the evidence I alluded to in my last lecture, as taken before the Committee of the House of Commons, on Medical Relief to the Poor, has been delayed, in consequence of the trouble and time taken in making an index. Mr. Hansard informs me it is nearly ready, and may be purchased at his office, No. 6, Turnstile, Lincoln's Inn Fields, in the course of a fortnight, in two volumes—one of Evidence, the other an Appendix of Papers of various kinds connected with the enquiry, many of which are not so important as the evidence they are intended to confirm or elucidate. I have endeavoured to shew that certain alterations should be made in the arrangements for medical relief to the poor which essentially concern medical men, and whilst many of them are so warmly engaged in resisting Sir James Graham's Bill, and are calling on the members of parliament for their respective towns and counties to give them their support, I would suggest their drawing their attention to this subject.

Members of Parliament have an almost insurmountable objection to medical discussions. Many of them like to dabble a little in physic, whether it be to swallow or to prescribe, but few will sit out a discussion, or allow themselves time to understand any medical subject which is brought under their notice. At the present moment, many wonder what Sir James Graham has done to array the Doctors in arms against him. Others are anxious to know, and some are willing to learn and understand the matter better than they do at present. If the gentlemen who wait on their respective members will lead them to understand, that they are a united body in each town, putting aside all politics, and looking only to fair and just enactments from them on this point, and that they have come to claim their attention in parliament to the subject, they will get it, for there are no members of parliament so little alive to their own interests as not to know, that the determined opposition of even a dozen men of respectability and influence may give them a great deal of trouble, and cost them some hundreds of pounds at a future time; independently of the natural desire that nearly all these gentlemen have to do justice, when they are at liberty to do it. As the objects of medical men are not political, and involve no peculiar interests but their own

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and that of the public at large, there will be no real obstacle to each member thinking and acting for himself. It will be the fault then of the profession if they do not now obtain good laws, just and equal for themselves and for the public. They must however put their shoulders to the wheel. They have all read Æsop and they must remember the celebrated and now hackneyed lines of Lord Byron.

"Know ye not
Who would be free, themselves must strike the blow;
By their right arms the conquest must be wrought."

They should act vigorously. It is not sufficient to have meetings in different places, and to vote resolutions. There should be a Central Committee formed in London, of men of the best characters in the profession, who are not in official situations, but who are desirous of a fair and honest Act of Parliament. To these should be added two or more deputies from each of the great towns in England—for this is essentially an English and not a Scotch or Irish question—and after these gentlemen have privately conferred together, they should publicly state their opinions as to what ought and what ought not to be done. If they do this, or something of the kind, the profession may rely upon it they will succeed; they will be invincible as long as they ask only that which is right and just. There is no Member of Parliament, be he who he may, who will not treat such a body with respect—who will not give to their opinions the greatest attention, and, instead of saying as at present, "I pin my faith on the sleeve of A. B. or C.; I suppose he knows what he is about; I have confidence in him, and I dare say you have the same in E. F. or G., and so we are equal,—that is, neither of us know anything about the matter; they will think and understand."

When the proprietors of railroads lately wished the Government to alter some of their proposed measures, and which, at first, there was a disinclination to do, they assembled, combined, and showed that continued opposition to their just claims might not ultimately be satisfactory to their opponents, and they succeeded. The Doctors will succeed just as easily as the railroad owners, if they will only adopt similar means. Knowledge, it is said, is power, but union is strength; and when united they will be indomitable.

Sir James Graham, in presenting his Bill, says he cannot carry it out, if it become an Act, unless he has a council of eighteen doctors and laymen to help him. It would have been perhaps as well, if he had provided such a council to aid him in framing the Bill; they would have prevented his falling into the errors he has done, and would have produced a measure that would have been satisfactory to a great majority of the profession, whereas, at present, I do not believe there are three persons of any real character in public estimation, in London, who will come forward, and say they approve of the Bill as a whole. Medical men are not less under certain influences than members of Parliament; there are some few of us who will do a little odd job now and then to oblige a friend, provided we do not appear in

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propria persona; but it is altogether a different thing to give and support an opinion publicly, and brave the resentment of a whole profession.

In offering these suggestions through your medium to the profession, with the view of aiding its members to obtain their legitimate rights, I can have no other object than the public good. Sir James Graham's Bill affects me not. It matters not to me what becomes of the whole body of practitioners in medicine, now or hereafter; I can neither gain nor lose by any thing that may befall them. I am, perhaps, as little indebted to country practitioners as any one of my standing in London, and it may be and has been asked,—why then do I interfere in what so little concerns me? I can only reply, that I love justice and hate oppression, and that I feel I ought to endeavour to serve my brethren who are less able to serve themselves, even although I should reap no advantage from it.

There are several operations to be performed, and I have not time to proceed further; on Wednesday next I shall enter on the proper business of our course, and I hope to be able to accompany you during the winter through all the principal diseases and operations in surgery.

J. F.

REPORTS ON UTERINE DISEASES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 46.)

The next case is also one of suppressed menstruation, but where the system has endeavoured to relieve itself by a discharge of bloody fluid from some other part of the body. The phenomena of vicarious menstruation are singular, and, not being of very frequent occurrence, I trust that a detail of them in the following case will not be uninteresting. Vicarious menstruation may take place from almost any surface of the body; but, generally, it prefers a mucous surface, probably, as being most analogous to that which secretes the catamenia under healthy circumstances. Thus it is occasionally discharged from the stomach, bowels, lungs, throat, nose, mouth, gums, eyelids, bladder, kidneys, breast, &c. Old sores and wounds have been known to put on a considerable degree of vascularity at these times, and secrete a quantity of bloody fluid, having all the characteristics of healthy catamenia, and producing the same degree of relief as is felt by the discharge of it from the uterus.

Mrs. G. æt. 30, mother of four children; pale, emaciated, feeble; residing about twenty miles from London.

March 6th 1842.—Constant vomiting of dark clotted blood, from two to three times a week, and varying in quantity from two tea-spoonfuls to two table-spoonfuls, at a time. Once in every four or five weeks, she has an attack more than ordinarily severe, and attended with smart inflammatory

symptoms of the stomach. Constant headache, both frontal and occipital; the latter is the worst, being attended with much throbbing, heat, and other symptoms of cerebral congestion. Occasional attacks of pain, weight, and fullness, &c., about the pelvis and loins, like the molimina menstruationis. Much derangement of stomach and bowels; obstinate constipation; motions tar-like; little or no pain on pressing the epigastrium; urine sparing, thick and high coloured; pain of limbs, with much lassitude; constant leucorrhœa. Bowels have been open since her arrival in London. Has not menstruated since her last confinement, viz., a year ago; and the labour is stated to have been very severe, during which an unusually large dose of ergot was given her.

R. Acidi nitrici dil. acidi hydrochlor. dil. aa ʒij. syrupi aurantii ʒj. aq. cinnamomi ʒiss. M. ft. mistura cujus sumat cochl. minimum j ter die ex aqua.

Let her use a hot semicupium as soon as the pain comes on, and throw up plenty of the water into the vagina, while in the bath; then let her apply eight or ten leeches to the os uteri. Let a flannel soaked in three-fourths camphorated spirit of wine, and one-fourth laudanum, be applied to the epigastrium; and, if the bowels are confined, let her take two of the following pills at night.

R. Extr. aloes aquos. ʒij., extr. hyoseyami ʒiss., mastiches gr. xij.—M. Ft. Pil. xx.

18th.—Has neglected all directions; complains of much abdominal and lumbar pain; tongue pale; pulse anæmic; bowels purged; evacuations black.

R. Ferri sulph. gr. ij., extracti taraxaci, extr. hyoseyami aa gr. iv. om. nocte. Rep. Mistura.

30th.—Has vomited occasionally; bowels in much the same state as before, except that when the motions are not dark they are clay-coloured; tongue dry, white, and rough; constant hacking cough; complains of pain in the right hypochondrium, and lies best on the right side; feels weaker. Omitt. Med.

R. Hydrarg. chloridi gr. iv., extr. hyoseyami gr. vj.—M. Ft. Pil. ij. h. s. sumendæ.

R. Pulv. rhæi, potassæ sulph. aa ʒj., mannæ optim. ʒij., spir. myristicæ ʒss., aq. carni ʒiss.—M. Ft. Haustus cras mane sumend., et post hac repet. med. ut antea.

31st.—Bowels purged seven or eight times, at first slimy, afterwards dark—all copious; tongue and pulse better; cough less; appetite improved.—Omitt. Med.

R. Hydrargyri chloridi gr. ij., pulv. rhæi gr. iv., extracti hyoseyami gr. v.—M. Ft. Pil. ij. h. s. sumendæ. Rep. Haust. rhæi cras mane.

April 1st.—Bowels have acted well, bringing away much dark, lumpy, and highly offensive matter; the evacuations were followed by severe pain and bearing down about the loins and pelvis.

Let her use the hot hip bath immediately, and if the catamenia do not appear, let five leeches be applied to the os uteri. Rep. Med.

3rd.—Bowels have continued to act briskly, but are still dark, foul, and lumpy; much pain of back and loins; leeches were applied the day before yesterday to the os uteri, and increased the pain round the hips very much; the pain came on in paroxysms like the true precursory pains of menstruation. Rep. Med.

R. Acid. nitrici dil., acidi hydrochlor. dil. aa ʒj., tinct. hyoseyami ʒij., syrupi aurantii ʒss., infus. gentianæ co. ʒvij. M. Ft. Mist. cujus sumat cochl. magn. ij ter die.

May 10th.—Left town immediately after last report. On the 18th (exactly at the half-way period since the last nixus menstruationis) she had a violent attack of pain in the back, coming and going like labour pains, and lasting the whole day, but without the appearance of the catamenia. On the following morning, however, at the moment of rising, she was surprised by a sudden gush of thick yellow discharge from the vagina, amounting, she states, to nearly a tea-cup full. Up to the present time she has vomited only twice; the first occasion was three days after the above-mentioned attack; has improved in general health and strength, but the tongue is pale, and dry and rough in the middle; she has the same barking

cough; complains of pain in the left hypogastrium, at times severe, but the part is not tender on pressure; evacuations dark. Rep. Med.

16th.—Bowels well opened; has not been sick; feels better; expects the molimina menstruationis in two or three days; cough very troublesome. Omitt. med.

R. Vin. antim. potass. tart., tinct. hyoseyami, aa ʒij., mist. acaciæ, syrupi tolutani, aa ʒss., aquæ carui, ʒvijss. M. sumat cochl. magn. ij., p. r. n.; let six leeches be applied to the os uteri on the 18th.

31st.—Did not perceive any menstrual symptoms on the 18th, as was expected, and having waited two days longer, she applied them on the 20th; they bled freely. On that day (the 20th) she vomited twice, and this is the only time that she has vomited since I saw her last. General health and appetite much better.

June 6th.—Her medical attendant informs me that, on the night of the 2nd instant, she passed a mass like a clot, of about the size of an egg, with a slight bloody discharge, and much pain; has not vomited.

July 15th.—Constant sharp pain in pelvis (not darting); much leucorrhœa; has vomited some blood twice; tongue white, dry, and rough; cough as before.

Exam. per Vaginam.—Uterus large, hard, and fixed; os uteri thin-edged, and open, so as to admit the finger up to the os uteri internum, which seems closed. Uterus very painful on pressure.

Hirudines vj. ori uteri. R. Hydrarg. c. cretâ, pulv. ipecac. co. aa ʒj., confect. rosæ caninæ q. s. M. ft. pil. viij., sumat ij. alternis noctibus. R. Liq. calcis, ʒj. cum pari lactis quantitate ter die.

29th.—Very weak: feels very ill; bowels confined, dark, and offensive; no darting pains, but a good deal of pain, and fullness about the abdomen and back, like approaching catamenia; urine sparing, and high colored; pulse very weak.

Exam. per Vaginam.—Edge of the os uteri softer, and more natural; passed a catheter through it, which produced much pain, but I did not feel quite satisfied, that the os uteri internum was pervious; a lump of albuminous mucus came away with the instrument.

R. Hydrargyri chloridi gr. ij., pulv. rhæi, ext. hyosc. aa gr. iv.—M. Ft. pil. ij., h. s. sumendæ.

R. Ferri sulph. gr. ij., extracti lupuli gr. vj.—M. Ft. pil. ij. om. mane sumendæ.

August 8th.—Has had a sharp attack of diarrhœa, with a slight trace of blood in the evacuations once or twice; seems much relieved by it. Commenced the pills on the 3rd instant, and feels better. Pt.

On the following day, Mr. Protheroe Smith met me by appointment, for the purpose of dilating the os uteri, which we effected without trouble. About August 20th, she was seized with very severe pains, exactly like those of commencing menstruation, and lasting more or less for two days; they were attended with a yellowish discharge which relieved them as long as it continued, but when it ceased, they returned more severely, lasting nearly twenty-four hours, since which she has been better.

R. Sulphuris precipitati, cochl. min. ʒ, magnesicæ carb., cochl. min. j., ex. aquâ om. mane.

Rep. Liq. calcis, ʒj. ter die ex lacte.

January 11th, 1843.—Since last report, she has had very little vomiting; but every fortnight has had a severe attack of pelvic pain, so as to make her expect the catamenia every instant. As, however, they did not appear, leeches were applied on the 6th January to the labia, after which a copious muco-sanguineous discharge took place from the vagina, followed by a very small clot of blood. Tongue, pale and dry; has the same hacking spasmodic cough. Bowels very copious.

Exam. per vaginam.—Os uteri looks forward, as if the anterior lip were everted and pulled up. It is open and round, but the edges are hard; in the inside it feels soft and pulpy, like the gelatinous plug of pregnancy. Part of it is very painful.

Leeches were again applied to the os uteri, and I saw her once more in February. A remarkable

alteration had now taken place; the hard and painful state of the os and cervix, and the everted condition of the anterior lip, had disappeared; it was now soft, round, not unnaturally sensitive, and evincing the peculiar cushiony feel of pregnancy. Her health had greatly improved. Although I could scarcely believe such a thing possible, I could not shut my eyes to the conviction that she was pregnant, and already at about the fourth month. From this time she discontinued her visits; but on enquiring of some relations in town, whilst writing this report, I find that she was delivered in the following July of a living child, which is, therefore, now fifteen months old, and is considerably advanced in a second pregnancy.

The interesting nature of this case must be my apology for its length. The difficulty of making the uterus resume its periodic function was greatly increased by the general feeble health of the patient, her neglect of herself, and, above all, the length of time (a year) which the disease had lasted. On her first visit, (March 6th,) finding that the bowels were open, I did not prescribe any alterative and laxative; although, as she was stated to be of a confined habit, I furnished her with the aloetic pills to be taken on her return home. The tar-like condition of the evacuations I attributed to a portion of the blood, which had been secreted by the stomach, having passed through the bowels instead of being thrown up by vomiting.

She was in that weak, anæmic, state at her next visit, that I was still unwilling to give any more active alterative than a mild dose of taraxacum, with the nitro-muriatic mixture, seeing that there was a spontaneous disposition to diarrhœa. In this, however, I was wrong, for the result proved that a few active mercurial purges would have been much better; but she was a difficult patient from whom to elicit anything like a full history of her case, and withal not over obedient to my directions, as the report of her second visit shows. The improvement which followed the calomel, fully justified my continuing its use, both during her stay in town, and after her return; copious discharges of very unhealthy matter, from the bowels, were kept up for some time, not only with manifest improvement in her general health, but also with the appearance of distinct efforts on the part of the uterine system to re-establish the catamenial discharge. I endeavoured to assist these molimina menstruationis by the warm hip bath, followed by leeches to the os uteri, so as to imitate as far as possible the natural discharge from the uterus, after having promoted the determination to it by the bath. The discharge did not appear; but I felt satisfied with the well marked menstrual symptoms which had been produced, and by the almost entire cessation of the vomiting. I continued the calomel and rhubarb pills, and slightly increased the tonic character of the nitro-muriatic medicine by adding the compound infusion of gentian.

The half-way period which, as regards observation and treatment, I hold to be second in importance only to the menstrual period itself, was marked with very decided symptoms; viz., not only increased pain, but also by a sudden yellow discharge from the vagina. I regretted that she had not been in town when this happened, as in all probability, a repetition of the hot semicupium and leeches might have converted the discharge into one of a sanguineous character.

No particular menstrual symptoms occurred on the 1st of May, as might have been expected from what took place on the 1st of April; I, therefore, requested her to be in town on the 16th of May, which was two days short of the month after, what I had supposed to have been, the half-way period. Her health had much improved; but no molimina appeared, and having waited two days beyond the time, she applied the leeches according to directions. The vomiting now had nearly ceased. On the 6th of June, a still nearer approach was made to actual menstruation, as shewn by the expulsion of a small coagulum with a little bloody discharge. This was probably owing to its having come on during the night, and, from her being in the horizontal posture, the blood had not es-

escaped from the uterus, but had formed a clot which was apparently a cast of the uterine cavity.

The uterine congestion seemed now steadily to increase, and to be taking on rather the appearance of local inflammation. I therefore deemed it necessary to make an examination per vaginam, and was concerned to find what appeared to be threatenings of organic disease coming on, from the painful, indurated, and fixed condition of the uterus, and the thin-edged open state of the os uteri itself. Leeches were applied to it, and menstrual symptoms again manifested themselves; but the health and strength had failed sadly; she rapidly became more emaciated; and having reason to suspect that the os uteri internum was closed, I dilated it by gentle tension, with an instrument for that purpose. A well marked attack of menstrual congestion followed in about ten days after the dilatation. These attacks continued to return every fortnight until the end of the year, when the menses were again partially brought on by the use of leeches to the labia, and I saw her shortly afterwards. At this time, the greatly altered state of the os uteri made me think so unfavourably of the case, as to request the opinion of Mr. Lawrence, who considered, with me, that the os and cervix uteri, from its altered form, its state of induration, evidently extending into the body of the uterus, indicated an advanced state of organic disease. The pulpy gelatinous mass at the os uteri internum rather confirmed this opinion, under the supposition of its arising from fungoid granulation commencing at this part. My surprise, therefore, when I examined her in February, may be imagined, to find such an entire alteration in the condition of the os uteri, which had not only resumed a healthy appearance, but bore the characters of a condition, which, of all others, I was the least prepared to expect.

The complete alteration in the state of the os uteri, which took place as pregnancy advanced, is very remarkable, and shows an important fact in the prognosis of organic diseases of these parts, viz: that considerable changes in form, size, and structure may occur without organic disease being thoroughly established. It would have been exceedingly interesting to have examined the os uteri during the interval between these two last pregnancies, and thus have ascertained how far it had returned to the condition in which it was when I examined it in January, 1843. There can be no doubt but that the uterus had been, for some months, slowly returning to a more healthy state, and had made vigorous efforts to resume its lost function. It seems, also, more than probable that the artificial dilatation of the os and cervix uteri, in August, contributed to render her more capable of impregnation, which, from the closed state of the upper extremity of the canal of the cervix, had become impossible, and after the operation the uterus seemed to show a still greater disposition to establish the catamenia, from the circumstance of well marked menstrual symptoms continuing to appear every fortnight for some time afterwards.

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. CORRIGAN, M.D., Consulting Physician to the Richmond Hospital, Lecturer to the Dublin School of Medicine, &c.

GENTLEMEN,

I deem it unnecessary, on the present occasion, to open the business of the Session by an introductory lecture, relative to the importance of the profession which you have chosen. I should be encroaching upon your time unnecessarily, as I am confident that you are already deeply impressed with a proper sense of its magnitude. If any one separate branch, of the arduous education which you have undertaken, calls imperatively for attention from you above all the rest, it is the one, the study of which we are about to commence. Do not for a moment think, from this observation, that I intend to depreciate the other branches of your medical education. By no means: it would be

absurd for me to do so, and for this reason: they are all auxiliary and subservient to the great end which we purpose to attain during the present course of lectures, namely, a clear and comprehensive view of the nature and treatment of diseases, and in order that, understanding the subject thoroughly, from the facts which shall be adduced for your comprehension, you may draw, from the varied stores of memory and observation, the remedial means best adapted to your purpose as ministers of good to your sickness-stricken brethren. In order that you may attain the end which I have proposed to you, namely, a thorough knowledge of the principles of medical practice, it will be necessary for us to adopt some systematic arrangement, that, having the subject regularly and methodically arranged, we may the better be enabled to surmount the difficulties that surround us on every side. Remember, that, on the care and attention which you devote to the present portion of your education, the greatest share of your professional fame and character rests. The divine, to whom a difficult and knotty point of dogmatic theology has been proposed, can retire to the learned ease of his study, there to commune with those reverend authorities whose glorious writings shed such a brilliant halo over ecclesiastical subtleties; there he can remain, immured in meditation, undisturbed by the turmoil of an idle world, until his doubts and difficulties are smoothed before him; the lawyer, whom, in the course of whose proverbially intricate profession, some professional ruse may *non plus*, can ask, and will obtain, too, from the bench, an opportunity of suspending judgment till the morrow. But the physician has another, and a more difficult, part to perform; he has no such indulgence; no delay; no suspension of judgment for him. An opinion on the case submitted to him must be immediately pronounced,—as quickly acted upon; and yet that decision, upon which, perhaps, depends the precious life of the father of some young and helpless family, yet, I repeat, gentlemen, that opinion may be erroneous. You will pardon me, I trust, for dwelling on the necessity of paying every possible attention to the present branch of your education. I have said, just now, that in pursuing this subject, it will be absolutely necessary for us to adopt some systematic arrangement of disease; of such arrangements, we have quite enough to choose from. Let us for a moment glance over one of the old systems, which, in its day, was considered the “*ne plus ultra*” of nosological accuracy; yet a cursory glance will satisfy us, that it at present will not suit us. We find under the classification of tumours, and occupying a juxta-position, aneurism and abscess: two diseases that have not the least elaim to natural affinity. In like manner, if we examine a few more of the so-called classifications in the above system, we shall find, grouped together, diseases which have not one common character to connect them. This, I think, will be quite enough to shew you that the present system will not answer us. I very much fear that, if we look over some of the much vaunted later nosological systems, the same objections will be found to apply. Among the latest arrangements, is one, which has, for its foundation, the division of diseases, according to the tissues which may be affected: thus, we have “mucous membrane” disease: “serous membrane” disease: and “cellular membrane” disease. This would be all very well, and quite satisfactory, if the symptoms of diseases of similar membranes, in different parts of the body, presented similar signs. The system, it is true, has for its foundation the pathological changes produced by disease, one of the best and surest guides we can have, in treading over the dreary waste which surrounds us; but even with this important advantage over the first, I think it leaves us nearly as much in the dark as the other. This system is based on the supposition, that, when you are acquainted with the symptoms characterising disease of a membrane in any one part of the body, you must consequently know disease of the same tissue in any other part of the body: of course, by the same diagnostic marks or symptoms. An example or two, I trust, will prove clearly to you that this rule does not hold good, and thus this system shares the same fate with the pre-

ceding older ones. Let us suppose the serous membrane of the abdomen to be affected with inflammation: you have, here, tenderness on pressure over the seat of pain, vomiting, small and quick pulse, sensation of chilliness, and debility of the whole frame; while, in inflammation of the serous membrane of the brain, we have no similar symptoms; but we may find our patient sleepless and restless for two or three successive days, and, to common observers, there is nothing else particular in the case to point out what or where the mischief may be, until coma suddenly supervenes, and then comes Nature's answer to all our doubts. Gentlemen, a pathological arrangement would be perfect, did we require nothing more than a knowledge of pathology; but unfortunately this is not sufficient for practice. The system which I am about to adopt is, I think, the most natural one that, in the present state of science, can be used. Moreover, it has this advantage over other methods: that by it you can call up more readily, when wanted for practical use, the facts which I trust to be able to impress on you, relative to the diagnosis and treatment of disease. My arrangement is as follows:—

- 1st. Diseases of the brain and nervous system.
- 2nd. “ “ thoracic cavity, including heart, lungs, and great vessels.
- 3rd. “ “ abdominal cavity.
- 4th. “ “ skin.
- 5th. Fevers.

I have made “Fevers” my finale in opposition to the general plan, which places them first, and, I think, wrongly, for, in the whole range of diseases, there is no more intricate subject than the treatment of fevers; it is, in fact, an accumulation of the knowledge of all other diseases which we possess, and were I to make fever the starting point of my lectures, I should suppose you already acquainted with every other disease, or waste your time by tiresome digressions on the treatment of the other diseases with which it may be complicated. Having settled the important subject of our methodical arrangement, let me beg your attention, for a period of time which I fear may be thought unreasonable, while we consider a subject which, I believe, is allowed on all hands to be the very “*pons asinorum*” of beginners: it is the very intricate one of

INFLAMMATION.

The proper comprehension of this, is indeed the keystone of the structure of professional knowledge. Without a thorough knowledge of this “primary element of all and every disease,” as it has been styled by one of our best modern writers, it is impossible for you to be acquainted, as you should be, with the nature and treatment of disease. The reason of my anxious wish that you should be thoroughly grounded in the knowledge of this difficult subject, is this; that, in commencing the study of my profession, I, myself, found it ever evading my grasp, like the bird, in the story, always seeming to be within reach and easily caught, yet ever flying from tree to tree and eluding the most persevering pursuit. Let us now turn to the definition of inflammation, as laid down by one of our latest writers, and which I am about to read to you—here it is:—“Pain, sometimes acute or dull, sometimes constant, and sometimes none at all; hardness, tension, turgescence, change of colour in the part to redder or darker than usual, and tendency to suppuration.”

Now, let us consider, for a moment, what the word *definition* means. It is the establishing of some unvarying character by which anything may be known. Now pain, in the above definition, being sometimes present and sometimes not, cannot be taken in the exact meaning of the term, as forming part of the definition of inflammation. How often do we find, in cases of the most intense form of ophthalmic inflammation (iritis, for example), which is rapidly devastating the interior of the eyeball, no pain, nor (much less even than that) intolerance of light. The case of cerebro-meningeal inflammation, which a minute back I alluded to, cannot fail to strike you as an instance of most intense inflammation uncharacterized by pain, until the fatal coma unexpectedly sets in.

So you perceive that pain cannot be looked upon as forming any essential part of a definition of inflammation. We come to another characteristic, viz., "tension or turgescence." We shall find this just as equivocal a symptom of inflammation as the preceding one; have we not examples of violent cutaneous inflammation, as in scarlatina, without the least appearance of tension or turgescence. Let us come to another characteristic of inflammation, namely, "hardness." How often do we find the liver in a state so soft, as to break down under the finger, from the effects of inflammation? No one, I am sure, will deny that such a state of the liver, as the one I have now spoken of, is caused by inflammation; and it is equally certain that another and opposite state of the same organ, namely, hardness, is another result of the same cause, where the liver acquires a cartilaginous hardness, and breaks as readily in the hand as the lungs would do, were they filled with melted wax, allowed to cool, and then snapped between the fingers. In pneumonia, in place of hardness, we often find quite the reverse; the substance of the lung becoming soft and infiltrated with a greyish matter, which, if the inflammation progress beyond this stage, becomes yellowish. Last of all, is "tendency to suppuration;" this, I think, is a mark of inflammation, which, when it appears, generally sets all doubt upon the matter at rest; but there is the absurdity of waiting for the nature of the effect, to determine a definition of the cause. I am now about to refer, for information on this subject, to the works of one of the greatest ornaments that medical science can boast of, namely: the immortal John Hunter; some of whose works, allow me cursorily to remark, should not be placed in the hands of beginners. What does he say? "Inflammation may be said to exist, where there are pain, swelling, heat, and redness." Of pain and swelling we have disposed before: now let us come to heat. Hunter himself, in an experiment made by him, overturns this character. In this experiment, the vagina of an ass was made to undergo the adhesive inflammation. Violent as this must have been, still, he says, that the heat was not greater than in the natural state of the parts. Again, view a patient within the first few hours of an attack of enteritis; can you discover any perceptible degree of heat, above the natural standard? No. Or, ask the patient, labouring under the disease, does he feel an increase of temperature? On the contrary, he complains of cold and chilliness. Again, look at a patient labouring under pericarditis, and can you detect any increase of warmth? None, certainly. And though such did exist, the character is useless, as we have no means of ascertaining the temperature of internal organs. In cases of inflammation, terminating in gangrene of the lips and fauces, we have not increased temperature: quite the reverse, it is lower than natural. The two examples of inflammation of two different serous membranes, which I have just cited, will serve as additional help to overturn the nosological system, based on the foundation of diseased membranous structure. The symptoms of peritonitis, according to that arrangement, should be identical with those of inflamed pericardium, yet how different do we find them. The latter disease frequently steals imperceptibly and thief-like, without furnishing us, apparently, with a single mark whereby to track its way; while, at other times, it may be detected by the laboured breathing, blue lips, and cold sweat bedewing the face and head of the unfortunate victim of the disease. Within the whole range of elementary medical education, there is not, I again assert, a subject more difficult of comprehension to the student, than this of inflammation. We will suppose an intelligent and industrious pupil, willing and anxious to acquire every possible information upon this and every other subject connected with his profession. He enters the "dead room" of an hospital: he there finds a liver, small, hard, and shrunken, from the effects of cirrhosis; he asks, what has caused this? and receives for answer, "inflammation." He examines another, and finds it enlarged, soft, and breaking under the fingers; he again asks the cause, and again is told, "inflammation." He sees a third: greyish, enlarged, and studded with

tubercle, and is perplexed to be again told, in answer to his question as to its cause, that it is the result of "inflammation." Bewildered and confused, he leaves the dead room and its pathology, and follows the physician through the wards of the hospital. "Here, at least," he says, "from the lips of Nature herself, I shall receive a satisfactory answer to my puzzling question." He approaches a patient, labouring under high fever, whose bloodshot eye, and vacant stare, proclaim that cerebral inflammation has begun to run riot within him. He finds that, for this man, his mentor directs copious leeching, and other depletive measures; while, for his companion, in the next bed, presenting many similar symptoms, he finds tonic remedies—bark and wine, prescribed.

Astonished, why two patients, apparently suffering so nearly alike, should be treated so differently, he goes to another ward, where a new scene of wonder awaits him. Here a patient, labouring under ophthalmia, as he is told, is being freely leeches and bled from the temples, treated with purgatives, perhaps with mercury; he sees another, also labouring under ophthalmia, have his eyelids, and, perchance, also the globe of the eye itself, rubbed with caustic; while a third patient, labouring again under ophthalmia, is treated with tonics, and stimulants applied to the eye itself. Disheartened at the difficulties which surround him, in his endeavours to comprehend all these seeming anomalies, he, as it very often happens, becomes disgusted with the subject altogether, flings it to the winds, at the same time passing an opinion (which, probably, is in general a true one!), "that the majority of medical works are compiled by medical men, totally unfit for the task of teaching what they profess."

In my next lecture, gentlemen, I shall resume this interesting subject, and hope to remove much of the confusion I have noticed.

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D.,
Surgeon-Lithotritist to the Royal Free Hospital.

(Continued from page 510.)

It is little more than a fortnight, since I operated on my first case in the Royal Free Hospital. The patient, a man of stout build, upwards of 60 years of age, had been operated on by me in 1831. He continued free from any symptoms of his complaint, until 1837, when they returned. On coming to London, he was informed that I had left England. He was admitted into one of the hospitals, when he underwent no less than *ten fruitless sittings*. He returned home dispirited, and much shattered in constitution. It was only by accident that he heard, some months after, that I had always resided in London. His altered appearance and emaciation told plainly how much he had suffered. He drew a picture, perhaps overcharged, of the misery and injury he endured from the attempts made to operate on him. His calls to void water were frequent, and the excretion was accompanied with great pain; his skin was dry and hot, and the appetite failing and uncertain. The urine was muco-purulent and very foetid; there were several calculi, the bladder excessively irritable, and the catarrhal affection making progress. Would it have been more prudent to try to moderate these symptoms, before recourse was had to the operation? he would not submit to delay. If I proposed to temporize, he believed he was beyond the assistance of art; "he wished it done at once; if it were not, he must die." I yielded to his importunities, determined, however, to conduct the operation, as one ought always to do in such a case, with the utmost possible care and gentleness. Omitting the usual preliminary step of injecting the bladder, I at once introduced a small sized lithotrite, and in a sitting, not exceeding twenty-five seconds in duration, seized and crushed several of the calculi. He walked to his lodging in the next street, and after a warm hip bath of half an hour, passed the rest of the day in bed. On the

next day, he felt much better, and was desirous my work should be proceeded with, but this wish of his was of course not complied with. The palliative treatment was conducted simultaneously with the sittings, four of which, held at intervals of three or four days, sufficed to clear out the bladder completely. Dr. Hingeston, Dr. Martin Lynch, Dr. Brown, and several other medical practitioners, were present to witness the progress of the case. He had no return of his symptoms till within the last nine months. He came to London about a month ago, when he submitted once again, cheerfully and with confidence, to the process, of which his experience is now, at least, respectable. My colleagues, Dr. Hume Weatherhead, Mr. Greville Jones, Mr. Eccles, Mr. Gay, and Mr. Hill, besides several other gentlemen, honoured this, my first performance at the Royal Free Hospital, with their presence. Three sittings, of the usual short duration, effected the destruction and expulsion of the small calculi that had been formed in the preceding year.

Can it be wondered at, that false notions should prevail as to the real nature and importance of lithotritry, when, in a public institution, but mere nugatory results are obtained after attempts so many times repeated. The subject, however, is very far from being exhausted. I know of another instance, in which a patient remained fifteen months in an hospital, undergoing frequent attempts at operation, without obtaining a cure. I could myself furnish not a small number of instances of patients, who had been subjected to trials, or attempts at operations, who came subsequently under my care. But the cases, just narrated, are already sufficient for the argument I have been so far labouring to establish.

Application of Lithotritry, as performed with a double slide lithotrite, to cases where the stone is small; or, if numerous, still small, and in which the urinary organs are healthy, or nearly so, and the general health unimpaired.—In this class of patients, the application of lithotritry, either by the three branched instrument of Civiale, or the double slide lithotrite, was always possible, and its results satisfactory, when the operation was conducted methodically, and with due care. In reference, therefore, to lithotritry as a general method, and applicable to this particular class of cases, there was no widening of its limits from the substitution of my instrument. But the manœuvre of the operation was rendered more simple for young hands, and, for the experienced, the seizure of the stone was less a matter of uncertainty; and the time occupied in the search for it was, consequently, abridged. With the three branched instrument, this step of the operation was sometimes protracted, more especially when the stone was thin and flat-shaped. Owing to this cause, I have now and then seen the sitting become fruitless, from non-seizure of the stone. With the double-slide lithotrite, such delay, or failure, in accomplishing this step, can scarcely occur to a practised hand. There has been, therefore, a very important gain in regard to the celerity with which the whole of the steps of the operation may be conducted, and, consequently, a great saving as regards the pain the patient might be subjected to. Let us square the foregoing statements by the test of facts in practice.

I was consulted by a gentleman of the name of Wall, who was under the care of Dr. Kenney, of the Strand. He had passed his seventieth year, and for some months had experienced pain in making water. The calls were frequent, and, although the quantity voided in four and twenty hours was rather more than the average, the sense of fulness in the bladder was constant. He had the power of retaining the urine, and answering the natural call as usual, but, in the interval, a slight oozing of the urine was taking place. This was one of those not uncommon cases, where retention and incontinence are present at the same time. A catheter was introduced, to draw off the accumulation, and upwards of two pints of urine were thus evacuated. On withdrawing the catheter, a small calculus was felt. Attention having been directed to his general state, by medicine, and the daily introduction of the catheter, such a degree of amendment was obtained in the space of

a fortnight, that it was thought right to remove the stone without further delay. One short sitting sufficed.

A gentleman from the neighbourhood of Brixton, of the name of Cutfield, applied to me to examine him for something he thought wrong in his bladder. He was turned sixty, and of a powerful frame. He had enjoyed tolerable health all his life, till lately, when he found he had not the same power to void his water. An inguinal hernia, which he had had for years, had latterly grown much larger, and, as he thought, from the straining he was compelled to make in micturition. The water sometimes stopped altogether, and then flowed again soon after, without his being able to account for it. He was very uncomfortable at night; could not ride in a chaise, as he had been in the habit of doing, and apprehended some fatal inflammation. He used to pass gravel, but had not done so lately.

I told him, in all likelihood, he had a stone in the bladder, and on exploring, this proved to be the case. A small lithotrite was at once introduced; the stone, about half an inch in diameter, seized, and reduced to fragments, several of which were extracted with the instrument: the remaining fragments came away in a few days. A careful exploration, made a week after the operation, satisfied me that the bladder was quite free, and the patient's sensations bore a similar satisfactory testimony.

Mr. Cholmondeley, of Devonshire-place, consulted me in the case of a female, who was suffering from frequent micturition and a feeling of burning in the urinary organs, and bearing down. She had occasionally passed gravel and red sand. These symptoms were relieved from time to time by alkaline remedies, and the use of fomentations, with the warm hip bath; their frequent return indicated the propriety of making an examination. A calculus, about the size of an almond, was discovered, and at once reduced to fragments by the lithotrite. I have not heard of her having had any return of her complaint.

Some time since, I was called by the Rev. Mr. Crawford, of Green Street, Kent, to see one of his poor parishioners, who had been for two years bedridden, with a stone in the bladder. The poor man had always dreaded the idea of an operation, and had, unfortunately, refused all assistance of art, until, by the progress of his malady, he was beyond the reach of remedy. When I saw him, he was fast hastening to his end, and any interference, except for the direction of soothing measures, would have been unjustifiable. While in the neighbourhood, I heard from his surgeon, Mr. Church, of another patient who was desirous of seeing me. This man, whose name was Hobbes, had been cut for the stone in London, about seven or eight years before. He was advanced in years, bordering on seventy, but was still able to work as a gardener. The return of his complaint dated from three quarters of a year back, and was accompanied by symptoms with which a sad experience had made him familiar. He would not be cut again, but he had heard of lithotripsy and was anxious to obtain relief by its application. On sounding, I discovered a small calculus, in a small, rugous, and thickened bladder. I made an injection of three ounces of tepid water, and at once proceeded to reduce the foreign body. The stone was soft and friable, and yielded, almost without force; but the operation was attended with more pain, than usual under circumstances where the stone is small, owing, of course, to the greater sensibility of a viscus, in which alteration, to a certain extent, had already made progress. The thickening was of ancient date, and was of itself an unfavourable circumstance; and a catarrhal affection of the mucous membrane must have supervened, almost necessarily, upon such a lesion, as soon as the mechanical cause, the presence of the stone, occurred to produce it. He was relieved of the calculus by the application of the instrument, and this was all that could be accomplished by any operation, but the thickening remained, and the inconvenience which it entails, frequent micturition, remains also.

While on this excursion in Kent, I was introduced to another patient, a gentleman of the name

of Harnett. Though of very advanced years, being much beyond 70, his general health was excellent. He made water frequently; the pain was sharp, but did not last more than a minute. He was tolerably comfortable in the horizontal position, but when he took exercise, either walking, or in a chaise, he felt great discomfort from pain, heat and scalding. His surgeon, Mr. Ray of Milton, who accompanied me, was anxious the patient should be examined before I proceeded on my journey home, in order that he might at once determine what course was to be taken. The bladder having been injected, a small calculus was detected. The injection and examination not having given rise to any uneasiness, I proposed to convert our exploration into the first step of the operation. This being assented to, I at once introduced the instrument, and reduced the stone into fragments, in a sitting, remarkable for nothing more than the brief space of time it occupied, and the perfect freedom from uneasiness of the patient under the manipulation.

I am not, however, inclined to recommend haste in these matters; it may be the very reverse of prudent, to proceed at once to an operation. In some cases where all other circumstances seem favourable, the urethra may be the seat of unusual sensibility; this tenderness ought to be subdued and blunted, before the operation is performed. When any great change has been made in the habits, and climate, it will be but reasonable to allow a little time for the patient's constitution to be modified by them, before he is subjected to a manœuvre, upon which very naturally his mind dwells so anxiously. These hasty operations are of course doubly condemnable, when there are any particular conditions of the system, however temporary they may be, either of the urine itself, or of the other secretions, to demand our first attention. The object of every prudent operating surgeon is to secure for his operations the most favourable conditions, and to throw no advantages away. Levity, in such circumstances, would be a cruel trifling with the life of the person who relies on his skill. There are cases, and I have pointed out some such, where to relieve the patient at once, and almost by surprise, is highly expedient. Experience will guide the practitioner safely in this matter. But it would be wrong to make success in such cases, the basis of a rule for all those that seem similar in their general features.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes Illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

Before describing the alterations of the encephalon, it is necessary to make an effort to determine what are the anatomical characters of the cerebral tissue in the healthy state; this is the first point to which all our attention should be directed, if we intend to arrive at notions as precise on this subject, as we possess on other points of pathology.

Beginning with the skull, we are struck with the varieties, as to weight, texture, and development, varieties which, in our opinion, are morbid states, the dependance of which on diseases of the brain is more intimate than we imagine. Thus, for instance, we often see the two tables widely separated, or close to each other, sometimes intimately united, and at other times the spongy tissue, the diploe, unusually thick.

There can be no doubt that appearances, so widely different, correspond to the character and progress of the chronic diseases, that affect the brain and its membranes. As a general result, long experience enables me to state that, in the affections of the brain that continue for a long

time, such as demency, hemiplegy, and certain forms of imbecility, with atrophy of the convolutions, or even of an entire lobe, the blood is no longer sent in the same abundance as in the normal state. As a consequence, a marked wasting of the brain takes place in the course of time, coinciding almost always with a species of atrophy of the bones of the skull; the two tables, becoming thinner, close together and become almost transparent, their nutrient vessels are obliterated, and even this atrophy may be observed on only one side of the skull, when only one lobe has been affected for a length of time. The bones become thin, very light, and have the appearance of ivory. Phenomena of an opposite kind are met with in the chronic diseases of the brain, marked by a continual, or periodical, flow of blood to the head, as in chronic mania and epilepsy. In the latter case, more especially, the increase of the diploe sometimes amounts to half an inch in thickness; the tables are also affected by this hypertrophy, the cause of which has not been hitherto pointed out.

On removing the calvarium with care, and the dura mater, we see the pia mater, which in the healthy state appears slightly injected; the arachnoid is thin and transparent. Both these membranes are easily detached from the surface of the brain; the slightest adhesion, or erosion, indicates a seat of morbid action. The cerebro-spinal fluid that fills up the anfractuosités is small in quantity, limpid, slightly unctuous, and flows away, or oozes in drops, either from the internal substance or surface of the brain, after the incision of the membranes.

When the brain is completely exposed, the convolutions appear smooth, full, and slightly rounded. We should notice such of them as are but slightly developed; these are instances of atrophy, either congenital or accidental. Some persons are remarkable for the small size of all the convolutions, while, in others, they are large, filled out, and deeply furrowed; this difference of organization corresponds necessarily to a different intellectual development. In the normal state, the external cortical substance has a uniform slate grey aspect, which after a few minutes' exposure to the light becomes faintly redder. In scorbutic persons, this substance has a greenish hue, which is particularly remarkable in the corpora striata; the general color, moreover, of the substance of the brain bears relation to the habitual color of the skin, and of the face especially. In plethoric persons, with countenances habitually injected, the external surface is the seat of constant hyperemia, whereby they are singularly predisposed to congestions.

Let us now take a glance at the base of the brain, so strangely neglected in post-mortem examinations. In its centre we observe an excavation, which in the healthy state contains a quantity of cerebro-spinal fluid. This region must be very carefully examined.

In the middle, there is a space remarkable for its grey colour, for numerous vascular openings, and the origin of the third pair of nerves. In the normal state, it presents an antero-posterior furrow, and two white fasciculi, separated from the peduncles by a darkish line. Near to this line, are the mamillary tubercles, separated from each other by a deep sulcus, excepting anteriorly, where they are joined by a thin layer of grey substance, which tears with the utmost facility even in the healthy state. I have observed, in several female idiots at the Salpêtrière, atrophy of one hemisphere only, in whom the corresponding mamillary tubercle was scarcely visible. These tubercles in their natural state are of the same size, white on the surface, and grey in the interior.

The *tuber cinereum* and the pituitary body which are on the same line should be carefully examined; they are placed between the mamillary tubercles and the roots of the optic tracts, so remarkable for their brilliant whiteness. The *tuber cinereum* is grey and soft. In the pituitary body, it is formed into two small lobes; the anterior contains a pulp resembling plaster mixed with water; the posterior lobe is of a deeper colour, almost grey, and often contains true stony concretions, similar to the pineal gland; it is not known whether this state is normal or morbid: the presence, however, of the pituitary

body throughout the entire animal chain, and its large development in fishes, shews sufficiently that its functions must be essential, and consequently that its alterations must be more serious than is generally imagined.

On uplifting the point of decussation of the optic nerves, we must carefully examine the two laminae (*lames*) that form the floor of the third ventricle, and one of which continues the root of the optic nerves; I have found this floor singularly thickened, hard, and like cartilage in several cases of amaurosis. In a young girl born blind, I have found it entirely wanting, so that the third ventricle was directly open to the base of the skull.

The most important of the parts of the base of the brain is undoubtedly the annular protuberance; its size is always in proportion with that of the lateral lobes of the cerebellum; when these lobes are atrophied, or absent, the protuberance is similarly atrophied, or entirely wanting. In a good number of epileptics, I have found it both hypertrophied and indurated at the same time. In five of the cases, this induration was very manifest, particularly in the *crura cerebri*.

The medulla oblongata, (*bulbe rachidien*) presents also numerous variations of thickness, and size. The corpora pyramidalia, and corpora olivaria, demand our minute attention, the latter especially, in whose internal texture is to be found the origin of the nervous filaments of the great hypoglossal nerve. This examination should be conducted with the last degree of exactness, wherever there has been difficulty, or abolition of the movements of the tongue. I am firmly persuaded, that in this point there are some curious researches to be made, on persons born dumb, and in cases of general paralysis.

On removing the corpora pyramidalia, olivaria, and restiforma, we come upon the centre of the medulla oblongata, which, in each of its halves, is formed of a very dense nucleus, presenting a mixture of grey and white substance. All its parts present lesions more or less profound in all persons attacked with nervous affections, characterized by disorder of the muscular contractility, and of the sensorial functions.

The remainder of the base of the brain presents, also, several interesting particularities. In the middle, and lateral parts at the bottom of the fissure of Sylvius, we see the substance of the brain perforated for the passage of vessels; this part should be examined, as the ossification or obliteration of these vessels exercises an almost mechanical effect on the sanguineous or serous congestions of the encephalon.

On its surface, the brain is furrowed by convolutions, of which either the number or the absence appear definitively to correspond with the intensity of the intellectual functions.

The occipital convolutions of the brain, thinner, closer, and more continuous at the edges, present the most defined inflexions. Their atrophy is particularly remarkable in cases of senile demency; their development, in any case, constantly corresponds with the development of the intellectual and moral faculties.

Tiedemann has perfectly well figured the progressive diminution of the cerebral convolutions, descending from man to the *rodentia*. In man, they have a depth of from 10 to 16 lines, and this point is important in the appreciation of their functions.

Taking the brain as an organ of determination, the mammals may be ranged in three classes: in the first, there are no convolutions (*rodentia*, bats); in the second, longitudinal convolutions, passing through the whole length of the hemispheres; in the third, longitudinal convolutions, but interrupted to receive the additional vertical convolutions (the elephant, apes, and man). In this last class, the convolutions are fuller, and more wavy.

Let us now take a glance at the anterior of the brain, in its normal state. If we divide a convolution in the middle, we find it formed of a white kernel, surrounded by a layer of grey substance, varying in thickness from half a line to a line and a half; it is very necessary in acute or chronic

affections of the brain to notice this thickness; in the healthy state, this substance ought to form the 5-6ths of each convolution. If we macerate the brain for several days, the grey substance may be peeled off readily; we then see the convolutions reduced to the white substance, representing short lamellae, springing from the different points of the surface of the medullary nucleus. All these central nodules are continuous with each other, and rest on the central nucleus of the hemisphere, which becomes larger as it approaches the corpus callosum.

On separating the hemispheres, we see the corpus callosum, beneath which we find the septum lucidum, under the shape of a thin white flake, which, proceeding backwards towards the fornix, forms, by its lateral surfaces, the internal wall of the lateral ventricles. This septum, in the healthy state, is formed of two very thin, but separable flakes, between which a few drops of serum are found. This small sinus may acquire considerable development, in serous infiltrations of the brain, and in œdema of that organ.

Forwards, as we have just stated, we find the fornix, and the plexus choroides, the examination of which is so much neglected; the organic alterations of all the parts just enumerated, are totally unknown.

The lateral ventricles are the seat of frequent alterations; they are lined with a transparent and resisting membrane which is prolonged into the middle, and thence into the fourth ventricle, through the aqueduct of Sylvius. This membrane is remarkably distinct in dropsy of the ventricles, owing to the pultaceous softening which the surrounding layers of the brain undergo. Anatomists regard it as a serous membrane, both on account of its lymphatic disposition, and the nature of the liquid it secretes; they adopt this view from its liability to dropsy, suppuration, and granulation, like other serous membranes; but this view must now be modified.

From the observations of Magendie, we now know that the cerebro-spinal fluid is of a particular nature:—that, according to the chemical analysis of M. Couerbe, it contains elements peculiar to the brain, such as cerebrote, cholesterine, and phosphorus,—and that, consequently, the membrane that secretes it must have a texture different from that of the serous membranes. It, moreover, appears that the fluid is as much secreted by the ventricles as by the brain itself. In the healthy state, it amounts to only a few ounces; but when there is disease, as in general paralysis, or hydrocephalus, its quantity is increased, or diminished. It exists in all parts of the brain, but its accumulations are most remarkable at the occipital opening beneath the cerebellum, at the tubercula quadrigemina, bathing the pineal gland, in the anfractuosités of the convolutions. It is to be found everywhere accompanying the pia mater, a disposition which becomes very evident when the brain is injected with size and vermillion. It is found, also, at the pons Varolii, and the *crura*, where it protects the basilar artery from the compression of the superincumbent brain, and it surrounds all the encephalic nerves, especially the fifth, up to the point where they pass out of the skull. Thus, we find, between the pia mater and arachnoid, a layer of fluid, which fills up all the void spaces on the surface. This same fluid is found in the lateral ventricles, and, when normal, the quantity should not exceed an ounce and a half. The entire absence of this fluid is indicated by muscular enfeeblement, paralytic trembling, and coma.

Let us now revert to the internal structure of the brain. The inferior wall of the lateral ventricles is formed to a great extent by the corpus striatum and the optic tract. The corpus striatum, considered as a whole, forms a true lobule, the relations of which must always be present to the mind, when we study its alterations, or those of the surrounding centres. When cut into, its anterior part presents a greyish red substance, dotted with numerous white points, resulting from the division of white fibres, which are medullary fasciculi that seem to proceed from the optic tract, and expand and lose themselves in its interior.

There are, besides, numerous blood-vessels, the presence of which accounts for the free hæmorrhages that take place in its substance; it is here, also, that the absorption and cicatrization of such effusions is the most prompt and easy. I have sometimes found the corpus striatum of a greenish hue, in scorbutic subjects at Bicetre.

The chief reason for entering into these details of normal anatomy, in regard to the different centres constituting the brain, was to show how much there is yet to be done for the pathology of all these parts, and how incomplete those microscopic observations really are, upon which, notwithstanding, up to this time, so many theories rest. Some persons, without taking the trouble of examining all the nervous centres of the cerebral mass, and establishing what their physiological conditions are, do not hesitate, nevertheless, in these diseases to conclude, that no trace of alteration can be found in the dead body, although they possess no term of comparison whereby they may discern their healthy from their morbid state; while others, without any knowledge of the brain, and completely ignorant of the structure and functions of the principal centres constituting it, confine themselves to the old traditions of a bye-gone age. They look upon the nervous system as an apparatus, the functions of which baffle all analysis, and all comprehension. It is the material instrument of supernatural faculties, which must be neither touched nor explained. These reasoners can never be made to comprehend that intelligence and motility, with all their degrees and all their shades, are functions of the brain, as digestion is a function of the stomach, or as respiration is a function of the lungs. We must leave them to the complacency they derive from ideas, which can be only the expression of an ignorance entirely voluntary, and this is equivalent to saying that it is incurable.

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OF THE GENITO-URINARY ORGANS, WITH THE ANALYSES OF THE DIFFERENT SECRETIONS.

By — SEGALAS, M.D., Member of the Academy of Medicine.

(Continued from page 507.)

Third Question:—*What is the influence exercised by traumatic lesions of the spinal marrow on the excretion of the urine?*

The immediate effect of these lesions is—*ischuria vesicalis*; and the secondary, supervening sooner or later, is—*incontinence of urine*. The former is said to be owing to the paralysis of the bladder itself, and the latter to that of its cervix. But, if such be the case, why does retention always precede incontinence of urine, no matter what part of the medulla has been divided? Why does incontinence follow retention, independently of the morbid condition of the spinal marrow, let its mode of development be what it may?—whether it remain stationary, or whether it tend to a happy or a fatal termination? Why does incontinence not take place, or why is it delayed, by following simple hygienic rules, and by withdrawing the urine regularly—every third or fourth hour—with a gum-elastic catheter, removing this instrument as soon as the bladder is empty? Why, on the contrary, is it accelerated, or even produced, by all that irritates the bladder, such as: over-distention, the constant presence of the catheter, and the internal use of tincture of cantharides? Is it not more natural to conclude, that the retention of urine is caused by the bladder, and the muscles surrounding the abdominal viscera, being incapable of contracting?—and that the incontinence takes place, at first, by *regorgement*, and, afterwards, by the resistance offered, by the inflamed bladder, to its distention? If this latter hypothesis be correct, in order to avoid, or at least retard, so very disgusting an infirmity, we must have recourse to the means already indicated as proper to prevent the alteration of the urine.

Fourth Question:—*What is the influence exercised by the traumatic lesions of the spinal marrow on the secretion and composition of the semen?*

Observation, experience, and analogy, unite in demonstrating that the secretion of the seminal fluid takes place after traumatic lesions of the spinal marrow. Indeed, the patient, in my second case, experienced the sensation which generally accompanies the emission of this fluid (it is true, that this occurred at a period when he was getting better), and Dr. Brachet relates the curious case of one of his patients, who, though affected with paraplegia, caused by a fall from a horse, became twice a father, and contracted three blennorrhagiae during the absence of his wife. The same physician has also performed, on this subject, several experiments far more conclusive than the fact just related, the which, to some persons, may appear doubtful.—1°. After having ascertained, beyond a doubt, that a cat, a year old, had covered its female three successive times, he divided the medulla between the third and fourth lumbar vertebrae; all the posterior extremities were instantly paralysed, as well as the rectum and bladder. The animal was well fed for three days, and then killed, and, on examining the body, the genital organs appeared to be in their normal condition, and the vesiculæ seminales were full of semen.—2°. A second cat, of the same age, was killed immediately after the act, and the vesiculæ were empty.—These comparative experiments were repeated three different times by Dr. Brachet, and the result was the same in all, for the vesiculæ seminales were constantly empty when the animal was killed immediately after copulation, and, on the contrary, full, when it was permitted to live after this act and the division of the chord. But Dr. Brachet did not content himself with these experiments; he likewise divided the spinal marrow of a cat, ten months old, in the lumbar region, and, as the paralysis of the posterior extremities prevented its being able to perform coitus, he caused the parts to be excited manually; after some time, the emission of the semen took place; the same manœuvre was repeated twenty-four hours after, and, finally, the ensuing day, in both cases with a similar result.

On my side, I have likewise made some researches on this subject, and the facts observed were: of fourteen guinea-pigs, whose medulla spinalis was divided at the lumbar or cervical regions, ten died, or were killed, the first or second day; three lived three, one only four, days. In all, I found semen in the epididymis and the ejaculatory canals, and even, in many of them, in the urethra. But it may be objected, perhaps, that the semen was secreted previously to the lesion of the spinal marrow; the contrary opinion seems to me to be the most probable, on reflecting that the liquid, at least apparently, was in greater quantity in the animals which survived two and three days, than in those which died sooner.

As to the composition of the semen, it did not appear, when examined under a microscope, to have undergone any considerable change. I remarked, in that of the guinea-pigs, that the animalculæ were alive two and three days after the division of the medulla in the lumbar or inferior portion of the cervical regions, and even when that organ was destroyed downwards from the point where it was divided. Nay, more; I found the animalculæ endowed with a remarkable degree of agility and vivacity, in the urethra of the animal which died the fourth day after the destruction of the spinal marrow, from the last cervical vertebra downwards. Moreover, it is well known that there is considerable affinity between the bladder and testes, relative to the origin of their nerves, and as I have already shewn that the secretion and the composition of the urine are not notably changed by the lesions of the medulla, may it not be concluded that the same result takes place with the semen? Doubtless, the answer will be in the affirmative; the more so, as analogy, supported by observation and experience, seems to prove that such is the case.

Fifth Question:—*What is the influence exercised by the traumatic lesion of the spinal marrow on erection, desire for sexual intercourse, and ejaculation?* In many cases, where these lesions exist, the

patients present, while their inferior extremities are completely paralysed, the singular phenomenon of priapism, or at least frequent erections, produced by the slightest contact of the hand or an instrument, with the penis, and that without the individual being at all conscious of the fact, or without his experiencing any desires, any agreeable sensation, &c. This symptom is more frequent in traumatic lesions of the cervical portion of the chord, than in those situated lower down. In these latter, as life may continue months and years, the phenomenon, just mentioned, undergoes numerous modifications, often decreases in intensity, and may even disappear altogether, as in the second case related in this memoir; in which, as is still more extraordinary, the patient experienced anew the desire for sexual intercourse.

As to ejaculation, it seems that it sometimes takes place. In my second case it was performed, though in an incomplete manner, and Dr. Brachet asserts that, in the patient affected with paraplegia, whose history has been already related, it occurred, but the fluid was not darted from the urethra, nor accompanied by that peculiar voluptuous sensation characteristic of the act. It is also well known that hanging, when complicated with luxation of the cervical vertebrae, produces, generally, erection and, sometimes, ejaculation. On this occasion, it may not be uninteresting to repeat briefly the result of my experiments on guinea-pigs, performed twenty years ago, and published at that period.* "If on a guinea-pig, the brain of which is exposed to view, a narrow stiletto is plunged into the cerebellum, so as to reach, through it, the spinal chord, erection takes place; and if it is pushed onwards down the vertebral canal, ejaculation is performed as soon as it reaches the lumbar region, whilst the bladder, if even full, retains its contents. The same phenomena were produced on guinea-pigs which were decapitated, on pushing the instrument in the theca vertebralis, from above downwards."

Having repeated these experiments, I found that not only the facts there recorded were correct, but likewise that ejaculation was produced when the instrument was introduced at the inferior portion of the cervical region, and carried from thence downwards. The presence of numerous spermatic animalculæ in the fluid, emitted during the operation, removes all doubts as to its nature. I remarked, also, that the destruction of the inferior portion of the chord, alone, does not produce the excretion of the gelatinous liquid contained in the cavities, which are called, erroneously perhaps, vesiculæ seminales, whilst it takes place in considerable quantities when destruction is performed from above downwards, beginning at the cervical region. I here candidly confess, that I was mistaken, when, in my former experiments, I considered the emission of this fluid as the real ejaculation, and consequently announced that this did not take place when the inferior portion of the chord, alone, was lacerated. But in several animals, on which, in the present researches, I performed only this partial destruction, the fluid which flowed from the urethra, during the operation, contained numerous seminal animalculæ, whilst in others, the liquid thus emitted offered, exclusively, all the characters of urine. This emission took place several times, without erection manifesting itself, and I fear that in my experiments, performed in 1824, the gelatiniform liquid, by its accumulation and concretion under the prepuce, led me to conclude that this phenomenon, more apparent than real, existed, and which I announced then as a positive and constant fact. Finally, I observed on some guinea-pigs, in which the spinal chord had been divided at the inferior portion of the neck, and in which the bladder was considerably distended by urine, that the least pressure on the abdomen was sufficient to cause that liquid to escape, and that it contained live spermatic animalculæ, 24, 48, and even 72, hours after the operation.

Before taking leave of this subject, I will reply briefly to an article published by Dr. Brachet, in

* Lettre sur quelques points de physiologie. Archives generales de medecine. Vol. 6., 1824, p. 216.

his *Recherches Experimentales sur les Fonctions du Systeme Nerveux Ganglionnaire*, beginning thus:—"In the Sitting of the Royal Academy of Medicine, August 11th, 1825, Dr. Segalas, while speaking of a case of fracture of the vertebral column, drew attention to the influence exercised by the spinal marrow on the vesiculæ seminales, and added to this fact the result of his experiments performed on guinea-pigs, where the irritation of the chord, by means of an instrument introduced into the vertebral canal, from the occiput down to the loins, produced ejaculation. This fact was too important not to fix my attention; consequently, I repeated the experiments, conjointly with my countryman and friend—Dr. Duchesne." Dr. Brachet, being unable to procure a small guinea-pig, performed the operation on a rabbit, and as he observed neither erection nor ejaculation, he closed his recital by the following remarks:—"This experiment is, consequently, in direct opposition with those of Dr. Segalas, and confirms the opinion I announced, that the vesiculæ seminales were not under the influence of the cephalo-rachidian system. If I performed it, it was in order that I might not be subjected to the reproach of having omitted aught that appertained to the subject, since it is but the repetition of similar experiments, performed, it is true, for another object, but in which I never saw ejaculation take place; and surely this phenomenon would have attracted my attention, had it occurred. It must not, however, be concluded that I entertain the slightest doubt as to the exactitude of Dr. Segalas' experiments, only I think he has drawn his conclusion somewhat prematurely, when he states that the ejaculation—produced probably by some other cause—was the result of the irritation of the spinal chord. Is it not a well-known fact, that certain positions are sufficient, sometimes, to cause the emission of the seminal fluid?—that pain, and still oftener flagellation, produce the same phenomenon? Are not these facts, and a thousand others which are employed by licentious debauchees, though reprobated by morality, enough to enable us to conclude that the animals, on which the experiment was performed, may have been under the influence of one of these causes; and that, it being at the period of rut, they ejaculated the more readily, a circumstance which ought never to be forgotten in such experiments?"

My reply will be brief: I have also performed the same experiments, upwards of one hundred different times, not only in my laboratory, but likewise during my lectures, before my pupils; and almost always ejaculation was produced, and that in an unequivocal manner. I operated, it is true, constantly on guinea-pigs, and constantly my attention was attracted by this phenomenon. As to the erection, as I have already stated, I might have been led into error by the presence of the gelatiniform liquid, which, proceeding from the vesiculæ seminales, concreted itself between the urethra and the prepuce of the animal, in which the spinal chord had been destroyed from above downwards; and, by the size and rigidity it gave to the genital organ, it may have caused the deception. I think that the reason, why Dr. Brachet obtained a contrary result, was because he operated on rabbits; as, on two occasions, I performed the experiment on these animals, and in both, the laceration of the chord, done in the same way as on the guinea-pigs, from above downwards, seemed to have no apparent action on the genital organs; at least it produced nothing more than a convulsive movement of the penis, but neither erection nor ejaculation.

Sixth Question:—*What is the influence exercised, by traumatic lesions of the Spinal Marrow, on Conception, Gestation, and Parturition?*

I found this question studied, though in an indirect manner, in Dr. Brachet's work—*Sur les Fonctions du Systeme Nerveux Ganglionnaire*, and I purpose here simply reproducing the facts, therein announced by that distinguished experimenter, as I consider them very conclusive.

Dr. Brachet took a young bitch, of small size, which for the first time experienced the desire of the approach of the male; he placed a dog of the same species beside her, for several hours, but they were prevented from coupling; after which, he

divided the chord of the former between the second and third lumbar vertebrae, covered the wound carefully, and held the animal upon its legs. The dog did not hesitate drawing near, and took all the time necessary to perform copulation. Immediately after, the wound was dressed, and the bitch left perfectly quiet; the heat, the tumefaction, and the running from the genital organs, continued for some days after. The wound soon healed; but, though the appetite of the animal continued to be good, it lingered, lost its strength gradually, and died a month after the operation. On examining the *plectana*, the left was found empty, but the right contained two embryos, perfectly formed, and of the size of a beetle.

Dr. Brachet was acquainted with a lady, who, after having been thrice a mother, was affected with paraplegia; sensation was totally abolished as high up as the hypogastrium; nothing was perceived during coitus, and yet she became pregnant for the fourth time. I myself attended, with Dr. Fleury, a looking-glass seller, whose wife, still young, and, in other respects, in perfect health, was affected with insensibility of the sexual organs; and yet this did not prevent her having several children. It may, therefore, be concluded, that conception is independent of the spinal marrow.

As to gestation, what precedes is sufficient to prove that it may continue, notwithstanding the lesions of the spinal marrow, complicated with paraplegia; but this physiologist performed the following experiments: 1^o Seventy hours after having caused a she-rabbit to be covered several times by the male, he divided the spinal chord in the lumbar region; all the parts situated posteriorly were instantly paralyzed. The wound, being closed, soon cicatrized; but the animal grew weaker and weaker, refused its food, and died twenty-three days after the operation. The *plectana* contained each three fœtuses, perfectly formed; 2^o the same operation was performed, under similar conditions, on a rabbit, which, after lingering a month, died; at the *sectio*, four fœtuses were discovered in one *plectana*, and three in the other, very little larger than in the former experiments; 3^o the same was performed on four female guinea-pigs. One died too soon to furnish any result; the second lived ten days, and presented several fœtuses perfectly developed; the third survived fifteen days, and had five fœtuses; finally, the fourth lived nineteen days, and had, in one *plectana*, two fœtuses, almost at full term.

But, in these experiments, Dr. Brachet examined the uterus only after the death of the animal; he, consequently, could not ascertain aught concerning the health of the fœtus itself. In order to fill up this hiatus, I divided the chord in the lumbar region, on a rabbit, very near the period of its bringing forth, and, 96 hours after, exposed to view the two cornua, the animal being still full of life. Twelve fœtuses were discovered, the sensibility, movement, and circulation of which were in every respect identical with those of rabbits, which had not been submitted to any operation. I observed the same fact on a she guinea-pig, which had two fœtuses quite alive, though the spinal marrow in the dorsal and lumbar regions had been destroyed, 72 hours before examining the uterus.

The general conclusion to be deduced from these facts, is that gestation is independent of the spinal marrow, or, at least, that the life of the fœtus may continue, although the influence exercised by this nervous centre be wanting.

On parturition, Dr. Brachet performed the following experiments:—1^o In a guinea-pig, about to bring forth, the spinal cord was divided. The contractions, and the efforts to perform this function, were instantly stopped; there was merely a slight tremor of the abdominal muscles; motion, however, was not entirely abolished, for feeble contractions continued, at very short intervals, during the three days the animal survived, without being delivered.—2^o In another guinea-pig, in the same position as the former, the chord was divided between the second and third lumbar vertebrae, and, as before, muscular contractions were less active, and could not be considered as those which were attendant on parturition; for, feeble movements were alone observed to proceed from

the flanks, the others which took place being communicated to the abdomen by the neighbouring organs.—3^o In a third guinea-pig, the chord was divided between the second and third dorsal vertebrae; all the muscular contractions ceased; delivery did not take place, and the animal died twelve hours after.—4^o In another, the same operation: same result: death twenty-one hours after.—5^o A rabbit, on the point of bringing forth her young, was taken. As soon as the phenomena which accompany parturition had appeared, the chord was divided, just below the last dorsal vertebra; muscular contractions instantly ceased. A voltaic pile was prepared, and, an hour after the operation, one of the poles was placed in communication with the anterior extremity of the posterior portion of the spinal marrow, and the other with the uterus, so as to establish a current between the two parts. The cornua contracted, and, three hours after this parturition, to a certain degree artificial, a young rabbit was expelled, followed a quarter of an hour after by a second, and half an hour later by a third; the animal died on the 6th hour, having five other fœtuses in the cornua, which it was unable to expulse on account of the feeble condition in which it was, and that, notwithstanding the help of the galvanic current.—6^o On a guinea-pig, an hour after the appearance of the phenomena of parturition, the cauda equina was divided in the sacral region, after which the integuments were incised, opposite the lumbar and dorsal vertebrae. During these various operations, the animal evidently suffered greatly; still the uterine contractions continued, and it brought forth five fœtuses alive and healthy. After these experiments, which prove, beyond a doubt, that the spinal marrow presides over uterine contractions, Dr. Brachet relates the case of the lady affected with paraplegia, and who became pregnant while in that state; but whose accouchement needed the application of the forceps for the extraction of the child, and the introduction of the hand for the removal of the placenta.

Conclusions.

From the foregoing observations and experiments, it may be concluded:—

1^o That the traumatic lesions of the spinal marrow do not prevent the urinary secretion.

2^o That they produce no direct change in the composition of that liquid.

3^o That the alterations which occur afterwards, are caused by a catarrhal inflammation of the bladder, produced by the length of time the urine remains in the bladder, or by the important presence of the catheter in that organ, with or without the aid of any other cause.

4^o That traumatic paraplegia is always complicated, first with ischuria vesicalis, and afterwards with incontinence of urine. This latter succeeds to the former, first because the bladder, being over distended, is incapable of containing the urine which continues to be secreted and brought by the ureters, and which escapes by *regorgement*; and secondly, because that organ, being highly inflamed, refuses to act as a reservoir.

5^o That the traumatic lesions of the spinal chord do not prevent the secretion of the seminal fluid.

6^o That the composition of this liquid undergoes no obvious change.

7^o That they produce, frequently, erections without sexual desires, to which sometimes succeed desires without erections.

8^o That they do not constantly form an obstacle to sexual intercourse.

9^o That they do not prevent conception or gestation, and that, when this occurs, parturition needs to be accomplished by the aid of physical or mechanical means.*

*This conclusion, founded solely on the experiments of, and a case recorded by, Dr. Brachet, is too absolute, as the following experiment proves:—parturition having been put a stop to in a rabbit, by the division of the spinal marrow in the lumbar region, the animal by its own efforts, after a delay of six days, expelled eleven or twelve young ones. Though unwilling to alter this conclusion, after the discussion which took place in the Academy, still I consider it just to rectify the error it contains.

10^o That, when considered in a surgical point of view, they lead to establish facts of the utmost importance to the practitioner, especially the following:—(A) The bladder must be emptied in all cases of traumatic paraplegia, at regular intervals: (B) The catheter must never be left constantly in the bladder:—(C) No remedy which irritates the bladder ought to be prescribed.

If these conclusions are considered in a general manner, it will not be denied, I think, that the medulla spinalis has no direct influence over the functions of the kidneys, testicles, or ovaries, any more than on the composition of the urine, the semen, or the development of the fœtus; whilst, on the contrary, it has, under its immediate dependency, the bladder, the vesiculæ seminales, and the uterus, and that the expulsive power of these different reservoirs is more or less disturbed by these traumatic lesions. I will here say nothing of a conclusion, relative to the circulation, derived from some of my experiments, and which is in direct opposition with the opinion of Legallois, who said: "Whenever the spinal marrow is destroyed throughout its whole length, the circulation is arrested completely and for ever.*" The conclusion, at which I have arrived, that, although the spinal chord is entirely destroyed, the circulation may continue within certain limits of time and space, constitutes a fact of the highest importance, but being foreign to the subject now under consideration, I reserve it for a future memoir.

(A memoir, on the same subject, will shortly be published, being revised expressly for the *Medical Times*, by E. H. Desportes M.D., M.A.M., &c.)

PROGRESS OF FRENCH SCIENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Oct. 3, 1844.

On Diseases of the Eye. By Professor Velpcau. In my last lecture, I examined ulcers of the cornea as the consequence of keratitis, and I endeavoured to point out the difference which exists between photophobia, epiphora, and ulcerations. But, in order to have a perfect idea of these symptoms, you must consider in what diseases of the eye they are to be met with; for, if it be true that they are sometimes present in retinitis, iritis, keratitis, and scleritis, yet it will be found that they are very uncommon in the first and last, and are unaccompanied by vascular injection; that, if present in iritis, they constitute a mere complication; and, finally, that keratitis is the only disease of the eye in which they offer any intensity. Doubtless, it would be difficult to establish a difference between iritis, conjunctivitis, keratitis, and other phlegmasiæ, if founded solely on these symptoms; for, being present in all, they vary only in degree; fortunately, there are other characters which, when added, enable us to form a positive diagnosis. As to the cause of these symptoms, I do not think we need have recourse to the reasons held by certain practitioners, in which the retina and the ciliary circle are considered to act the principal part. It is well known that the slightest touch on the skin, if recently deprived of its epidermis, is very painful; now, may not a similar effect be produced by ulceration of the cornea: the lachrymal organs are stimulated by the excitation thus produced, and the result is, photophobia and epiphora. This manner of explaining the fact appears to me far more rational and satisfactory, than to imagine a disease of the ciliary circle.

Treatment of Keratitis.—Before enumerating the various remedies recommended against this affection, I wish it to be clearly understood, that those I am about proposing, as well as such as I have already mentioned, are applicable only to acute diseases of the eye; as to the chronic affections of that organ, I consider them of sufficient importance to be studied attentively on a future occasion. This said, I will proceed to the subject of to-day's lecture.

Were any further proof requisite to establish

the difference between the various inflammations of the eye, it is here that we should find it, for the remedial agents which are so efficacious in conjunctivitis are of little utility in keratitis, and *vice versa*. Thus, local remedies, so heroic in the former, are but of secondary importance in the latter, and even, in some cases, injurious. The same remarks are applicable to general remedies; in conjunctivitis, revulsives on the skin, purgatives, frictions, cupping, baths, and sometimes general and local bleeding, may be prescribed with advantage; in keratitis, local and general bleeding must form the basis of the treatment, and, as accessory means, we should employ blisters, sinapisms, setons, cauteries, &c. The cicatrices resulting from these two last, prevent their being generally employed, notwithstanding their efficacy.

Internal Remedies.—Among the most important, is calomel, given in doses sufficiently powerful to produce salivation in a very short time. There are now, in my wards, two striking proofs of the action of this remedy. Unfortunately, salivation is considered by many persons as capable of producing serious and disagreeable accidents in the mouth; thus, they dread the shaking, or the fall of the teeth, necrosis of the edges of the alveoli, gangrene of the mouth; these accidents, though not impossible, are very uncommon, when the remedy is properly administered; for, though I have employed it for the last ten years in thousands of cases, I have never witnessed one in which these complications occurred. In this respect, the following precepts may be established:—1^o that keratitis, when intense, or even moderately so, threatens the patient with the loss of the eye; 2^o that keratitis can be cured by a very limited number of remedies; 3^o that one of the best means is to produce salivation by the administration of calomel, in strong, but divided, doses; 4^o that salivation, though disagreeable, is without danger, when properly attended to; 5^o finally, between a disease inevitably followed by the loss of the eye, and a mode of treatment, which, though disagreeable, is not dangerous, there can be no hesitation. When, therefore, you have determined upon administering calomel in keratitis, it must be prescribed so as to produce salivation in a moderate degree; this object attained, you must cease giving it, and in order to repress the mercurial action, make use of alum. Thus, if the salivation is moderate, prescribe: *R* Sulph. alumin. 3ss.—3iiss., mellis optim. ʒij, aquæ puræ ʒiv.—*M. ft. gargarisma.* If, on the contrary, it is intense, powdered alum must be applied on the parts affected, by means of the wet finger covered with this substance. About a year ago, I was induced to change my mode of prescribing calomel, from the opinion emitted by M. Mialhe. This chemist stated that salivation took place, after its administration, by its being converted into the deuto-chloruret, and then absorbed, so that it ought to be given in very minute doses to render the decomposition more rapid. I even ordered for that object a certain quantity of chloruret of sodium to be added to the food; but the result failed completely, whether owing to the substance having been badly prepared, or to some unknown cause, I cannot say; and I was, therefore, obliged to have recourse to the ordinary method. As to the dose, it cannot be fixed; for it varies, not only according to the age, sex, and strength, but likewise with the idiosyncrasy of the patient, some being salivated with very small, and others requiring enormous, doses, to obtain that result. Colebicum and turpentine have likewise been greatly vaunted; but the action of the before-mentioned substance being far more certain, it ought always to be preferred; as to the other remedies advocated, they do not deserve to occupy our time, experience having shewn that they are useless.

Local Remedies.—While speaking of the treatment of conjunctivitis, I stated that direct topical remedies were the most efficacious; here, on the contrary, those which act only after producing a modification in the whole system are principally indicated. Thus, astringent collyria (*v.* preceding lectures) are of little utility in keratitis, excepting in one variety, of which I will speak presently; on the contrary, those containing

opium, the ointments of which, belladonna, opium, mercury, &c., are the active principles, may be prescribed with advantage. These remedies need not be placed in contact with the diseased part, but around it, as they act after having been absorbed; whilst the nitrate of silver, and the other astringents, must be placed on the spot itself. But I have just stated, that, in one variety of keratitis, these last are useful, *viz.*: very superficial keratitis diffusa; and this will not appear extraordinary, on reflecting that the external layer of the cornea is considered by many anatomists to be the continuation of the conjunctiva; and as they are so efficacious in the inflammation of the latter membrane, they may be equally so in that of the former, when very superficial. The azotate of silver must not be prescribed as recommended in conjunctivitis, but in smaller doses, thus: *R* nitrat. argent. gr. i, grs. ij. or grs. iv. aq., distill. ʒj. Ointments are useless, because, when applied, they are soon rejected by the tears which flow so abundantly. Leeches are seldom ordered in conjunctivitis, except in cases of intense cephalalgia, but are frequently and advantageously prescribed in this affection. They have been applied—1^o. *On the conjunctiva.* In 1817, I myself advised their being so placed, but as, at that period, I confounded the different inflammations of the eye under the generic term of ophthalmia, I cannot say whether the successful results obtained, were owing to its being conjunctivitis, keratitis, or iritis; but since then I have found them chiefly beneficial in the first. Their application is, however, very tedious, as the surgeon is obliged to put them on by himself, one by one—2^o. *On the lids or around the orbits.* Large ecchymoses and a considerable degree of swelling are the results here; this not only frightens the patient, but is likewise dreaded by some practitioners; for my part, I do not consider them very dangerous; they disappear, generally, in a very short time, without being followed by erysipelas; indeed this spot may be considered as the best.—3^o. *On the temples, or behind the ears.* The former is preferable when no complication exists; but, if intense cephalalgia is present, the latter. To resume: when leeches are applied in keratitis, the nearer they are to the seat of the disease the better; the inconveniences they give rise to are, however, less, when placed at a distance. There is another remedy which may be employed with advantage, *viz.*, a small blister on the forehead, immediately above the orbit. In my next lecture, I will close what I have to say on the treatment of keratitis, and as time will not permit my ending all I have to say on these important diseases this season, I will continue the subject next spring.

Poisoning with the Acetate of Morphia.—Dr. Soujeou, of the Hotel Dieu, Chambery, published, in the *Gazette Medicale*, the following case, remarkable from the dose of the poison, the length of time which elapsed before the symptoms declared themselves, the rapidity of the cure, and the powerful mode of treatment made use of. Alexander B—, an apothecary's assistant, of a good constitution, bilious-sanguineous temperament, took of his own free-will, on the 14th July, at half-past twelve, the following mixture: *Acetat. morphin. ʒj.*, syrup. gum. arab. ʒss., aquæ puræ ʒij. Half an hour after, gr. ij. of tartar emetic was given, but it produced no effect, and the patient went out with one of his friends, walked about with him for an hour, and drank a glass or two of beer, without experiencing the slightest symptom. Two p.m.—Slight giddiness, numbness of the limbs, and slight somnolence. Half-past two p.m.—Brought to the hospital: the following draught was administered: *R* Antim. tart. gr. vj. pulv. ipecac. gr. xxiv., oxymel. seill. ʒij; no effect; consequently, a solution of ioduret of potassium, combined with iodine, and dissolved in distilled water, was ordered, and while it was being made up, M. Rey, Surgeon to the Hospital, introduced the cesophagian tube, in the hopes of producing vomiting; augmentation of the somnolence took place; the head fell forwards on the sternum; paralysis of the elevator palpebralis; legs bent under the weight of the frame; respiration normal; pulse full and strong (venesection). Three p.m.—On giving the second dose of iodine solution, vomiting took

place, and a wash-hand basinful of liquid was ejected; he was then requested to titillate the fauces, but he went to sleep with his fingers in his mouth. Four p.m.—Coma became deeper and deeper; it was with the greatest trouble that he was kept awake; pulse, which had been weaker after venesection, was once more strong and full (phlebotomy was performed for the second time). Five p.m.—Face of a violet hue; limbs rigidly contracted; the patient is speechless, and cannot open his eyes.—(Ordered: Ammoniacal frictions on the epigastrium; sinapisms on the limbs.) Six p.m.—As the signs of congestion of the brain increased considerably, the vein was opened for the third time; coffee was given in large doses, and sinapisms were applied on each shoulder. Half-past six p.m.—Slight amelioration; he opened his eyes and spoke. Eight p.m.—Symptoms became weaker and weaker; the patient can overcome the tendency to somnolence, and stated that he was conscious of all that had passed, but perceived it as if surrounded by a mist. Half-past eight p.m.—The effects of the narcotic are no longer to be dreaded, but on account of the active treatment that had been employed, for fear of accidents, a man was ordered to sit up all night, to watch over the symptoms, to administer the coffee, and prevent the patient going to sleep. 15th July, eight a.m.—He complains of giddiness and heaviness. "If," said he, "you wish to know what I have experienced, read the description given of the Chinese opium smokers." Slight vesicular eruption showed itself on the forehead; he vomited several times during the night, and the vomitings persist.—Ordered a weak infusion of *melissa officinalis*. 16th July.—Disappearance of all the symptoms; and the next day he left the hospital quite well. But, adds the author, how comes it that a substance which poisons in the dose of grs. vj., or grs. viij., did not do so at the dose of ʒj.? Was it because the salt was not dissolved in the liquid, which sometimes happens, when some time has elapsed since its preparation? Or, because the stomach was paralysed to such an extent as to be incapable of absorbing the poison? Probably the latter was the case; otherwise, how could that organ have been insensible to the influence of so powerful an emetic as that administered? Be this as it may, in all probability the patient would have died, had not so active a treatment been employed, *viz.*: powerful emetics; three copious venesections; a solution of iodine and ioduret of potassium; sinapisms on nearly all the surface of the body; more than 40 cups of a strong infusion of coffee, in the space of ten hours.

New method for the Amputation of the Maxillary Bones.—Professor Velpeau lays down the following rules:—*Maxillare inferius*: a curved incision, convex inferiorly, is made under the jaw, of sufficient size to contain in its concavity all the portion of the bone to be removed; the flap is next dissected from below upwards and raised; a chain saw is then passed under each extremity of the bone, which, when sawn through, must be detached from the deep-seated parts with the bistoury. This performed, the parts are replaced and united by the twisted suture, leaving only a small spot open by a tent of lint, so as to permit the pus secreted to escape freely. This method presents an advantage over those hitherto employed, because the cicatrix is not seated on the face; also, because, should it be requisite, the incision may be prolonged forwards, or upwards, and backwards; and, finally, it may be employed in every case, except when the skin is so diseased as to need its removal. *Maxillare superius*: The incision must here begin at the commissure of the lips, proceed upwards and backwards as high as the temporal region, in a straight line, or even crooked, its convexity directed downwards. Care should be taken to avoid wounding the Stenonian duct. The flap must then be dissected from below upwards, and the lower lip detached; the tumour removed, the parts are to be replaced, and the edges of the wound united as before by the twisted suture. By this mode of operating, the following parts may be exposed: the entire half of the upper jaw, the malar bone, the zygomatic process of the temporal bone, the septum narium, the anterior portion and the external half of the orbit. In 1829, Professor

Velpau removed, from a female, not only the upper jaw, the malar bone, and the lower plate of the orbit, but likewise the zygomatic process, and a part of the fossa pterygoidea, so that a part of the brain was exposed to view, and that without being in the least incommoded by the soft parts. (*Bull. de Therapeutique.*)

Rupture of Tendo Achillis.—Dr. Malgaigne has just published two cases of rupture of this tendon. A wine merchant, *etat* 36, of a muscular system, highly developed, weight about 194 lbs. while dancing at a wedding, was seized with a smart pain in the left leg, accompanied with a noise similar to the crack of a whip. He turned round under the idea that somebody had struck him, but found that he was unable to stand, and it was only with the help of his friends that he got to bed. The pain soon subsided; he slept well; rose the next morning, and set about his usual avocations, retaining only a slight limp, which he hoped would soon disappear. The accident caused little or no inconvenience, and the man was enabled to walk five miles, two days after the accident, without the help of a stick; but perceiving no amelioration, on the sixth day he consulted Dr. M., who, on examination, discovered the following symptoms:—opposite the upper part of the malleoli, at about an inch above the calcaneum, a depression was felt in the tendo Achillis, in which the thumb could easily be placed, and which was limited superiorly and inferiorly by two horizontal surfaces, formed by the divided portions of the tendon. This depression was enlarged by bending the foot, and disappeared entirely when the foot was extended, and the knee bent; foot not swollen; slight ecchymosis of the malleoli, and on the dorsal surface of the foot. When the patient walked on an even surface, he experienced nothing unusual, but if, perchance, the toes were placed on a spot somewhat higher than the heel, he felt, at the ruptured part, an excruciating pain. He walked rapidly, without limping; the thigh and leg were slightly bent, and the equilibrium was lost as soon as he sought to stand erect. In going up stairs, he raised the right leg, and then drew the left up; he could, notwithstanding, go up stairs, in the usual way, if he took care to place the sole of the left foot flat on the stair, before he endeavoured to raise his body. The patient was put to bed, the leg bent, the foot extended, and the limb placed on its external surface on a cushion, a long strip of sticking plaster extending from the heel to the ham, and supported by circular strips, and a band, to keep the parts motionless. A fortnight after, the apparatus was removed, but the limb was kept in the same position. A week after, a heel, about two inches thick, was put on his shoe; a strap was placed round the inferior extremity of the thigh, and another fastened under the heel, buckled to it posteriorly, so as to permit the patient getting up, and moving about on crutches. A week after, he used one crutch only, and began to put his foot on the ground, and, in a month after, the cure was complete. In the second case, the cause was a false step; the patient was 60 years old; in other respects, it was similar to the foregoing; the cure was perfect in fifty days. (*Journal de Chirurgie.*)

Academy of Sciences; Sitting of the 30th Sept.—Baron Chas. Dupin in the chair.

Theory of the Formation of Bones, by M. Flourens, M.D., M.A.S., &c.—From his researches, the learned Academician concludes:—1^o *That bone is formed by the periosteum.* On four dogs, part of a bone (the rib) was removed, the periosteum being left untouched; on examining the part, seven days after, an osseous nucleus was discovered, which gradually increased in size, so as, after four months, to fill up the vacant space. Thus, the new bone is formed by the periosteum; is at first isolated, and increases gradually, until it unites to the other portions of the bone. 2^o *That bones increase in size, by super-position of new layers externally.* On eight dogs, portions of the tibia were exposed, the periosteum divided, and a ring of platinum passed under it; the bone continued to grow, and the platinum was gradually covered by successive layers. 3^o *That the medullary canal increases in size, from the absorption of the internal layers of the bone.* This was shewn in the preceding experi-

ments; thus, on the first dog, the ring was on the bone, and, by degrees, became more and more deep-seated, so that, in the eighth, it was in the medullary canal; which shews, that the opinion emitted by Hunter was correct. 4^o *That, if a portion of a bone of one animal be placed in an opening made in that of another, it is absorbed.* This was proved by the introduction of a portion of the rib of a rabbit into the tibia of a dog.

On the Chemical Constitution of Acids and Bases, by M. E. Millon.—From his researches, the author concludes: 1^o *that there are three classes of bases*:—(A) *Monoatomic*: they are very seldom met with; silver is the only metal which always forms a monoatomic oxyde, Ag. O.; the other bases, barytes, lead, &c., must be in a peculiar condition to form them—Ba. O. and Pb. O. They result from the union of an equivalent of oxygen with one of metal, and form neutral salts with the acids. (B) *Polyatomic*: are produced by the union of several equivalents of metal and oxygen, or of several equivalents of monoatomic bases; form generally acid salts. (C) *Hydric*: result from the union of a monoatomic base with several equivalents of water, thus: Mg. O, HO—Mg. O, 4 HO—Cu. O, HO—Ca. O, HO—Ba. O, HO, are hydric bases. 2^o *That there are also three classes of acids*:—(A) *Monoatomic*: resulting from the union of a metal with oxygen, SO³ CO³ IO³ &c.—(B) *Polyatomic*: comprise the mineral and organic acids denominated bibasic and polybasic. (C) *Hydric*: produced by the union of the anhydrous acid with one or more equivalents of water; thus, oxalic acid forms two, C² O³ HO, and C² O³ 3 HO: which unite with the bases to constitute salts, without losing any of their proportions of water.

On a New Method of obtaining Iron in a Metallic State, by M. E. Peligot.—The iron is obtained by decomposing the proto-chloruret of this metal by pure hydrogen gas; it is partly in octahedrons, and partly in thin flexible plates, and does not contain manganese, the proto-chloruret of that metal not being decomposed by hydrogen. The fusibility of the chlorurets offers a means of preparing, by their decomposition by hydrogen, homogeneous and pure crystals of certain metals, iron, cobalt, nickel, &c., which are easily oxydized, and not very fusible. Professor Dumas, in making known this method, added, that the facility with which pure chlorurets may be obtained, by crystallization or sublimation, renders it highly useful for the preparation of the pure metal, especially at the present moment, when legitimate doubts have been raised concerning the real atomic weight of certain metals; that the metallic oxydes, from their insolubility, are almost always obtained by precipitation in an amorphous state,—a circumstance which renders it difficult to prove their purity; that these oxydes, when decomposed by charcoal, produce a metal which contains a quantity, more or less considerable, of carburet, and by hydrogen, a certain proportion of the alkali employed to precipitate the oxyde.

Additional note to the memoir on poisoning by Copper.—Addressed by Messrs. Danger and Flandin. (This note being as it were the continuation or complement of the memoir already given, vide *Medical Times*, vol. IX. p. 188 and 214, will shortly be published entire.)

Academy of Medicine. Sitting of the 1st. Oct.—M. Barthelemy in the chair.—The president informed the Academy of the death of one of its members, Dr. Clarion, formerly professor at the Faculty of Medicine and School of Pharmacy.

Professor A. Berard read three reports.

1^o *On a new Instrument and method for performing the operation of Cataract by extraction*,—by M. Bodinier.—The Instrument is composed of a handle at the extremity of which a needle is fixed, and of a blade which glides on the under edge of the needle. A longitudinal slit exists on each side of the handle, in which the small knob is placed, according as the surgeon operates with the right or left hand, and with which the blade is made to glide forwards. The shape of the needle is deserving of notice: it is round posteriorly, and flat anteriorly, as if it had been detached from the cataract knife by dividing it parallel and at about a line from its back: the point is terminated by a triangular blade, the back of which forms a right angle with the flat edge of

the needle. The reporter then described the method employed by M. Bodinier, which is more a combination of those already known, than a new one; and, as to the instrument, it belongs to the class of *knife-needles*, of which several models are extant. In theory, this method presents advantages and inconveniences to an equal degree; but, in practice, it has succeeded; for, on thirteen operations (ten by M. Bodinier, and three by the professor himself,) the loss of the eye occurred in none, and in ten the sight was restored. These successes, though not as yet sufficiently numerous to form a positive conclusion, are still enough to encourage other operators to persevere. Conclusion: thanks (adopted).

2^o *On Circular Iridectomy*: by Dr. Callias of Adrianople.—(Vide *Medical Times*, vol. X. p. 199). The reporter, after allowing the inconveniences attached to the instrument here proposed, by which the iris would rather be torn than cut, and which will prevent its being adopted, adds, that the efforts made by the author are worthy of being encouraged; consequently, he proposes thanking him for his communication, and placing it in the Archives of the Academy (adopted).

3^o *Spontaneous Expulsion of the Os Hyoides*: by Dr. Rozat, of Bordeaux. Miss —, *etat* 41, rachitic aspect, general health good, menstruation regular; affected, for the last five years, with hypertrophied glands under the lower jaw, accompanied with slight cough and dyspnoea. These symptoms increased, in spite of an appropriate treatment, and sputa, sometimes ropy and thick, or streaked with blood, appeared, with attacks of suffocation, colliquative sweats, marasmus, &c. At a still later period, aphonia declared itself, with constant pricking pains in the larynx, and purulent sputa. The state of the patient appeared beyond the reach of art, when one day she experienced a violent attack of the pain in the larynx, intense suffocation and cough, and spit up a bone which, on examination, was found to be the os hyoides, and which offered, on its external surface, numerous carious spots, especially on the right lateral extremity, at the spot where the body is united to the corresponding cornu, of which only the articular extremity remained; the left cornu was partly destroyed, and its articulation with the body of the bone was mobile. After the rejection of this bone, all the accidents gradually disappeared; the upper part of the neck, instead of projecting, as usual, was flattened and seemed larger; the os hyoides was replaced by a supple and elastic substance; the lymphatic ganglions decreased; the aphonia disappeared; the voice became normal: and all that remained was a slight dysphagia. A drawing of the bone accompanied the case. Conclusions:—Thanks to the author: memoir to be sent to the *comité de publication*.—Professor Blandin considered the lesion of the bone to be a necrosis, not a caries, and that this observation ought to be added to the conclusions.—Professor Berard: I made use of the expression employed by the author, without, however, warranting its exactitude, as I had not seen the bone.—Dr. Renaudin requested that an engraving of the drawing be annexed to the case. These two propositions, and the conclusions of the reporter, were adopted.

Reflections on the Functions of the Nervous System: by Dr. Castel, M.A.M. An error into which most modern writers have fallen, is to study separately this system, one of the principal agents of life, and to neglect the influences to which it is submitted. For my part, I have dared to go so far, as to declare that no physiological phenomenon exists, which may not admit of explanation; and, in a late sitting, I mentioned the contrasts that were to be met with in paralysis. In reply, our honourable colleague, Dr. Rochoux, claimed, in favour of Professor Lallemand, the priority of this interpretation, but, on consulting his treatise on diseases of the brain, I find it is not similar to that I proposed. The speaker here quoted a passage of that work, and after comparing it with the opinion of Galen and his own, continued thus: Prof. Lallemand founds his opposition to Sir Charles Bell's doctrine, on anatomical reasons alone; I, on the contrary, establish mine on anatomical and physiological facts, especially the following: how

could the will be transmitted to motor nerves, were they deprived of sensibility? How could moral impressions produce motion, if that function were exclusively under the dependence of motor nerves? Fear and drunkenness abolish movement; and is it not evident that, in the former, it is monopolized by a moral impression, and, in the second, it is oppressed? When any sudden noise wakes us out of a deep sleep, are not the motor nerves first called into play, by our starting up? Motility, consequently, is not a quality, it is a faculty, similar to those which belong to the functions which establish a *rappor*t between us and exterior objects. Now, being alike, they ought to be placed under the dependency of the same power, and not separated, as with Sir Ch. Bell, whose doctrine has by some critics been justly denominated a physiological mystification. If the division proposed by this author be admitted, nerves no longer exist as a system, for this term, when applied to organization, indicates uniformity in the *rappor*ts, and subordination to the same principle. This generalization troubles innovators; it is a check from which they seek to deliver themselves, and as the word—sensibility—confuses them, they strike it out, forgetting that it is the primary condition of all sensation. The speaker next quoted several passages from the works of Galen, to prove that no conclusion can be drawn therefrom, favourable to the division of nerves into two orders; that a nerve may acquire a motor power, though it does not possess it at its origin, if, during its course, it becomes sufficiently firm to be a conductor of a stimulus; that, from the mode of distribution of the nerves, he explains different species of paralysis; that, in paralysis of movement, the lesion is seated in the nerves of muscles, and, in that of sensibility, in the nerves of the skin, and when both are affected, sensibility and motility are simultaneously abolished; that hemiplegia, when produced by a lesion of the medulla spinalis, ought to be attributed to a lesion of the corresponding part of that organ. What physiologist, on perusing the works of Galen, could conclude that they authorise a classification of the nerves, founded on two fundamental and separate properties of the medullary substance. He established differences in their consistency, their mode of distribution, and of action. These are the only rules which can be followed, in demonstrating that certain nerves preside over sensibility, and others over motility, and this distinction is in no wise that of modern authors, into sensitive and motor nerves: which gives to the one an exclusive power, and to the other a faculty independent of that power; which destroys all connexion between motility and sensibility; which deprives a portion of the nervous system of that which appertains to all; and which implies that a moral cause may produce contractions in an insensible muscle. The ideas of Galen on the nervous system are as extraordinary, from their accuracy, as from their originality; they are proofs of his creative genius, which will last for ever. As to transmission of a stimulus, it takes place, more or less rapidly, according as:—1^o the nerve which receives it is in direct communication with the brain:—2^o as the sensibility is greater:—3^o as the consistency is more developed. In fact, all the nerves of animal life become round, and firmer and firmer as they proceed; and it is as easy to conceive that a nerve is a good or bad conductor of a stimulus, as to imagine that any given body is a good or bad conductor of caloric or electricity, since the consistency of the medullary substance is always in direct proportion with the degree of stimulus it is destined to transmit. Thus, the brain, being only a receptacle, is very soft; the spinal marrow, being the conductor of the most active stimulus (I say active, not energetic)—the will, is firmer; finally, the nervous extremities are softer than the rest of the nerves, as these are no longer conductors. To resume: to receive a stimulus, and transmit it, are two very different things, and the animal economy would be in a constant perturbation, if the ganglionic nerves were capable of transmitting all the stimulus they can receive. They are bad conductors from their softness, which is very

like that of the different senses; their susceptibility to transmit impression, as their influence on the motility, is confined to certain limits, and it is a tonicity, rather than contractility, since, in the organs, in which the latter is energetic, cerebral nerves are to be found. Were it not unreasonable to take the root of a nerve for the entire nerve, we might establish, from the similarity of texture, an analogy of functions between the posterior root of the rachidian and the ganglionic nerves, from the softness of the former, the difficulty with which it transmits a stimulus, and because it alone possesses a ganglion. Finally, if the irritation of the posterior root of rachidian nerves produces no movement, and that of the anterior no pain, instead of concluding, that there are nerves which preside exclusively over sensibility, and others exclusively over motility, ought we not rather to conclude, that all nerves possess the double power of presiding over both.—Dr. Virey considered, that, in order to explain the different phenomena, they must be studied in vegetables, as well as in animals.—Dr. Londe: Dr. Castel denies, that there are sensitive and motor nerves; if so, how comes it that the former are more voluminous than the latter? How comes it, that La'Condamine lost sensibility, while motility was preserved?—Professor Blandin: The doctrine of Sir Chas. Bell is not only not a mystification, as Dr. Castel calls it, but even not an hypothesis; for nothing can, by facts, be more clearly demonstrated, and anatomy, physiology, and pathology, come to its support.—After a reply from Dr. Castel, in which he asserts, that Sir Chas. Bell's doctrine is not only extraordinary, but even absurd, and some remarks from M. Dupuy and Professor Velpeau, in favour of that doctrine, the discussion was closed.

Dr. Rochoux read a few remarks on the memoir read by M. Hamont on the plague, and after combatting the opinions therein announced, Dr. R. concluded by proposing the suppression of all sanitary cordons, lazarettos, and quarantines.

Dr. Cherest read a memoir on Scrophula, as observed by him at Forges (Seine and Oise.)

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the Mode of Preparing some Narcotic Extracts in small Quantities.—Dry the herb, as, for instance, *hyoscyamus*, in a stove, at a moderate heat, and then powder. Put about four ounces of the coarse powder into a glass funnel, loosely stopped at the lower end with cotton; place over the powder a piece of white filtering paper, and upon the paper a layer of well washed sand, previously purified by muriatic acid. Pour alcohol, of 30 per cent., gradually into the funnel, till the powder is partly moistened. Then cease, and in half an hour you will see that the liquid has slowly penetrated the whole mass, and the alcoholic solution will fall in the form of dark green drops into the vessel, over which the funnel is placed. When the dropping ceases, begin again instilling small quantities of alcohol, about half an ounce every quarter of an hour, and proceed as above till you have used 18 ounces. Cover over the solution with a glass-plate, for the night, and begin next morning by infusing pure water, continuing till the liquid, which passes off, is no longer green, but brown; that is to say, till all the alcoholic solution has become exhausted, and nothing but a watery extract remains. As soon as you perceive this change, substitute a new vessel for the one containing the alcoholic extract. Continue during the day with the watery infusion, till the dripping fluid commences to be transparent; then pass through a small quantity more of spirit, and cover it over for the night. The alcoholic extract is now to be filtered and distilled in Gundermann's small steam apparatus, until a few ounces only of alcohol remain. Then put the beautifully green and thickish alcoholic extract, which results, into a porcelain dish, together with the watery extract, reduced to the

consistence of syrup, and evaporate the whole at a gentle heat by the spirit lamp. Thus, an extract will be obtained, perfectly soluble in water, of a beautifully green colour, and certainly unsurpassed in efficacy by any extract prepared by other methods. The same process may be adopted in the preparation of *extr. belladonnæ, digital., conii, &c.* From four ounces of coarsely powdered *hyoscyamus*, I obtained one ounce and six drachms of extract.—*Scheidemandel in Buchner's Repertorium.*

Charta Vesicatoria.—M. Heuster communicates the following recipe:—

R Cera citrinæ ʒjss.

Ol. Canthar. ʒj.

Spermacet. ʒvj.

Terebinth. Laric. ʒij.

Melt together. When nearly cold, the mass is to be spread on paper. To keep the blister open, he recommends the following composition:—

R Emplast. diachyl. simpl. ʒvj.

Resin. depur.

Cera citrinæ

Olei olivar. aa ʒij

Terebinth. ʒv. Melt.—*Ibidem.*

Ready Mode of preparing the Grey Mercurial Ointment.—According to M. Heuster, the grey mercurial ointment can be prepared in less than half an hour, in the following manner, by using a little sulphuric ether: Take six ounces of pure quicksilver, two ounces of mutton suet, and five ounces of hog's lard; mix in an iron vessel, and from time to time add about a drachm of sulphuric ether. After a very short time, no mercurial globules can be distinguished by the naked eye, and, in less than three quarters of an hour, none will be perceptible by the microscope. The quantity of ether used should not exceed seven drachms.—*Jahrbücher für praktische Pharmacie.*

Medicinal Action of Cochineal.—Since the attention of the medical profession has been directed to the use of cochineal, its efficacy in hooping cough has been confirmed on all sides. Prof. Schneemann has employed it in Munich, with the most favourable results. Cochineal is, however, not only used in the form of powder, as already mentioned, but may also be advantageously combined as a *linctus*, with syrup. But it must be observed, that the carbonates of soda and potash, which dissolve its active principle, and form a new combination with it, constitute an essential principle of the remedy. Cream of tartar does not seem to answer so well in combination with it, as either of the above alkaline carbonates.—*Buchner's Repertorium.*

On the Baldrianate of Zinc.—Muratori and Cerulli mention in the *Bulletino delle Scienze Mediche*, that the *baldrianate* of the oxide of zinc has been successfully used by some Italian physicians in nervous diseases. The preparation of the remedy is not difficult. Either, pure hydrated oxide of zinc is dissolved in liquid *baldrianic* acid, or a watery solution of *baldrianate* of lime is decomposed by a solution of sulphate of zinc. *Baldrianate* of zinc, which is very soluble in water, is then to be separated by filtration from the sulphate of lime. We consider the former mode of preparation the more advantageous, and should recommend, on the addition of an excess of the hydrated oxide of zinc, the application of a moderate degree of heat, after which the solution is to be poured off, and evaporated. At a certain point of concentration, the liquid becomes covered with a whitesaline pellicle, which must be carefully taken off, and dried, from time to time. Cerulli recommends the remedy chiefly in neuralgic affections, in the dose of one grain, or a grain and a half, daily, and in the form of pills.—*Ibid.*

Cortex Frangulae, an excellent Remedy in Hemorrhoids.—A chemical analysis of the barks of the *rhamnus frangula*, and *rhamnus catharticus*, would certainly be very desirable, inasmuch as both operate as purgatives, and used formerly to be employed in obstruction of the bowels and of the portal vessels. The bark of the *frangula* particularly, which possesses a nauseous smell, and bitter taste, has unfortunately been set aside, like many other valuable native remedies, to make way for foreign drugs. The country people alone know, and still appreciate, some of these remedies.

Thus, for instance, they use the inner bark of the root of the *rhamnus frangula*, in hydrops, and very often with the greatest success. Dr. Gumprecht, of Hamburg, has lately directed the attention of the medical profession to this valuable remedy. He observes, that it was known to the ancients as a valuable cathartic, and that Mathiolus advised the non-employment of the fresh bark, on account of its great tendency to excite vomiting. Dr. Gumprecht's attention was first drawn to this remedy, by the exceedingly happy cures which he saw effected with a nostrum (the active principle of which was found to consist of the *rhamnus frangula*) in hæmorrhoidal complaints. Dr. G. has now administered this remedy for twelve years, with very favourable results, in chronic abdominal complaints, particularly when combined with venous plethora and habitual obstruction of the bowels. The remedy invariably occasions copious evacuations, at the same time that it displays very powerful diuretic effects. It is best suited to such individuals as suffer from habitual constipation; (Dr. G. has proved this in his own person, for the last ten years). He employs the dried bark of the old tree, in the form of decoction, and asserts that it has no drastic nor heating effects, but, on the contrary, it occasions soft and moderate evacuations. The ancients generally administered it, combined with aromatic substances. Dr. G. orders an ounce and a half of the dried bark to be boiled in two pints of water, for two hours. When boiled down to one pint, the decoction is infused on three or four drachms of orange peel, and three drachms of pounded caraway-seeds. In some cases, an ounce, or an ounce and a half, of Epsom salts, may be dissolved in the decoction. In hæmorrhoidal complaints, he substitutes two drachms of *milfoil*, with three drachms of caraway seeds, for the orange peel; and generally orders a cupful to be taken in the evening. By the next morning, two or three free evacuations ordinarily ensue. Should this not be the case, the same dose is repeated at eleven o'clock, a.m. A smaller dose must be given to individuals of irritable and feeble habits, or to those who have a tendency to diarrhoea. In abdominal complaints, Dr. G. employs the decoct. *frangul.* for from three to six weeks; in habitual obstruction, two or three cupfuls are given during the week. This decoction may be preserved for a very long time without losing its efficacy, in well-stopped earthen-ware jugs.—*Ibid.*

Adulteration of Lycopodium with Pea-flour.—In Schweinfurt (Bavaria), attempts have been made to adulterate the *lycopodium* with ground pea-flour. The deception is easily discovered under the microscope, the shape of the two granules being so different. The peas containing amyllum, the fraud may be discovered more readily, and quickly, by the addition of iodine.—Dr. Schenk: *Ibidem.*

New Experiments on the Toxicological Effects of the Salts of Copper.—It may be remembered that Dr. X. Urban, so far back as 1825, related several experiments which his colleague, Dr. Reiter, performed, to test the effects of the black oxide of copper. The results were:—1^o that the oxide of copper, carried with the food into the stomach, forms saline combinations, and imparts by that means a bluish green colour to the fæces;—2^o it is not absorbed by the blood, at least it cannot be discovered in that fluid;—3^o the oxide of copper produces but slight inflammatory effects, displaying an astringent, rather than a corrosive, property: consequently, it is not rapidly fatal;—4^o it prevents chylification, and thus produces atrophy.

At a more recent period, Dr. Wibmer, of Munich, made some experiments with acetate of copper, and found that, after a slow poisoning by this salt, it can be discovered in the liver, but in no other organ. Orfila maintained, in 1840, that the soluble salts of copper were carried into the blood from the stomach, rectum, and cellular tissue, and discovered there, as also in the liver, spleen, and other organs; nay, that the human body contains, even in a normal state, copper and lead. This assertion was refuted in 1843, by MM. Danger and Flandin, by the following experiments:—The food of a dog was alternately mixed with small portions of sulphate and acetate of copper. During nine months, the doses of salts

were gradually increased; the health of the animal did not seem to be disturbed, till it received one grain and a half at a meal (it was fed once only every twenty-four hours). Within two hundred and seventy-three days, the dog had taken four hundred grains of the poison. As long as it lived, no copper could be found in its urine, and, when killed, no trace of this substance was discovered on the most careful analysis of its viscera, muscles, and bones. The question may then be asked, in what way was the poison eliminated from the living organism? It was not by the kidneys (as is the case with antimony and arsenic), but, according to the above-named chemists, by the exhalation from the lungs.* In poisoning by the salts of copper (according to Danger and Flandin), we should administer powdered iron-filings, along with drinks acidulated with sulphuric acid; at the same time giving purgatives and emetics. Subsequently, stimulants and diaphoretics, and particularly vapour baths, should be administered.—*Ibidem*

NOTICES TO CORRESPONDENTS.

Several letters are before us, suggesting a truly respectable Medical Association for the Metropolis. Offers of pecuniary support are liberally made, and two of our friends suggest, that all admissions should be by ballot, to exclude the chance of indifferent company. We shall be happy to be the medium of further promoting this excellent design, till some provisional and truly independent committee be formed.

Our notices of Medical Meetings again preclude the insertion of several original articles, which have been some time standing in type.

Scrutator, on Mr. Campbell's case, is inadmissible. Our correspondent, among a number of suggestions, recommends that medical men alone should have charge of lunatic asylums.

Our Pershore correspondent is right. We have been caught napping. Our meaning was, that since Mr. Campbell's seclusion in Mr. Allen's house, no symptom, not mild, had exhibited itself.

A Constant Reader thinks that the New Bill should be modified before it becomes law, in which form it would be a great boon. Our correspondent is in error when he supposes that gentlemen, in legitimate practice before 1815, cannot be registered under the New Bill.

We have been favoured with an immense mass of papers and correspondence, much of which, we fear, we must decline. The following papers, however, will be inserted on the earliest opportunity: most of them next week:—Chirurgus on Reports of Cases, &c.; Mr. Dermott on the Physiology of Inflammation; Mr. Tosswill on the Cause of Tubercle; Mr. Jackson on the Spleen; Mr. Close on Accumulations of Feculent Matter; Mr. Richard King on a case of Compound Fracture; &c.

P.T.—We are indifferent authorities on the subject named. We understand, however, English medical men can practice among their countrymen in Belgium, and that the price of food is low.

THE MEDICAL TIMES.

SATURDAY, OCT. 12, 1844.

In media tutissimus ibis.

The New Bill is evidently growing in favour. Discussion and enquiry have served to appease the fears and soften the hostility which mistaken

/* I could not ascertain, from the general report, whether Danger and Flandin likewise analysed the blood of the portal vessels and the liver. It would be a great omission if they failed to do so, for, very likely, they might have found the copper there; at any rate, copper existed in the intestinal evacuations.—*Note of Dr. Buchner.*

comments on it had at first roused. The bad points are dwindling down to their true proportions—and the Bill's excellencies are correspondingly assuming prominence. In the words of Dr. Hastings, at the Worcester meeting, it is felt that "the Bill, taken as a whole, will impart additional strength and firmness to the Profession, and that Sir James Graham has gone farther, in reference to it, than gentlemen in the position of Dr. Hastings had ever anticipated." The change in the character of our late meetings, and the temper of their proceedings, has been most satisfactory. We have now little of those sweeping censures, confounding good and bad, and conveying to the legislature reasons for suspecting our powers of discrimination, and tempting it, therefore, to pay little weight to our opinions. The only recent meeting where anything of this kind has been noticed—and there in only a very moderate degree—is that at Winchester, which took place at the end of last week; and it is evident, if we are to believe the report sent us, that there the censures originated in some little ignorance of the Bill, Dr. Phillips, the chairman, setting out by a declaration that the Bill would abolish all duties paid on quack medicines! The most important meetings we have had, appear to have been those of Gloucester, Worcester, Leeds, Norwich, Birmingham, and Liverpool—some of the largest towns in the empire. In Birmingham and Liverpool, the very proper precaution was adopted of discussing in committee the clauses of the Bill *seriatim*, before pronouncing on them an opinion in public meeting. Our readers are acquainted with the result: the report of the Liverpool meeting, this day published, shews how entirely the opinions we so early expressed on this measure, are the opinions of some of the most enlightened practitioners in the empire. We own to a strong hope that a short time will reveal the Profession acting in a similarly cautious manner, speaking in a similarly judicious way, and equally unanimous in giving the Bill a general support, while enforcing on it the great improvements that are on all hands admitted as essential. If such a happy union as this be realised, we shall count confidently on having an admirable new law. Never was a juncture of circumstances more favourable for our getting a full and satisfactory adjustment. By the circumstance which has placed the proprietor of *The Times* and Sir James Graham in mortal collision, we are fortunate enough to secure for us the aid of that leader of public opinion, in discarding from the Bill every objectionable clause. The attempt of that powerful journal to destroy all and every measure of the Home Secretary, that it may have the pleasure of holding him up to the people of England as the "great unsuccessful statesman," will, if we know how wisely to avail ourselves of the opportunity, so far do our business, and serve our turn, that we shall get between the two parties exactly what we want. While with Graham's help we can retain the good of the Bill—with the *Times*' help we may dis sever from it the bad. The *Morning Chronicle* again, the organ of so large a section of Parliament, while doing the measure generally the justice which the *Times*, of course, cannot afford to render it, seems yet disposed to give us efficient help in our attempt at a discriminating opposition. In an article which appeared on Thursday, strong objections are urged to the composition of the Board of Health, as now constituted, and a very distinct intimation given that we are entitled to ask higher guarantees for its good working, than are now given us. Now, when we consider, that Members of Parliament

have no interest against ours—that on the contrary, there is a strong feeling—among all whose enlightenment gives them any claim to influence—that a great deal should be done to put us on a good, and comfortable footing; and that individually, we have powerful and private interest with them—is it, we say, to be doubted, that Parliament on either side will cordially support amendments backed by the voice of the public, as well as by the influence of the Profession, and that the Minister will acquiesce in alterations which will remove all strong objections to his bill? We think not, and therefore we urge our brethren to lose no labours about a wholesale useless opposition,—for the Bill in some shape will be carried it is clear—but to concentrate their exertions on the wholesome and prudent duty of amelioration. If a law is to be passed, the thing which more than aught else should be deprecated, is its being forced on us in a hostile spirit.

We dwell on this view of our future policy the more pertinaciously, because we know that there are some traders in professional disturbances who have never shewn a consistency except in the point of opposing every scheme of improvement the moment it appeared in the House of Commons. Their bread has been cast on troubled waters, and a calm would strip them of the chance of that return with increase they are waiting for so anxiously. This morbid love of the excitements and profits of agitations in a learned and scientific profession, is so well—so *naivety*, expressed by one of our contemporaries, fond of acting the part of jackal to the lion of the press, that we cannot do better than reprint his words to illustrate the thing we point at. “We cannot refrain from guarding our professional brethren against coming to any qualified expression of opinion relating to the MONSTER BILL. The Government will take advantage of any softened opposition, and ask for leave to re-introduce the Bill, for the purpose of retaining the unopposed portions of the measure, and of attentively considering, if not rejecting, the parts which have been found the most obnoxious to the Profession. Our able advocate, the *Times*, is for assailing the Bill in front.” In other words, Government will give exactly what we want, unless we vigorously resist! The only thing that can save us from getting what we have spent so many years in demanding, is our firm union in one determined veto! With such an assurance, who will not be for a sweeping wholesale opposition? An unobjectionable measure of Medical Reform pass! Mr. Wakley will die on the floor of the House first!

REVIEWS.

On the Supposed Formation of Valerianic Acid by the Action of Potassa on Indigo and Lycopodium. By Dr. SHERIDAN MUSPRATT, Giessen.

Nothing can show the errors which chemists may sometimes commit, by making assertions unsupported by analysis, or the accuracy of the results of the chemists of the present day, above those of the last half century, better than the paper of Dr. Sheridan Muspratt, on the supposed formation of valerianic acid by the action of hydrate of potassa on indigo or on lycopodium. This acid, which occurs in the roots of valeriana officinalis and in one or two other plants, is, according to Gerhardt, formed when indigo is added in small portions to fused hydrate of potassa; shortly after, Winkler came to the same conclusion, and, in addition, stated that somewhat similar results were obtained, when lycopodium was

used instead of indigo. In some remarks added by Erdmann to the paper of Winkler, he also states that on a repetition of Gerhardt's experiments, he obtained traces of valerianic acid. Neither of these chemists made an analysis of the acid obtained, being quite satisfied with the proofs of its nature afforded by its external appearance. But the nature of the action of potassa on indigo, which must be regarded as a true oxidative process, as well as the products thus obtained (Anthratic acid, Aniline, &c.), rendering the formation of valerianic acid very improbable, Dr. Muspratt was induced to undertake the examination of the subject. Having heated pure indigo with hydrate of potash, treating the resulting mass with diluted sulphuric acid, filtering to separate the chrysanthic acid formed, and distilling, he obtained a clear liquid having the smell of fresh cows' urine, and a strong acid reaction; carbonate of baryta was added to this liquid, boiled, filtered, and evaporated to dryness, by which a salt, which crystallised in prisms, was obtained, which, on being treated with an acid, gave off a strong smell of acetic acid, which was further confirmed by making the usual tests for acetic acid. From five analyses of this salt, he obtained, as a mean result:—

	Experiment.	Theory.
Baryta.....	60.736	60.016
Acid.....	39.264	39.984
	100.000	100.000

And the same number of experiments to determine the atomic weight of the acid, gave, as a mean result:—

Experiment.	Theory.
618.93	643.19

A similar silver salt gave an atomic weight 601.62. The Baryta salt, burned with chromate of lead, gave:—

	Experiment.	Theory.
Carbon.....	18.562	18.816
Hydrogen ..	2.483	2.352
Oxygen	18.219	18.816
Baryta.....	60.736	60.016
	100.000	100.000

Equivalent to the formula $C_4 H_3 O_3 + Ba. O.$

Being exactly the formula of acetic acid; lycopodium afforded exactly the same result. The acetic acid, thus formed, appears to be produced from foreign substances mixed with the pure indigo blue, and, in fact, white indigo, which is not quite pure, yielded a much smaller quantity of acetic acid than commercial indigo. Dr. Muspratt obtained some other substances in the treatment of lycopodium, which, it is to be hoped, he will further examine with the same precision which has marked his other investigations.

The Principles of Physiology applied to the Preservation of Health, and to the Improvement of Physical and Mental Education. By ANDREW COMBE, M.D., F.R.C.P., Edinburgh, &c.—MacLachlin and Stewart.

Terms fail us to describe the feelings we entertain towards this precious work, so useful to civilized man, so pre-eminently honourable to our profession. We would almost say of it, as was remarked of the excellent book, by Thomas a Kempis—“it is the most valuable we have received at the hands of man—the Bible came from God.” A good mind of high endowments, working in earnest, and hopefully for the certain and undoubted happiness of his fellows—such is the beautiful spectacle each page presents us with. Every one of the facts so ingeniously used, every one of the opinions so rationally advanced, every one of the sentiments so simply, yet tastefully, and philosophically expressed, is hallowed by an

enlightened and lovely benevolence. It is a work of as much power as goodness: wherever read it rules, and it must in time be read everywhere. We are much mistaken, or it contains in its silent and diffusing influence a social revolution; it must modify the habits of millions, and to all prove a boon. It is the body's testament: sure of lasting ages, a foreshadowing of which is given in this “twelfth” edition. We wish it a further hearty God speed, and trust that our friends will aid on its journey this missionary of good.

PENCILLINGS OF EMINENT MEDICAL MEN.

DR. LETTSON.

By R. BRINSLEY KNOWLES, Esq.

Dr. John Coakly Lettson was apprenticed to one Abraham Sutcliff, a surgeon-apothecary, practising at Settle, in Yorkshire, distantly related to Samuel Fothergill, brother to the Physician, and Lettson's guardian; a man apparently fitted for his trust, if we may view as evidence of this position his parting admonition to his ward, recorded in these words:—“Please thy master; and, above all, please thyself: and never forget that, to be good, is to be happy.” It would savour, perhaps, too much of proneness to speculation, should the tenor of his after-life be referred to the force of advice of this kind upon his disposition: and yet it would be difficult to conceive a more dangerous opinion than the belief that what was well done by the man, would have been done as well had no such counsel been impressed upon the boy. The doctrine of the fatalist, discouraging as it is to the upward efforts of the mind in the matured condition of its existence, and perilous to all its hopes by promise grounded on its own virtuous exertion, in time and eternity, is yet by a thousand degrees more terrible in mischief, when it persuades the abandonment of youth to the bent of its nature—denying the possibility of correction—insisting on the immutable decree of predestinating Fate. But, apart from the wisdom of such a charge, there is something touchingly beautiful in the picture it calls before us. The hoar and wearied warrior, committing his sword to the robustier wielding of his son, and sending him forth to battle, is but a poor and savage type of this illustrious group. The Swedish chancellor, commissioning his son to go forth, and see with how little wisdom the world was governed! is a worthier instance of age bequeathing to youth the mantle of its strength; but too politic and world-wise to excite our admiration. In the instance before us, we behold Experience, in its noblest attitude, enforcing the importance of such conduct as never, for a flitting advantage to ourselves, entails on others a permanent misfortune, and upholding virtue as the only benefit of worth! What wiser, what grander, admonition, could be given! “Above all, please thyself;—and never forget that, to be good, is to be happy!”

Saying thus much with reference to Lettson's guardian, in the belief that his future character was greatly determined by the moral example he had in this man, it seems proper to say something concerning the instructor to whom he was now apprenticed. This shall be borrowed from Mr. Pettigrew, who thus describes his origin:—“Sutcliff, having no patrimony, received only twelve months' instruction to spell and read a little English, when he was appointed to the loom; but the exertion of throwing the shuttle was too hard for his constitution to bear. He was asthmatic early in life; and he suffered so much in the chest, from the mechanical exertion of weaving, as to be obliged to relinquish the employment. He had a distant relation at Kendal, of the name of Ecroyd, an eminent surgeon, to whom he applied for any species of servitude. This journey, a distance of sixty miles, he performed on foot. At first, he was engaged in carrying out medicines, and cleaning the shop. In this town, a considerable school was conducted by Thomas Rebanks. Young Sutcliff became acquainted withof

the school-boys, from whom he borrowed books, and occasionally procured instruction. He left the loom when he was about sixteen years of age; and, at eighteen, he had acquired a knowledge of so much Latin as to enable him to read a prescription which he also learned to compound; and, at length, was permitted to visit patients for his master. Having by strict economy saved a little money, he was allowed by him to visit Edinburgh, to attend some of the classes. Here, he regularly studied, under Professors Munro, Sinclair, Rutherford, &c. In summer, he walked back again to his own station, and resumed his services to his indulgent master. For two or three subsequent winters, he repeated his perambulations, and became not only a scholar, but a proficient in medical science; and, with a view of exercising his abilities independently, he visited the town of Settle, and commenced his professional duties in a single chamber, practising surgery, midwifery, and pharmacy. He acquired so much celebrity, as to include in his attendance an extent of at least ten miles on every quarter from his residence, at the period when Dr. Lettsom was apprenticed to him."

On the termination of his apprenticeship, Lettsom came to London, as he himself says, "unknown, and knowing no one." Here, he remained for a year, pursuing his medical studies at St. Thomas's Hospital. He then returned to the West Indies—of which he was a native, being born at Tortola—to take possession of some little property which had been left him by his father. It consisted of a small portion of land, and fifty slaves.

There are various degrees of virtue exercised in doing that which we believe to be our duty. It will be observed, sometimes through fear of punishment; sometimes through hope of gain; and, besides these heads, come various subdivisions which are left to be understood. Yet in all of these, the main ones and their branches, we do our duty; and, to the eyes of the world, appear very laudable and worthy people. Neither will the opinion of the world be always altogether unfounded; perhaps the fear of punishment, or the hope of gain, may not have wholly influenced us; they may not have done more than merely turned the balance which was wavering: or, it may be, our bias would in the end have gone in favour of duty, without the additional instigation of these accessories. But, in all of these conditions, there is the taint of the flesh; its proneness to itself; its gathering its inclinations under its wing, and keeping them warm and comfortable. We are dutiful after the fashion in which we take a cordial for the stomach; both because it is wholesome, which is the expressed reason—and because it is nice and palatable, which reason is modest and shuns publication. A hardy virtue must be whose duty is performed because it is fitting that it should be. Such a man has no hopes or fears, collateral and seductive of the attention from its right object. They proceed immediately from the duty itself. He hopes himself strong enough to perform it to its capacity of good; he fears to leave it undone. Perhaps the position of circumstances is such that he will gain—so much the better; but suppose it is such as to superinduce loss, is it possible that this man shall look upon his loss as gain?

When Lettsom arrived in the West Indies, he found his fortunes standing thus. His father had been dead many years; his executor had greatly neglected his estate; his mother was again married; himself in possession of no more than £50., in a country he had not been in for seventeen years, and encumbered with that most cumbersome of all unwieldy commodities in the absence of ample pecuniary appliances—i.e., a learned profession. To his £50, add fifty slaves, and what would be the answer of another man in his place, when justice demanded their emancipation, but interest bid poverty rivet their chains more closely? Lettsom instantly set them free; and thus—in his *Life of Fothergill*—remarks upon the act, with thoughts and language so sublime, that one can fancy him, without much fancy, rather accounting to his Maker for his life, than unfolding his views to his fellow-creatures.

"The repeated proofs of fidelity and love which I received from my own people, gave me at length so settled a confidence in their integrity, that, without the least apprehension of danger, I have frequently found that I had left, not only my liberty, but my life, entirely at their disposal. The beneficence of the powerful, and the gratitude of the dependent, form an union of interests that never fails to heighten mutual regard. My own happiness became at length so closely connected with the happiness of my negroes, that I could no longer withhold from them the natural privilege of freedom which Heaven had conferred upon me. I, therefore, delivered them from bondage, and thus restored them to the character of beings unto whom the Author of Nature and Giver of all Good has breathed the breath of life."

At Tortola, his native place, Lettsom commenced practice, and in a few months realized nearly £2,000, which he divided with his mother, and returned to England, in the hope of succeeding the celebrated Dr. Fothergill, brother to Samuel, his former guardian. Nearly about the same time, he attended the school of Edinburgh, graduated as M.D. at Leyden, and married a lady, whose claim to be the partner in his fortunes was founded on the notable circumstance of having materially served to increase them. Having commenced practice in London, he quickly rose to eminence as a physician and author. He was active in forwarding the cause of medicine wherever he had opportunity; especially in the case of vaccination he exerted himself, and was the first person who sent the vaccine lymph across the Atlantic. He lent his powerful name and abilities to the establishing of the Royal Jennerian Society; He founded the London Medical Society; suggested the establishment of the Infirmary at Margate, and many similar institutions; introduced into this country the *mangel wurzel*; wrote on a variety of topics many works and pamphlets; realized, in fees, from three to four thousand by the year, and, in one year, twelve thousand; and, finally, enjoyed the respect, personal and professional, of the most distinguished scientific and literary men of his day.

One of Lettsom's first exploits, after commencing to practice in London, was the establishment of an institution, entitled, "A Dispensary for the Relief of the Sick and Necessitous part of the Community." This was the first of the kind ever set on foot, and those which afterwards, and by its suggestion, arose, took this one for their model, almost universally, and in every particular. For some time, medical cases alone were admitted, but nothing short of comprehensive good could satisfy a mind so benevolent as Lettsom's. On his representation to the governors, the benefits of the Society were conferred equally on those "sick and necessitous" persons who stood in need of surgical assistance. In matters of this nature, in the establishing of societies for the aiding of the unfortunate, were the earlier years of Dr. Lettsom passed. Indeed, it may with truth be said of him, that however he was employed, every act had this end in view. He gave money to the poor—he gave advice to the poor—established societies in their favor—wrote pamphlets explanatory of their necessities, and the way best calculated to relieve them—he practised amongst them—made his son, at a later period of his life, a governor of several charities, more fully to promote his own views, as well as to raise up for them a champion of his own forming, who might work with him, and take his place whenever he should leave it vacant. The earnestness with which he undertook this cause, the zeal with which he maintained it, and the humane and noble truths he extracted from his experience, will be fully observed in the following extract; which may also serve in modern quarters of influence to mend an error or raise a blush. In his pamphlet, treating "of the improvement of Medicine in London, on the basis of public good," he says, "I have been too intimately acquainted with the condition and manners of the poor to want facts in support of what I advance. If I err, it will be in not doing sufficient justice to that industry and gratitude, which they exemplify in the general department. Those who form their judgment

from a superficial view of a few intoxicated objects who are found in the most frequented places, are much mistaken with respect to the body of the laborious poor, who humbly seclude themselves in miserable courts and alleys. Vice is barefaced, and boldly exposes itself in the open streets; but modest worth steals from the public eye, and frequents the most solitary avenues. * *

When I consider the distresses of the indigent, I rather admire that the instances of their misconduct should be so rare. When they behold the affluence, ease, and indulgence of their superiors; when in spite of their utmost industry, they can, with difficulty, support their families; and when sickness and disappointment supervene, it is not to be wondered at if some expressions of discontent should break forth amongst them. But such only can properly judge of these repinings who have seen a whole family that once experienced better days, confined to one chamber and one solitary bed; with sickness, with want, and a total incapacity to raise one penny. Let such try the experiment without murmuring, before they form a conclusion to the disadvantage of the sufferers. During the last three years, I have attended nearly six thousand poor persons, into many of whose habitations I have entered, and been conversant with their sufferings, and their resignation under them, in both of which they have exceeded many of their fellow-creatures, whose lot has cast them in a superior station, and whose contentment under temporary miseries should ever be sustained by this comparative reflection.

"What myriads wish to be as bless'd as I."

Such opinions as these need little commentary. They are those of no superficial observer, but of one who saw thoroughly, and are worthy to be remembered though the times for which they were written are passed, for we still have our poor, and though legislation has been busy, they are as poor, and perhaps poorer and more wretched, than when Lettsom was "entering their habitations and making himself conversant with their sufferings." The opinions of a man so qualified to form them should not be neglected, for many of them are on matters arising from the natures of men, under particular circumstances, which must always be the same, whenever humanity and the same circumstances meet. And the gist of some of these opinions comes to this:—that if poverty, starving in spite of its utmost industry, look upon affluence, giddy and insolent as it very commonly is, with some expressions of discontent, it is not much to be wondered at: but it is much to be considered; and while every week, and almost day furnishes some appalling instance of the brutal operation of our Poor Laws; while an English jury is found, who are driven to say of English charity, that the conduct of its administrators is disgraceful to a Christian country, a result, more momentous than mere expression of discontent, is one much to be prayed against, but its avoidance hardly to be hoped for.

(To be continued.)

STATE OF PROFESSIONAL FEELING.

A Meeting of the Members of the Medical Profession of Liverpool, numerous attended, was held at the Medical Institution on Wednesday, October the 2nd, 1844, for the purpose of considering Sir James Graham's Bill "for the better regulation of Medical Practice throughout the United Kingdom." Dr. Jeffreys took the chair.

The Chairman, after thanking the meeting for the honour conferred upon him, said the subject which had been the means of bringing them together was one of the greatest importance to every individual who had the good of the profession at heart. The meeting had been called in consequence of a requisition signed by twenty respectable practitioners of the town. He was anxious that all should be united on a question of such importance, as the whole country looked up to Liverpool to see what they were about on the present occasion. With respect to the bill he had no right to give an opinion. Whatever bill was passed it would not give universal satisfaction,—

but that was no reason why they should not attempt to better their condition. He rejoiced that Sir James Graham had taken the thing in hand; they ought to be glad he had not come on them by surprise, but allowed several months for a consideration of the question; and he trusted such alterations would be made as they might think proper to suggest. A committee had been acting for some time, and had come to the conclusion that a memorial would be preferable to a petition for presentation. In conclusion, he thought the best way to carry measures was not to be too violent—that the whole profession ought to be in harmony with each other on such a subject as they were met to consider, and unite heart and hand for the general good.

Dr. Freckleton moved the first resolution. He felt anxious for some legal enactment for preserving good order in the profession, so that regularly-educated men should be protected, and quackery punished in all its branches. Some enactment was necessary, and it would be difficult to frame a bill to meet the views of all classes. He did not wish to oppose the bill *in toto*, but thought it would be better to point out those parts which were objectionable. He felt sure the Government had acted towards the profession with good faith and honesty, as they had allowed sufficient time for parties to examine and comment upon it; and if the members of the medical profession would only point out to her Majesty's Ministers those parts of it that were objectionable, he had no doubt they would meet that attention they deserved. They were making efforts by the proposed bill to render the profession respectable, and Government had a right to interfere in legislating for them as well as for other bodies. They would be doing wrong if they did not concur with the Government in supporting those parts of the bill which were for their own good. He concluded with moving the following resolution:—

"That it is a matter of gratification to this meeting, that her Majesty's Ministers have introduced into Parliament a Bill, having for its object the better Regulation of Medical Practice throughout the United Kingdom." John M. Banner, Esq., seconded the resolution, which was carried unanimously.

Sir Arnold Knight, M.D., moved the second resolution:—"That the provisions of the bill for ensuring greater uniformity in the education, qualification, and registration of the profession, are judicious, and have long been called for." So perfectly did he concur in all Dr. Freckleton had said, that he had scarcely an additional remark to make. If the profession were to show a disposition to oppose no more of the measures than was objectionable, Sir James Graham, who, by bringing the bill in at the conclusion of the session, had acted with great fairness towards the profession, would be more likely to make such modifications as were desirable. If the medical profession were to oppose the bill altogether, he thought that government would most likely give up in despair all further attempts to improve the present anomalous position of the profession.

J. L. Minshull, Esq. seconded the resolution, which was carried unanimously.

Dr. Sutherland referred to the charter of the College of Physicians, and the Apothecaries Act, in the spirit of both of which irregular practice was considered as contrary to law. It was proposed by the new bill to repeal all charters which imposed restrictions on the practice of medicine—to place the educated on the same footing with those who have received no education at all, and for that they had a right to seek a remedy. It was unnecessary for him to argue that men intended for the medical profession must be men of education; the amount of knowledge they required was greater than for any other—there was scarcely any branch of knowledge they did not require; and the principle that there should be a distinct body of men for that purpose had always been recognised. During the examination before the House of Commons, it was stated to be almost impossible to put down illegal practice by the present act, on account of the expense, but the circumstance of its being deemed necessary to suppress it, showed it was an evil. Sir James

Graham had stated the impossibility of putting down quackery, but he believed it could be accomplished if proper steps were taken in reference to it. The new bill itself admitted irregular practice to be an evil, for it excluded irregular practitioners from the army and navy, and from all public medical offices. If a practitioner were found not to be registered, let him be taken before the magistrate, and quackery would soon be put down; as far as law could reach it, that course would be most effectual. He proposed the following resolution:—"That this meeting deeply regrets that no restriction on irregular practice should have been provided in the bill, by the substitution of measures more efficient in their operation than those contained in the acts proposed to be repealed: which acts, although they may not have been of sufficient power to remedy the evil, nevertheless admit the sound principle that the practice of uneducated persons is contrary to law."

Henry Stubbs, Esq. seconded the resolution, which was carried unanimously.

It was moved by Dr. Macintyre, seconded by Dr. Collins, and unanimously agreed to, "That the following memorial, which has been prepared in conformity with the foregoing resolutions, be adopted by this meeting, and signed by the chairman, and transmitted to the Right Honourable Sir James Graham, Bart., Secretary of State for the Home Department."

To the Right Hon. Sir James Graham, Bart., Her Majesty's Principal Secretary of State for the Home Department, this Memorial, agreed upon at a Meeting of the Medical Profession of the town of Liverpool, held at the Medical Institution on the 2nd of Oct. 1844,

SHEWETH,—

THAT your memorialists hail with satisfaction the introduction into Parliament of "A Bill for the better Regulation of Medical Practice throughout the United Kingdom." That they have given a careful consideration to the said Bill, and beg respectfully to submit to you their opinions on the same.

That inasmuch as the restrictions on unqualified practice as they at present exist in the several Acts and Charters proposed to be repealed in the first clause of the said Bill have been local and partial in their application, and have thereby frequently been injurious to well-educated Members of the Profession, and especially as they have never proved themselves to be a sufficient protection to the Public against ignorant and unskilful pretenders, your memorialists think it quite necessary that these Acts and Charters should be repealed and annulled.

That nevertheless these Acts do acknowledge as a principle in Law, that persons not duly qualified, shall be prohibited from practising under certain penalties, and if they shall be repealed without at the same time substituting a *more efficient prohibition* against irregular practice; your memorialists consider this giving up of a sound principle as *pro tanto* legalizing the practice of unqualified persons, as tending to lower the dignity of the Medical Profession, and as at the same time taking away from the Profession its legitimate rights, while it withdraws all protection from the Public.

That as the Medical Profession is at present constituted, there exist registers of all qualified Practitioners in the United Kingdom, some of which are from time to time published, and that, instead of these it is proposed to have one general registration, a measure of which your memorialists cordially approve as lying at the basis of all effective legislation on the subject.

That, by existing Laws or usage no unqualified practitioner can or does hold any medical office in infirmaries, dispensaries, poorhouses, or prisons; or in the army, navy, or East India Company's Service, and that considering the proposed registry as a test of qualification, your memorialists approve of it as a means of excluding as heretofore all unregistered and unqualified persons from such public medical offices.

That, as it is fully conceded by the Bill that it shall be unlawful for any unregistered person to practice in certain departments and public offices,

your memorialists know no valid reason why the same principle should not be fully carried out, so as to render it unlawful for any one to practice medicine and surgery in any part of the United Kingdom, without being duly qualified and registered, while they are of opinion that great good would follow, if the Bill declared all such irregular practice, subject to a penalty similar to that which the Bill inflicts on all unqualified persons practising in public offices; but recoverable by a summary process.

That your memorialists are of opinion, that a measure founded on the proposed registration, may be devised, better calculated than the laws now existing to protect medical men, as well as the public, against unqualified practitioners.

It was moved by Dr. Dickinson, seconded by William Bainbridge, Esq., and unanimously agreed to:—

"That a copy of the above Resolutions and Memorial be transmitted to the County and Borough Members, with the respectful request that they will have the goodness to support the objects of this meeting."

It was moved by Hugh Neil, Esq., seconded by Dr. Macnaught, and unanimously agreed to:—

"That the following seven gentlemen be appointed a standing committee, with power to add to their number, to watch the progress of the Bill, and to adopt measures thereupon, which they may see necessary: Dr. Jeffreys, Dr. Formby, Sir Arnold Knight, M.D., Dr. Freckleton, Mr. Halton, Dr. Sutherland, and Mr. Long."

It was further moved by King Ellison, Esq., and seconded by Alfred Higginson, Esq.: That a report of the proceedings should be sent to the Medical Times, and the other Medical Journals; and on the motion of Dr. Formby, seconded by King Ellison, Esq., the thanks of the meeting were voted to Dr. Jeffreys the chairman.

[We are indebted for this report to the obliging attention of Mr. George Millett Davis, who acted as secretary.]

Agreeably to advertisement a meeting of the Gloucestershire Medical and Surgical Association was held in Gloucester. Several professional gentlemen resident in the county but not members of the association were present.

Hardwicke Shute, Esq. M.D. who was called to the chair, gave it as his opinion that the measure was a most valuable one, calculated to elevate the character of the profession, and at the same time to confer substantial benefit on the public. He referred to the practical working of the apothecaries' act, and of the procedure of the colleges, to show that neither the public nor the profession had received any advantage from the existence of these bodies. They had been altogether inoperative for good.

Dr. Dick, of Tewkesbury, moved the first resolution which expressed the thanks of the meeting to government for introducing the bill, and observed, that any one who considered the present state of the medical profession must feel gratified at the circumstance of the government having taken up the question, for, as the chairman had very properly remarked, as the profession could not govern themselves, the government was the best body to exercise the controul, and any one who has read the bill must be convinced that the spirit and tenour of it are good, and that the provisions go as far as the legislature could be expected to do in the first instance, although, perhaps, not so far as the profession could wish. As to the efficiency of the apothecaries act, he knew of several applications which were made to the governing body requesting them to adopt measures to put down unqualified persons, but the reply was that they could not do it.

Dr. Conolly, of Cheltenham, felt grateful that the subject was before parliament, and he should be extremely sorry to lose a good measure merely because some portion of it was not acceptable to all the profession. Its general provisions he thought were good and excellent, particularly the one which referred to the institution of the council of health. He thought the bill should be suckled, and an endeavour made to get improve-

ments engrafted on it. A great advantage had arisen from their not having met earlier to consider this measure. At the time it was introduced a great outcry was made against it by those who had overlooked its advantages. Those now present had had an opportunity of considering the bill more carefully and calmly, and were therefore prepared to do it more justice, still it was their duty to endeavour to get it amended and improved, and if they went temperately to parliament he had no doubt of their being listened to. (Applause.)

Mr. Eves and Mr. Brooks, of Cheltenham, were of opinion that the bill did not afford sufficient protection. As to the efficiency of the Apothecaries' Company, he could state that about two years ago they instituted proceedings against an unqualified person, succeeded in getting a verdict against him, and in consequence he was driven from Cheltenham. [It was stated by some gentleman present, that the person after leaving Cheltenham had gone to Frampton, and then to Bristol, where he was now practising. (Laughter.)]

Mr. Stokes, of Nailsworth, was also of opinion that the protection afforded by the bill was not sufficient.

The resolution was then carried.

Mr. Wilton. If the meeting recollected the small service which the great Corporations had rendered to the profession—if they recollected the manner in which diplomas had been given—if they considered how uninterested these corporations had shewn themselves to be in every thing which related to the respectability and advancement of the profession—how little they represented the feelings, and what little regard they paid to the representations made to them in all directions—the profession must rejoice at the prospect of being placed in immediate connexion with the government (Applause). When this occurs, representation will not be confined to one section of the profession, but to all branches; physicians, surgeons, apothecaries, all will have equal access in preferring complaints which they may have occasion to make. If the profession lost the bill, they would lose also the Council of Health; and where then could they go to? They had worn out those Members of Parliament—never at best very influential—who had advocated their claims in Parliament, and should the present bill be lost, the profession would be the sufferers.

Mr. Rumsey considered the institution of the Council of Health as most important—by far the most important and beneficial of any reform yet proposed—and he regarded it as the foundation for future measures, more generally approved than some of the provisions of the present bill had been by some of the profession. He regarded as of great importance the connexion which would be formed with the state. Such a thing had never existed before. There was also another point of importance, and this was the power possessed by the council of defining all offices which might be called "public situations." This was a power of extensive application, and may be exercised so as to include attendance on the great mass of the population. In its duration it will include the medical attendance on the poor, in prisons, dispensaries, and hospitals, and it is possible that it may be extended to clubs, and in this way the great body of the people may in time be brought under qualified practitioners. (Applause.)

The resolution was then put, and carried unanimously.

Dr. Thorpe spoke at some length on the subject of quackery, and stated that no measure of a stringent character, and actively enforced against it, would succeed. The only way of counteracting it was by a modified measure, like the one proposed. He thought the practitioners themselves could do more to put down quackery than the legislature. (Hear, hear.) Quackery could only be put down by steady, persevering, judicious, and honourable policy on the part of medical men themselves, and by instructing persons on points which involved their welfare. Dr. Thorpe concluded by proposing the third resolution.

Dr. Gooch, of Stroud, seconded its adoption, and it was carried unanimously.

The next resolution was moved by Dr.

Ackworth, and seconded by Dr. Thorpe, of Cheltenham, and carried unanimously.

The remaining part of the proceedings were chiefly formal, and after it was transacted, the meeting separated.

The following were two of the resolutions passed.

"That while the proposed establishment of a Central Council of Health and Medical Education appears likely to promote the respectability and protect the interests of the medical profession, this Meeting is of opinion that the constitution of that Council, as laid down in the Government Bill, needs further consideration, more particularly as regards the relative proportion of Councillors to be elected by the profession; and that the measure would be greatly improved by permitting the medical practitioners of the provinces to elect the two representatives whom Sir James Graham has proposed to appoint from the rural districts."

"That as one of the most important features of the Bill is the abrogation of existing penalties on unlicensed practitioners, this Meeting admits that, in the present state of public opinion, any direct legislative interference with unqualified practitioners would not be unattended with difficulties, but has, nevertheless, reason to believe these difficulties have been overrated, and that if fairly met, will not be found to be insuperable; and therefore that the principle of protection against unqualified pretenders may be more extensively applied than is apparently contemplated by the Bill."—*Gloucestershire Chronicle*.

At a meeting in Worcester, the following resolutions were passed:—

"That it is the opinion of this meeting that the present regulations of the medical profession require extensive and speedy amendment, and that the bill proposed by Sir James Graham contains many provisions that would tend materially to effect the improvements that are necessary."

"That it appears to this meeting that the bill is essentially defective, in not containing a clause for the punishment of unqualified and unregistered persons, and that the absence of such a clause will be productive of incalculable injury to the public and to the profession."

At Newark a meeting was held, in which a resolution was passed against the bill in its present shape.

The British Medical Association, suffering a resurrection under the galvanic agency of the new bill, met in the person of Dr. George Webster, on Sept. 28. The secretary was absent, and the resolutions appear to have been moved by the president, seconded by the president, put to the vote by the president, and carried by the president. He was the whole meeting. After some very reasonable objections, which we have already frequently urged, the meeting thus resolves:—

"The appointment of a 'Council of Health and Medical Education,' which, if justly constituted and judiciously worked, implies a greater concern for the public health than government or parliament have hitherto evinced."

"The legitimate connection, for the first time, of the profession with the government, and thereby a much readier access to the ministers of the crown and to parliament, through the secretary of state for the home department."

"The general superintendence of medical education, with uniform tests of qualification for practice."

"The erection of the 'Council of Health and Medical Education' into a court of appeal against any oppressive or unjust acts of the medical corporations, and which have hitherto passed with impunity and without redress."

"The general registration of all qualified practitioners."

"The right to practice in all her Majesty's dominions after being duly qualified and registered."

"The provision against the assumption of medical titles by unregistered practitioners."

"That none but registered practitioners can legally recover charges for medical or surgical advice, attendance, or operations, or for medicines prescribed or administered."

At Chelmsford a meeting was held on the 26th

ult., in which very decided resolutions were passed against the bill. Dr. Rowe, the author of a popular work on Indigestion, and Female Complaints, appears to have been the presiding genius. Meetings have been also held at Rochester, Islington and Salisbury, in all of which resolutions of a moderate kind were formed.

ON MEDICAL REFORM.

To the Editor of the "Medical Times."

SIR,—I beg leave to offer a few observations on this subject, as I presume that the views herein taken are somewhat different from those that have been yet offered; it is probable that they may not suit the wishes of the majority, yet, if they are founded in truth and justice, I may be permitted to say "*vincit veritas*."

Sir James Graham's bill will, undoubtedly, tend to raise the standard of the medical profession: it will exalt the honourable, while, at the same time, it will check the low mercenary principles of the medical man, by allowing every mercenary and ignorant empiric to practise.

Then comes the question, how will the bill exalt the honourable principles of the medical practitioner, and, at the same time, check low and mercenary ones? In the first place, medical practitioners are recognized by the state as a body of gentlemen; and, by the registry, they are publicly made an honourable and distinct body from all interlopers,—whereas, at present, they are neither known to the world nor to themselves, nor properly distinguished from others. In the second place, every low and mercenary principle is checked and discouraged by this bill, in allowing medicine to become an open science, in which the whole host of *ignorants* are at liberty to compete with the learned, so that the learned man will find it necessary to leave his low mercenary ground and take a higher one. Now, if every one can learn medicine and surgery without the anatomical, medical, chemical, and surgical schools, it is plain that these schools confer no benefit upon the medical student; however, it is very certain and undeniable, that the hospitals and schools do benefit the medical student, and render him, *and him only*, fit to attend the sick-bed;—therefore, the medical practitioner has nothing more to do, in order to succeed in his competition with all ignorant pretenders, than to abandon all his quack principles, all his ignorance and incapacities, by studying the superiority which is derivable from the study of nature and the practice of those who have become truly eminent in their profession.

The clever man needs no protection—his talents are to him like the bee which draws honey from every flower; and there ought not to be any but clever, talented men within the boundary of medicine and surgery; yet there ought to be no statute to prohibit any person to practise it, if he chooses to do so: for talent in society is like water in hydrostatics—it will be sure to find its own level.

On the other hand, when empirics of every description are allowed to handle the medical sword, what guarantee will the public have for its security? I answer, that the public is already possessed of that,—viz.: the coroner's inquest. Whosoever dares to tamper with human life, is accountable to the state, and is judged by an impartial jury; if that ordeal was more frequently enforced, not only upon the unqualified, but upon the *qualified* practitioners of the medical art, I have no doubt but that illegal and legal quacks would disappear as if by enchantment; *this test would separate the base from the noble metal*. If any unqualified person should escape that ordeal, he ought to be looked upon as a skilful, outside worshipper of Æsculapius.

How rampant quackery exists in the profession itself! How the report of cases in all the medical journals for the last one hundred and twenty years proves this! A real medical reform should strike at the root of this evil, and it could only be done by enforcing an impartial inquest on the death of the victim—the difficulty would indeed be great in avoiding Sylla on the one hand, and

Charybdis on the other; for party influence would be the great and terrible tyrant in the decision of local juries. However, the formation of a superior court of appeal, from the coroner's jury, would secure both the practitioner and the public from injustice.

Let the motto of medical reform be, "Talents and merit shall be rewarded, but ignorance and presumption shall punish itself by the coroner's touchstone."

If the doubted skill of the legal practitioner was thus subjected to a public ordeal, surely the unqualified, the ignorant, and the presumptuous, could never in conscience object to give account of their actions before the coroner's tribunal. Indeed, this is the *corculum* of medical reform,—let the impartial coroner's inquest be as a flaming sword hanging over every one indiscriminately that dares to meddle with human life.

As I am presuming to handle the subject of medical reform, I beg to draw some attention to a certain evil which is now prevalent amongst teachers of medicine and examiners:—a lecturer will dwell principally on matters that are quite irrelevant to a successful practice; he will waste much time with new things, as a botanist does on the rarest plant, which after all may be the most useless; some rare disease, or an unaccountable physiological fact, will take up much more time than the common and the useful things; many idle theories are advanced, and the session is over before the student is made acquainted with scarcely any of the old, the common, and established principles of the healing art. The lecturer on medicine ought to use brevity and be comprehensive; he ought to be more of a demonstrator than a wrangler. All Mason Good's modifications of disease ought to be pointed out by the lecturer, and he ought not to be allowed to screen himself behind Cullen's easy chair. The examiners, again, dwell much upon the microscopic minutiae of anatomical ingenuity, on the theories of certain authors, on the *yles*, the *iims*, and the *ines* of chemistry, which, of necessity, tend to divert the student's attention from the plain matter and useful facts, to arm himself against those refined chess-catches which stalk before him at the straight gate! In teaching and examining, it is better to dwell upon the most important facts, and descend to particulars as time will allow; for the student's time ought to be appreciated, not only for his own sake, but for the sake of suffering humanity, to relieve which he is soon to go.

Since man's constitution is the same throughout Great Britain and Ireland; since diseases are affected by the same remedies every where; and since all these are to be known by the same means,—would not an uniform text-book of medical education, representing the present state of medical and surgical knowledge, be very desirable, if it was established in these kingdoms?

I beg to remain, Sir,

Your humble servant,

CORVENIUS.

Corwen, Sept. 24th, 1844.

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Colthurst, J. Mall, Clifton.
Conran, J. T. Madras Medical Establishment.
Cooper, George, Brentford.
Cornish, Chas. H. Taunton.
Crawford, H. Canterbury.
Creed, G. Bury St. Edmunds.
Ciellin, Fred. Royal Navy.
Crompton, D. W. Birmingham.
Crosse, John G. Norwich.
Curry, William, Barnstaple.
Dabbs, Geo. H. Royal Navy.
Darby, Wm. Bengal Medical Establishment.
Dickinson, N. Wigmore st.
Dodd, A. T. S. Chichester.
Dollard, William, Calcutta.
Doratt, Sir J. Knt. Pall Mall.
Downs, George, Stockport.
Duke, Abraham, Chichester.
Dunn, John, Scarborough.
Edwards, John, Royal Navy.
Egerton, Chas. C. Calcutta.
Este, Michael L. Albany.
Eves, Augustus, Cheltenham.
Ferguson, Chas. Sunderland.
Fergusson, W. Dover-street, Piccadilly.
Fisher, John Wm. Argyll-st.
Fitzpatrick, N. Brighton.
Fixott, Charles, Jersey.
Flint, Richard, Stockport.
Folds, William, Royal Navy.
Fowke, J. Wolverhampton.
Fowler, Chas. Cheltenham.
Franklin, Henry, Army.
Franklin, Sir R. Knt. Limerick.
Fuge, John Hele, Torquay.
Garden, Alex. Bengal Medical Establishment.
Gardner, John, Marlborough.
Gaskell, Samuel, Lancaster.
Gepp, G. Asser, Chelmsford.
Gibbs, Harry Leeke, Exeter.
Gilson, B. Halstead, Essex.
Goldney, Harry, Royal Navy.
Goldstone, Robt. Guernsey.
Good, S. Scots Fusilier Guards.
Goodeve, H. Hurry, Calcutta.
Grabham, John, Rochford.
Grantham, John, Crayford.
Greatrex, Edw. Coldstream Guards.
Green, William, Durham.
Griffith, T. Taylor, Wrexham.
Gruggen, William, Chichester.
Hall, Thomas, Army.
Harrison, Geo. sen. Chester.
Harrison, Geo. jun. Chester.
Harrison, Jas. S. Lancaster.
Harrison, J. Cambridge-ter.
Harrison, John, Chester.
Harrison, J. The Court Yard, Albany.
Hartle, Robert, Army.
Hewson, John, Lincoln.
Higginbottom, J. Nottingham.
Higgins, C. Hayes, Taunton.
Hill, W. Wootton-under-edge.
Hinds, R. B. Royal Navy.
Hough, H. Bengal Medical Establishment.
Howell, John, Clifton.
Howitt, Ralph, Lincoln.
Humphry, G. M. Cambridge.
Hunter, C. T. A. Downham.
Hutchinson, J. Bengal Medical Establishment.
Huthwaite, F. C. Grenadie Guards.
Ikin, Josh. Ingham, Leeds.
Image, Wm. Ed. Bury Saint Edmunds.
Ireland, Richd. S. Stephen's-green, Dublin.
Jackson, A. Russell, Warley Barracks, Essex.
Jackson, John, Calcutta.
Jackson, W. Bengal Medical Establishment.
Jameson, Hugh, Royal Navy.
Jeaffreson, W. Framlingham.
Jones, Richard, Leamington.
Jones, T. W. George-street, Hanover-square.
Jones, William, Army.
Jubb, Abraham, Halifax.
Judd, Wm. H. Scots Fusilier Guards.
Kane, Chris. Bombay Medical Establishment.
Kays, M. T. Bombay Medical Establishment.
Kelley, Wm. Royal Navy.
Kelsall, Henry, Royal Navy.
Kent, William, Royal Navy.
Kidd, John, Royal Navy.
Knox, Geo. Madras Medical Establishment.
Lallemant, F. F. Macclesfield.
Lancaster, J. J. Royal Navy.
Lane, T. M. Madras Medical Establishment.
Law, Thos. S. Barnstaple.
Lawder, Jas. Madras Medical Establishment.
Lawrance, S. G. Royal Military Asylum, Chelsea.
Leese, L. Norwood, Surrey.
Le Grand, F. W. Royal Navy.
Leonard, Daniel, Army.
Leyson, Wm. Royal Navy.
Lingen, Charles, Hereford.
Lunn, William, Hull.
M'Cormick, R. Royal Navy.
M'Donald, T. W. Royal Navy.
Macdonnell, G. B. Madras Medical Establishment.
Mahon, H. W. Royal Navy.
Marshall, J. Bengal Medical Establishment.

Maurice, T. B. Reading
 May, George, Reading
 Medd, John, Stockport
 Mellis, Jas. Bengal Medical Establishment
 Melville, Alexander, Ghent
 Middleton, Wm. Leamington
 Mitchelson, W. Bengal Medical Establishment
 Moore, David, Belfast
 Morris, Harvey, Royal Navy
 Morrison, Wm. Chester-le-street, Durham
 Mouat, Fred. John, Calcutta
 Murray, Denis, Army
 Muscroft, James, Pontefract
 Nasmyth, A. George-street, Hanover-square
 Naulty, John, Royal Navy
 Nicholson, Brinsley, Army
 Nicolson, S. Bengal Medical Establishment
 Nugent, M. Erechtneum Club
 Nutt, R. Clarke, Royal Navy
 O'Shaughnessy, R. Calcutta
 Palmer, C. Quartley, Army
 Partridge, Ald. Colchester
 Paul, John, Elgin
 Peach, George, Army
 Pettigrew, W. V. Chester-st. Grosvenor-place
 Pinhey, R. Bombay Medical Establishment
 Piper, Sam. Ayrault, Army
 Pooler, John, Army
 Poyser, Thos. Warksworth
 Price, William, Leeds
 Pritchard, John, Leamington
 Pritchett, M. Royal Navy
 Quigley, T. H. Barbadoes
 Raleigh, E. W. W. Calcutta
 Ranken, Jas. Bengal Medical Establishment
 Rayner, John, Stockport
 Reece, Richard, Cardiff
 Reynolds, Michael, Army
 Richardson, T. Scots Fusilier Guards
 Ricketts, Martin, Droitwich
 Ring, T. Edw. Royal Navy
 Roe, Samuel Crozier, Army
 Rogers, Peter, Looe
 Rogers, Samuel, Madras
 Rowland, William, Swansea
 Rumsey, James, Amersham
 Rumsey, Nath. Henley-on-Thames
 Russell, James, Birmingham
 Ryland, Fred. Birmingham
 Salter, Thomas, Poole
 Sankey, William, Dover

Scratchley, James, Paris
 Seagram, William Frowd, Warminster
 Searle, Henry Smith, Queen's-place, Kennington
 Seddon, Joshua, Shelton
 Sillery, Robert, Army
 Simon, John, Wellington-street, Strand
 Smith, Charles Case, Bury
 Saint Edmunds
 Smith, John (C.) Royal Navy
 Smith John Gregory, Harewood, near Leeds
 Smith, William, Lymington
 Snow, James, Lincoln
 Spark, James, Newcastle-under-Line
 Spencer, Richard, Army
 Stewart, Alexander, Army
 Tapp, William Denning, Dorchester
 Tarn, John, Royal Navy
 Toms, Philip, Royal Navy
 Toynbee, Jos. Argyl-place
 Travis, William, Scarbrough
 Tripe, Cornelius, Ker-street, Devonport
 Tuckwell, William, Oxford
 Tudor, William, Bath
 Tassall, William, Army
 Verling, J. S. Roeh, Devonport
 Waddington, John, Margate
 Ware, Martin, Russell-sq.
 Watson, William, Bengal Medical Establishment
 Waylen, William, Colchester
 Welch, Francis, Taunton
 Wells, Thomas Spencer, R.N.
 Whitfield, Charles Tomlins, Junior United Service Club
 Widmer, Christopher, Army
 Williams, Benjamin, Madras Medical Establishment
 Williams, Caleb, York
 Williams, John, Royal Navy
 Williams, Richard Lloyd, Denbigh
 Windsor, John, Manchester
 Wise, John, Banbury
 Wood, Abraham, Rochdale
 Woodyer, Caleb, Guilford
 Worthington, William Collins, Lowestoff
 Wright, James Dennis, Grenadier Guards
 Wylie, John, Madras Medical Establishment
 Young, D. S. Madras Medical Establishment
 Young, Wm. Henry, Army

peared to be markedly mild, and the return of the parts to natural condition seemed more speedy than after the use of port-wine injection. The first case was supposed to be encysted hydrocele of the spermatic cord, and the second was complicated with an irreducible hernia.

OVARIAN DISEASE.—Mr. Brown mentions a case briefly, to shew that ovarian dropsy may occur prior to puberty. He considers that medical treatment will be most available in cases where the ovary itself has become diseased and degenerated, and the fluid contained in the sac is thin and watery. In other cases, the medium operation is to be recommended.

MANAGEMENT OF BLISTERS.—Dr. Robertson gives the following directions for the management of blisters, as the result of nearly seventeen years' experience: the blistering plaster should be spread thinly on paper or linen, not sprinkled over with powdered cantharides on the surface: but instead thereof, a few drops of olive oil rubbed on it and allowed to remain. Used in this way, he says, the blister acts speedily, and without causing irritation: with him it never produces strangury. He objects to a blister spread upon leather, because the leather, by the heat of many parts of the body, becomes dry, partially crisp, and with difficulty adheres to the skin, and thereby prevents it from acting well and generally over the whole part intended to be blistered. The blister should be spread thinly, because the outer surface only is efficient; and when it is used in a thick layer, it becomes irregular, and consequently partial in its operation. The powdered cantharides should not be sprinkled on it, because they will not add to its efficiency, as they act but slightly on the skin; but the active principle of the Spanish fly being soluble in olive oil, affords a reason for the use of the oil on the surface of the blister. Dr. Robertson concludes by remarking, that every one can make this blister for himself, of the commonest materials at a very trifling expense, and, if this be any recommendation, it will act three, four, or six times, if uninjured, and the oil gently renewed on its surface.

ANTIDOTE FOR PRUSSIC ACID.—Messrs. Smith have experimented on prussic acid, and have found that a sulphate of iron, consisting of four proportions of the per-sulphate, and three of the proto-sulphate, combined with a proper proportion of an alkaline carbonate, will neutralize hydrocyanic acid, the resulting compound being the insoluble Prussian blue. 210 grains of the salt of iron, and 144 grains of the carbonate of potash are required to neutralize 56.8 grains of real prussic acid, but they recommend that when used as an antidote, not less than three times the theoretical quantity should be given, as from the presence of food, mucus, &c., in the stomach, it is improbable that the antidote would mix immediately with the poison at every point; so that to render the action more certain, a large excess is advisable, more especially as this would be attended with no evil consequences, as the only effect, that could follow an excess, would be the formation of sulphate of potash, and an insoluble mixture of proto-carbonate and peroxide of iron. Should there be reason to believe that the stomach contains much free acid, which might interfere with the decomposition of the salt, a dose of magnesia should precede the exhibition of the antidote, but not otherwise.

PARTIAL SOLUTION OF CALLUS.—A case is recorded from the London Hospital, where the callus uniting a fractured femur became partially absorbed, in consequence of bad diet in an union workhouse. By the use of good food and tonics, the patient recovered. A somewhat similar result followed in another case, after an attack of rheumatic fever.

BACKWARD DISLOCATION OF THE CARPUS.—A young man, 18 years of age, was admitted into the London Hospital, having fallen from the mainmast of a brig, by which, in addition to other injuries, the left carpus was dislocated backwards, presenting the following symptoms:—lower ends of the radius and ulna prominent, both styloid processes being entire, a marked depression beneath, or rather in front of them;—hand partially

adducted, and thrown backwards; a prominent tumour, formed by the carpus, extending from the level of the radius and ulna, backwards, i.e., towards the elbow, for about an inch and a half; a marked depression above the tumour, i.e., towards the elbow; movements of the hand almost lost, there remaining only slight power of extension and none of flexion. Reduction was effected by making extension from the hand, the elbow being fixed by the knee. The fore-arm and hand were placed in splints for about three weeks, and he soon after this regained perfect movement of the joint.

SURGEONS TO SHIPS.—An old sailor exposes the disgraceful conduct of owners in engaging surgeons for their vessels, both as to the amount of salary, and the fees allowed by Government when soldiers are conveyed in the vessels. He also states, what we know to be the fact, that, in many ships, the doctors are no more than drug-gists' boys (assistants); and he adds, that instances have come under his own observation, where buboes have been treated for hernia, and a dislocation of the os humeri for a sprain. The whole system requires revision, and no vessel should be allowed to leave the country, however small the crew may be, without having a legally qualified surgeon on board. The life of one man is as much worth earing for as that of twenty.

MIDWIVES' MIDWIFERY.—Mr. Reid mentions a case where a midwife, in attendance on a footling case, tied the cord and divided it while the child was *in transitu*, and before the head was born. As a matter of course, the child, when quite born, was dead.

FOREIGN BODY IN THE TRACHEA.—Dr. Bowie has communicated to the *Montreal Medical Gazette*, the case of an elderly man, who suffered from chronic bronchial inflammation, dyspnoea, frequent fits of coughing, and muco-purulent expectoration for two years, when suddenly one of the neck-bones of a fowl, about the size of a large pea, was thrown up during a fit of coughing, and then all the symptoms disappeared, and the man recovered.

OVARIAN TUMOUR OPENING INTO THE BOWELS.—In the *Montreal Medical Gazette*, is published a case of ovarian tumour remarkable for the excessive pain which attended its formation, its rapid growth, and the discharge of its contents by the bowels, with the consequent apparent recovery of the patient.

COUNTER-IRRITANT.—Mr. M'Diarmid recommends a solution of ten grains of tartar-emetic in an ounce of distilled water as a counter-irritant application, to be used in lieu of the ung. antim. tart., the use of which is disagreeable to many persons.

LITHOTOMY.—In a paper, entitled, "Surgical Cases and Observations," published by Mr. Syme in the *London and Edin. Medical Journal*, he states, that in operating on children, a common grooved staff and a straight bistoury blunted to within an inch and a quarter of the point, are all the instruments that are required; in adults, however, in consequence of the development of the prostate gland, and the consequent importance of dividing it to a certain extent, a corresponding alteration in the mode of procedure is required. He regards the proper section of the prostate as the most critical step in the operation. He observes that the part usually called "the neck of the bladder," which offers the final resistance to passing a catheter, which gives the feeling of a ring when the finger is introduced through it, and which seems to be the most sensitive portion of the urinary apparatus, must be divided, in order to allow the extraction of even a small stone, without inducing fatal inflammation of the bladder, and when this is done, additional space is readily obtained through dilatation by the finger, the remaining part of the prostate tearing in the direction in which it is cut, the mucous membrane of the bladder stretching, and the fibres of the muscular coat separating from each other. Mr. Syme believes that leaving this ring entire, is the most dangerous error that can be committed in performing lithotomy. In operating, he introduces a straight staff through the wound in the perinæum, and then passes an instrument, which

PERISCOPE OF THE WEEK.

[The only points of interest in the two last Nos. of the *Lancet*, are the following.]

LARGE BLISTERS IN THE TREATMENT OF ACUTE INFLAMMATION.—Dr. Turnbull confirms generally the statement of Dr. H. Bennett, as to the efficacy of large blisters in the early treatment of acute inflammations, especially of the chest. He is of opinion that they act, not by diminishing the quantity of fibrine in the blood, which, on the contrary, they tend to increase, but by producing counter-irritation; and he advances a statement that mercury acts on the constitution in a similar manner, basing his opinion on the recent researches of Andral. He has been anticipated, with respect to the action of mercury, by a previous writer.

DISLOCATION OF THE HUMERUS.—Mr. Houghton narrates a case of partial dislocation of the humerus, attended with some symptoms of fracture of the bone, but the occurrence of the latter accident is, to our minds, by no means certain. The man recovered with an useful arm, but not possessing full command over it. Mr. Smith, who presented a specimen of this injury to the Pathological Society of Dublin, observes that the dislocated head of the bone cannot be reduced, as no extending force can be brought to bear upon it. The diagnosis, however, is not difficult; we have, nevertheless, seen one of the Fellows of the College at work for hours to reduce the dislocation, he not being aware that the bone was fractured also. As a matter of course, he did not succeed.

HYDROCELE.—Three cases of hydrocele are reported from the practice of Mr. Fergusson, at King's College Hospital, in which a cure was obtained by injecting a solution of iodine in water. In all these cases the effects of the operation ap-

he calls a prostatome, along its groove, until the blunt part is arrested by the prostate, when the neck of the bladder will be sufficiently divided. No harm can happen, even if the prostatome is pushed onwards against the bladder. This instrument is a triangular shaped knife, straight and blunt on the back, for running in the groove, and sharp on its convex edge from the point backwards to the extremity,—the remaining part is blunt, but thin.

AMPUTATION AT THE ANCLE JOINT.—This operation, Mr. Syme says, in the *London and Edinburgh Medical Journal*, should supersede amputation below the knee in a great many cases. The flap should be obtained from the heel and sole of the foot, as the natural thickness of the integument at those parts will afford a proper support to the stump. The best instrument for performing the operation is a large bistoury, or small amputating knife, with a blade about four inches long. There is no occasion for a tourniquet, as the assistant has complete command of the vessels by grasping the ancle. The incisions across the instep and sole of the foot should be curved, with the convexity forwards, and exactly opposite each other. A line drawn round the foot, midway between the head of the fifth metatarsal bone and the malleolus externus, will shew their extent anteriorly, and they should meet a little way further back, opposite the malleolar projections of the tibia and fibula. If the ancle-joint is sound, the malleolar processes should be removed by cutting pliers; but if the articulating surfaces are diseased, a thin slice thereof should be sawn off. Care should be taken to avoid cutting the posterior tibial artery before it divides into the plantar branches, as in two cases where Mr. Syme did so, there was partial sloughing of the flap. The edges of the wound should be stitched together, and lightly dressed. When the cure is completed, the stump is of a conical form, the thick integument of the heel constituting its apex, or point of compression.

COMFORT FOR PAUPERS.—Dr. Handyside, who designates himself Secretary to the Association for obtaining an Official Enquiry into Pauperism in Scotland, in his examination before the Poor Law Commissioners, stated that he would say, from observation, with regard to a father and mother, with four children under ten, at the working period of life, that 3s. 6d. or 3s a-week, might make them comfortable! The Doctor adds, that 1s. a-week might do for a single man, of which 6d. is allotted weekly for nourishment. He considers 2s. 6d. the lowest sum on which a man with a family of four children might be supported, exclusive of house and clothing. Dr. Handyside's ideas of comfort and support for paupers, seem to be based on homœopathic principles. We would advise the Doctor to try the system for a week personally, and then give his opinion. In all probability, the sum he so generously allots to support six individuals for seven days, would not prove sufficient to pay for a dinner for himself alone.

THE DARK ABDOMINAL LINE.—Mr. Turner, in the *London and Edinburgh Medical Journal*, says, that it has occurred to him to notice this line once, faintly marked, immediately after abortion, in the third month; but, except in this solitary instance, he has not yet—although he has frequently looked for it—met with it earlier than the seventh month of utero-gestation. In healthy subjects, he believes it disappears in the vast majority of cases, in the course of the second month after delivery, but he has found it, scarcely perceptible, in the third and fourth months; and, in one case, that of a woman under treatment for hepatic congestion, it persisted faintly, but distinctly, for at least six months after delivery. He has also met with it, in a few cases, unconnected with pregnancy, principally those of gastric disorder, intestinal irritation, or of hepatic disease.

PRESERVATION OF BODIES FOR DISSECTION.—In the *London and Edinburgh Medical Journal*, Dr. Nicol states, that in his occasional pathological examinations, he has for many years used a combination of the nitrate of potash and bichloride of mercury, with the most satisfactory results. He uses from five to ten grains of the bichloride dis-

solved in a pint of water, and to this solution he adds as much of the nitrate as it will dissolve. While the nitrate preserves the colour, the quantity of bichloride is sufficient to prevent the incursion of maggots, and the process of decomposition is thus effectually retarded for such a length of time, as completely to answer every requisite purpose. Dr. Nicol states, that, to the naturalist, this solution is invaluable, for if the skin of any animal be dipped into it, and afterwards dried, neither moth nor maggot will ever make any impression on it, nor will the colour of either hair or feathers be in the slightest degree injured or altered.

SOLUTION OF ACETATE OF IRON AS AN ANTIDOTE FOR ARSENIC.—The hydrated peroxide of iron has always proved efficacious in cases of poisoning by arsenious acid, or by arsenic acid in a free state; but, according to the experiments of Duflos, it remains completely powerless when these acids are combined with bases; for example, in the arsenite, or bi-arsenate of potash; the latter being frequently employed in the arts, particularly in printing stuffs, and consequently easily procured. Thus, in the uncertainty in which the physician may be of knowing if the poison is a free arsenical acid or combined, it is very important to administer the oxide of iron in such a form as may promise a successful result, and it is with this end that it is desirable to have recourse to the solution of acetate of iron. This preparation is procured by adding to the hydrated oxide of iron, obtained by the decomposition of four parts of liquid perchloruret of iron, three parts of acetic acid of a density of 1.03, and water in sufficient quantity to form 16 parts.—This liquid, which is, in fact, a solution of acetate of iron, with excess of base, precipitates the arsenious and arsenical acids from all their solutions, whether they be free, or combined with base. Thirty-two grammes of this solution are sufficient to entirely decompose 122 grammes of Fowler's solution. The liquid peracetate of iron is consequently the ferruginous preparation, which should be preferred in cases of poisoning by arsenical preparations. It must be, moreover, remembered, that the antidotic effect is more rapid in proportion, as it is more diluted: and that a degree of dilution has the advantage of preventing any irritating action of the acetic acid on the stomach and bowels.

MALARIA CAUSED BY THE DECOMPOSITION OF GREEN-WOOD.—Dr. Black, in the *Provincial Medical Journal*, states that in the year 1815, the ship of war, to which he was surgeon, took in a quantity of green-wood at Demerara, for fire-wood. The ship was then healthy, but after being at sea for three weeks, and without being in any other port, fever, of a very violent congestive character, made its appearance among the men and officers, and the ship was ultimately obliged to run to Barbadoes, where forty men, and the doctor also, were carried to the hospital. The ship afterwards returned to her cruising ground, it being thought she would sooner get clear of the fever by being at sea than by lying in the harbour. The men's diet was also modified, as they had not been long from a cold climate; the fever, however, continued to make its ravages, and the ship was again obliged to return to port. The hold was then overhauled, and found to be very foul and foetid from the green wood fermenting and decomposing. It was immediately cleared out, the men quartered on shore, and the ship fumigated and white-washed; after which the men returned on board, but no more cases of fever occurred.

ABSORPTION OF ARSENIOUS ACID BY PLANTS. BY DR. GIANELLI.—The experiments of Dr. Trinchinetti shew, that arsenic, in solution, when brought in contact with plants, is absorbed by them. Having placed in a solution of 25 milligrammes of arsenious acid in 100 grammes of water, a hyoscyamus, a purslain and a gourd, he found these plants withered the next day; their roots were softened and disorganised, and the juice which he expressed from them yielded, by the ammoniacal sulphate of copper, the green precipitate which characterises arseniate of copper. The same experiment, repeated upon a gourd, immersed in a solution of five milligrammes of arsenious acid, produced no other alteration on the

plant than a slight fading on the lowest leaf. After cutting the stalk nearly close to the point of immersion, he expressed the juice of the whole plant, and this heated, to the boiling point and filtered, was coloured green by the ammoniacal sulphate of copper. M. Trinchinetti having used a solution of 5 milligrammes of arsenious acid to 60 grammes of water, to moisten the mould in a small vase containing another gourd in full vegetation, observed at the end of two days that this plant did not appear to have been the least affected by it. He then took it out of the pot and ascertained that it was healthy, but having pressed out the juice, and submitted it to the action of the above-mentioned re-agent, he obtained the same results as in the preceding experiments.—M. Gianelli has published, in the *Annali Universali di Medicina*, other experiments made with the same poison, tending to confirm the results at which M. Trinchinetti had already arrived, on the absorbing faculty of the roots of plants. He wished, for example, to ascertain whether the juices of vegetables, watered with arsenious acid, were susceptible of poisoning animals, and whether the viscera of these latter would destroy birds that fed upon them. For this purpose, he grew some endive, which he watered with a solution of arsenious acid, by which they seemed affected. He then gathered it, pressed out the juice, and gave it to a rabbit. This animal died twelve days afterwards, with all the symptoms of poisoning; but some screech owls that were made to feed on the viscera of the rabbit, did not present any symptoms of the kind.

GOSSIP AND NEWS OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—*Notice to Students.*—The Registration at the College will be open from Monday the 21st to Thursday the 31st of October instant; and from Wednesday the 22nd to Friday the 31st of January next; and from Saturday the 22nd to Monday the 31st of March next;—between the hours of 10 and 4;—for the Registration of Students attending Hospital Practice and Lectures in London, during the present Session.—N.B. Students are required to produce the Cards of Admission to such Lectures and Hospital Practice.—EDM. BELFOUR, Sec.—Oct., 1834.

We are happy to see, from our contemporary of Worcester, that the suggestion for a Special Meeting of the Provincial Medical and Surgical Association, has been adopted. It will be held in Derby, but the day is not yet fixed.

APOTHECARIES' HALL, 3rd October, 1844.—John Young Godwin, Thomas Willey, Thomas Christopher Weeden Cooke, Thos. Bowe Thwaites, Douglas Hamilton, Rowland Tilson.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted Members, on Friday, October 4th, 1844:—E. Moore, T. Batt, J. F. Jones, G. Yates, T. Evans, J. Black, J. P. Smyth.

Metropolitan Mortality for the Week ending Saturday, October 12th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	961	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	247	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	109	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	150	152	157
Diseases of the Lungs, and of the other Organs of Respiration	252	312	236
Diseases of the Heart, and Blood-vessels	32	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	65	66	69
Diseases of the Kidneys, &c.	6	6	5
Childbirth, Diseases of the Uterus, &c.	8	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	4	6	6
Diseases of the Skin, Cellular Tissues, &c.	2	1	1
Old Age	47	74	71
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REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 31.)

Before quitting the subject of amenorrhœa, I may allude to a species of it which is not commonly met with. I mean where it depends on congenital defect of the uterus, and probably also of the ovaries. The individuals under these circumstances are far from evincing a feeble torpid circulation; the frame becomes large and semi-masculine; the features, in some instances, very coarse; the limbs gaunt and powerful. The mammae are small and defective, and on examination, *per vaginam*, we not unfrequently find the vagina short and contracted, with little or no sign of a uterus. In some cases, an indurated and thickened spot, at the extremity of the vagina, marks the rudiment of the uterus, and examination, *per rectum*, shews it to be either very diminutive and imperfect, or altogether wanting. In some of these cases, the menses have never appeared, in others they have not come on till late; viz., 19 or 20 years of age, and then sparing; in others they seem scarcely to have been influenced by the imperfect state of the uterus. This variety in the secretion of the menses, under nearly similar degrees of congenital defect of the uterus, can, I think, only be explained on the supposition, that in some case the ovaries are also imperfect, whereas, in others they are nearly or quite natural. There can be no doubt but that these organs are closely connected with the function of menstruation, as proved by the changes which are known to take place in them at these periods, and by the derangement which the ovarian disease produces in this function. I need hardly say that these cases afford little or no scope for treatment, and that they have come under my notice in consequence of some other affection.

Mrs. H., æt. 38; a huge and remarkable masculine looking woman, with powerful limbs, large bony hands and feet, and very coarse features.

August, 24, 1844.—Much pain and irritability on passing her water; constant pain over the symphysis pubis, and in the anterior part of pelvis; occasionally coming in severe paroxysms; pain in the region of the left kidney, extending into the left hypogastrium.

Exam. per vaginam.—Os uteri very high up; cervix very small; there is no trace of a uterus above; the region of the bladder intensely tender.

Exam. per rectum.—No body or fundus uteri to be felt.

Orificium urethræ and the mucous membrane lining the canal very tender and vascular—almost livid.

Urine, passed in the morning, of a yellowish green colour; acid, containing much epithelial matter; and copious muco-pus globules. Sp. gr.

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10·16; serous. The proportion of phosphates is very small. Muriate of ammonia.

R. Acid nit. dil., acid. hydrochlor. dil. aa M. vij. ex infus. pareiræ ter die.

R. Linim. camphoræ co. ʒijss. tinct. opii. ʒss. M. ft. linimentum regioni renis sinistr. et pubis infiricand.

As before stated, it will be observed that the active symptoms, for which I was consulted in this case, were entirely independent of the congenital defect of the uterus, and probably also of the ovaries. The disease is one of rather obscure character, first pointed out by Dr. Prout; where there is severe irritation of the bladder and urethra, connected with, and arising from, insidious disease of the kidney. The history of her symptoms: the congested appearance of the orifice of the urethra; the pain referred to the bladder during vaginal examination; and above all, the condition of the urine, clearly shew that, although the bladder and urethra are the chief points of suffering, yet the left kidney is, in all probability, the real source of the disease. This is shown not only by the serous state of the urine, but also by the presence of muriate of ammonia; a salt which can scarcely appear in the urine, except as the result of muriatic acid secreted by the kidney. I shall not give any further details of the case, partly because she is still under treatment, but chiefly because it does not belong to the present subject.

S. T., æt. 39; married 13 years; no children.

July 21st, 1838.—Has menstruated regularly since the age of eighteen; and, with the exception of two attacks of painful menstruation, has always enjoyed good health. Was attacked with severe pain in the left thigh three months ago, extending to the left side of the abdomen and back, which confined her to bed for six weeks, after which period the pain diminished; but she perceived a swelling in the left hypogastric region. Tongue furred; pulse weak; appetite bad; a hard circumscribed tumour may be felt in the left hypogastrium; has not menstruated for the last three months, during which time she has become very weak. Suffers much pain in the tumour, extending to the back on the slightest pressure; limps with the left leg.

Exam. per Vaginam.—Vagina very short; no os uteri or cervix. On pressure, a hard body, about the size of the os uteri, may be felt covered by the mucous membrane at the upper part of the canal, to which it adheres.

R. Hirudines xij. hypogast. sinistro.

R. Extr. gentianæ. extr. hyoscyami, aa gr. v. o. n.

28th.—Much relieved by the leeches; feels better. The tumour is not to be felt, but the abdomen is much distended; appetite much improved. Pergat.

I have given the above case to illustrate the fact which I mentioned, viz., that an extremely imperfect uterus (and even where it appears to be entirely wanting) is not incompatible with the function of menstruation. In this case, the symptoms, for which she applied, were, in all probabi-

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lity, those of ovarian inflammation of the left side, of three months' duration, since which, the catamenia had ceased to appear; so that, considering the almost entire absence of the uterus, we not only have the presence of ovaries, as indicated by symptoms of oophoritis, to account for the regular secretion of the catamenia, but we have a suppression of this function cotemporaneous with the appearance of these symptoms.

A somewhat similar case occurred to me some years ago, at St. Thomas's Hospital, where the patient, an elderly woman, consulted me for some unimportant ailment, and where the vagina was very narrow and short, apparently not larger than the middle finger of an ordinary sized glove. A small, cicatrix-like, indurated spot, marked the rudiment of the os uteri, but without a trace of uterus above. The catamenia had not appeared until the age of 19, and always sparing. She was married, but, of course, had never been pregnant.

M. A. S., æt. 37; married; no children; healthy looking.

Sept. 26th, 1840.—Complains of much lassitude, and debility, with pain about the abdomen, especially the pelvis; much sense of weight about the rectum, and violent, griping, cutting pains in front, relieved for a time by emptying the rectum, so that this takes place about 20 times a-day. When the fœces are solid, they have a taper-twisted form. Has been very stout, but has lately lost flesh considerably.

Exam. per vaginam.—Vagina not more than an inch and a-half long, dividing into a sort of bifid extremity, the septum of which is hard; no os or cervix uteri can be detected, unless, perhaps, a slight trace of something in the left cornu indicates the rudiment of it. Something firm and heavy is felt above the vagina.

Exam. per rectum.—Orifice of anus small, and on passing through the pouch at the lower end, the finger comes to a very narrow canal, bounded in front by a hard mass, over which the finger can curl, like the symphysis pubis, when felt, *per vaginam*, just after labour.

Although the fact of her having menstruated is not mentioned in the report, I have the full impression, that this was the case, and that the menses had not appeared until near the age of 20. The irritability of the rectum, the taper-twisted appearance of the fœces, were evidently the result of pressure from the tumour in front of it, and I much regret, that I had not an opportunity of investigating the nature of this mass further, but she was an out-patient at St. Bartholomew's, and I never saw her again.

Although I shall bring forward some cases of dysmenorrhœa from a closed or contracted state of the os uteri, I have not, as yet, met with a single instance of this condition producing amenorrhœa, although numerous cases on record attest its occasional occurrence; I will, therefore, finish this subject by adverting to another cause, which, as far as I know, has not hitherto been mentioned. The case, as regards the labour, of which the amenorrhœa was the result, was recorded by me

in my Midwifery Reports (*Med. Gaz.*, Aug. 26, 1827.). It was a severe case of perforation, arising from that species of deformed pelvis, which has been noticed by Professor Naegele, under the term of "*Pelvis oblique-ovata*." The delivery of the child, even after perforation, was both tedious and difficult. "In a day or two afterwards, she had an attack of uterine phlebitis, which was subdued by bleeding, calomel, poultices, and injections into the vagina. At the expiration of a fortnight, having had a fetid discharge for some days, bearing down pains came on, and she expelled a large fibrous mass, apparently a complete cast of the uterus. It formed a large bag about a quarter of an inch in thickness, and with an opening corresponding to the os uteri. She recovered favourably. The fibrinous cast of the uterus was by far the largest of the kind I had ever seen, being as large as a uterus at the fourth month of pregnancy. In such a case an interesting question arises, although with little chance of being solved, viz., are either, or both, Fallopian tubes pervious? The preparation is in the museum of St. Thomas's Hospital."

It did not strike me at the time, that the inner surface of the uterus would, probably, be so altered in structure, that menstruation could scarcely take place from it. On meeting the patient some months afterwards, I found that her health had become quite established; but that the catamenia had not as yet appeared. My suspicions were, therefore, now excited, and, in the course of a year afterwards, confirmed, when she informed me that no sign of menstruation had taken place, and that she suffered occasionally from severe congestion, and pain of head, which she controuled by laxatives and low diet. I saw her again after an interval of about four years: the condition was the same, except that the system seemed now to be gradually adapting itself to the suppression of the menses. I need scarcely add, that she has not again been pregnant.

DYSMENORRHOEA.

The subject of dysmenorrhœa is one of no ordinary extent and importance. Year after year seems to bring fresh varieties and modifications of the affection to our notice, and shows pretty distinctly that the field of inquiry and observation in this painful disorder is very far from being exhausted. The most comprehensive definition of dysmenorrhœa is that of *painful menstruation*, or menstruation attended with greater suffering than is natural to this function in a state of health. It is true that no two women menstruate exactly alike, not only as regards the quantity secreted, or the duration of the attacks, or that of intervals between them, but also as regards the amount of pain, of uterine excitement, and general, as well as local, disturbance of the health.

Whatever may be the cause of an attack (and they are very various, as well as numerous), I think I may say that a state of high uterine irritability is an essential concomitant, and on which the pain equally essentially depends.

The next feature, which, as far as my experience goes, I believe to be a constant attendant in more or less degree, is the disturbance of the general health, and derangement in function of some neighbouring organ, so that I might always extend the definition which I have just given, in the following manner:—"Painful menstruation with derangement of the uterus or some adjacent organ, and disturbance of the general health."

Dysmenorrhœa neither necessitates any peculiar length or shortness of the menstrual attacks, or of the intervals between them. The catamenial discharge may be sparing, dark, thick, discoloured, watery, or profuse, florid, with coagula, or exudation of fibrinous matter. It may be connected or not with inflammatory action of a part or the whole of the uterus, or of some neighbouring organ; and these different features of the complaint may in one case be connected with the cause of it, while in another they may appear more directly as its effects. In describing, therefore, the symptoms of the complaint, my readers must be prepared to find a degree of vagueness, owing to their variety, and to the numerous

modifications which they present, depending partly on the peculiar cause, and partly on the habit, &c. of the individual herself.

The pain, I need hardly say, is the striking feature of the complaint; this is never absent, however the other symptoms may vary in number or degree. Always severe, it is sometimes so intense, as almost to deprive the patient of self-controul and consciousness; making her writhe, and even roll about upon the bed or floor from the extremity of her agony, and sometimes attended with insensibility and convulsive action, like epilepsy. The seat of the pain varies both in different cases, as also in the same case at different periods of the attack; it is usually in the back and loins, spreading round the pelvis, or darting through it with intense severity; coming on in paroxysms, and closely resembling the pains of severe abortion. In some, it seems rather connected with the ovaries, shooting backward into the rectum, across the bladder, and down one or both thighs. In other cases, it seems to depend in a great measure on a highly irritable and inflamed condition of the os and cervix uteri; the peculiarly acute lancinating pains, and pain in the crest of the os ilii, forming the more prominent part of her sufferings. In other cases, it is attended with great hemorrhoidal congestion and pain about the rectum.

I have stated that the pain usually precedes the discharge, and rises to its acme just before the discharge appears. When this takes place, the congestion diminishes, the pain abates, and perhaps disappears before the discharge has ceased; this, on the whole, is the most common mode of its appearance. In many cases, however, the discharge appears first; and, having lasted for a short time, it stops suddenly, or diminishes considerably, and is then followed by an attack of pain, which continues until the discharge returns, and sometimes until the discharge, by its profuseness, has reduced the powers of the patient considerably. Under these circumstances, it will assume a menorrhagic character, and be accompanied with coagula.

In other cases, the discharge is scanty throughout. After much suffering, a quantity of fibrinous exudation is expelled in shreds, from time to time, and this is attended with relief; or a return of the pain indicates a fresh formation of exudation and fresh excitement of uterine efforts to expel it. The quantity varies exceedingly. Sometimes a few shreds are detected in it, and no more; in others, they go on to be expelled for many hours, amounting in the end to a considerable quantity; or one or two larger portions are discharged, forming even a cast of the cavity of the uterus. The quantity of fibrinous matter, thus thrown off, is usually in the inverse ratio to the pain; the more sparing the discharge of exudation, the more severe the pain; the more profuse, the greater the relief.

There is also another variety less frequently observed, viz., where the pain does not appear until the discharge is beginning to cease; probably from the circumstance of the irritable uterine system not having been sufficiently unloaded.

The duration of pain, especially in the more ordinary mode of its attack, viz., where it precedes the discharge, is very various. In some cases it may be only a few hours, whereas in others it may last some days.

In the last case of dysmenorrhœa, which I have reported in my work on uterine affections in connection with mal-assimilation, the pain commenced at the half-way period, and continued until the appearance of the catamenia. In connection with this point, I may also mention that, during the progress of treatment, the manner in which the pain diminishes varies. In some cases it abates greatly in severity with each successive menstrual period, although the patient is still aware of its presence during the same extent of time, only in much less degree, until it ceases in fact to be pain: whereas in others, and especially in severer forms of dysmenorrhœa, the improvement is chiefly observed in the shortened duration of its attacks, but without any diminution of its severity; so that, on visiting

a patient just after a period, she will express herself greatly relieved, for that the pain lasted only an hour, whereas on further enquiry we shall find that it was, for the time, as severe as ever.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "*Traité Médico-Philosophique sur l'Aliénation mentale*," "*Medicine Clinique*," "*Nosographie Philosophique*," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the *Cyclopædia of Practical Surgery*, &c.

WEIGHT AND SIZE OF THE BRAIN.

In order to determine with some degree of precision the influence of the size of the brain on the intellectual manifestations, we must take the size of the brain itself, and the different parts composing it, as a standard, instead of referring solely to the facial angle, the occipital angle, or the circumference, as Camper, Daubenton, Cuvier, and even Gall himself, have done. Modern observers have felt the necessity of an almost mathematical exactness in this matter, and have reduced the question of intellect to the measure of grammes and millimetres. In point of fact, in the healthy state, the weight and size of the brain, and of the nervous centres, always express, and in an absolute manner, the quantity of matter, and this at least must be taken as a determinate term of comparison. But this is only a very small part of the whole question; after the question of quantity, that of quality remains, and how are we to judge of the latter? How appreciate the functional activity of the brain, and the greater or lesser facility with which in different individuals, it perceives, retains, expresses, and combines images? How measure that undeniable property, by which an ordinary, but irritable, brain will perform its functions with an activity, a hundredfold greater than a large brain which is dull to impressions. The brain of a workman may weigh as much or more than that of a literary man, or a poet. But by what instrument or by what psychrometer, can we determine their difference of expression. We may attempt to explain it by partial development, predisposition, or education, all reasons which may be good in themselves, but their very uncertainty proves the question to be more extensive.

Muschenbrock, in his experiments to determine the specific gravity of the brain in the adult, found it, as compared with that of water, to be as 1.031 to 1.000, and, according to Semmering, this weight varies according to age, being lighter in old persons. According to Desmoulins, the density of the brain is not influenced by the state of corpulency, or of leanness, but it diminishes after the fortieth year, and is about one-twentieth less in aged people. Meckel imagined, from some observations, that in the insane, the brain had less weight than in the healthy; but this is an error. M. M. Leuret and Pitivié have proved the contrary.

The constitution of woman being generally in proportion below that of man, the brain also is generally smaller. Age has also a remarkable influence on the size of the brain in reference to the increase of other parts of the body. According to Meckel, the weight of the brain in the fœtus, at three months, is 1.9-10th grammes; at five months, 24 grammes; at nine months, 290 grammes; and, five months after birth, 642 grammes. According to Semmering, at two years, it is 803 grammes; and at six years, 1,087 grammes. From this we see how rapidly the brain grows in the early periods of life.

Meckel in comparing the relative weights of the brain, and the spinal marrow, at different periods of their growth, obtained the following results: in the fœtus, at three months, the brain, as compared with the spinal marrow, is as 1 to 18; at five months, as 1 to 63; at nine months, as 1 to

107; at five months after birth, as 1 to 112; and in the adult as 1 to 40. Thus it appears, the growth of the brain, so remarkable in the first periods of life, becomes slower at a later period, until at last the enormous disproportion of growth between the brain and spinal marrow disappears. It is between the sixth and seventh year, that the brain reaches the maximum of weight and size, relatively to the body. The brain is to the body, then, as 1 to 15; but in the adult this ratio is no longer the same, being no more than as 1 to 48. May not this extreme difference account for the intellectual precocity of certain children, who, as they advance in life, shew no more than the average mental power?—and does it not also indicate the cause of the restless activity, and extreme mobility, that characterize the infantile period?

Dr. Sims concludes, from 253 cases, in which he had taken the weight of brain in both sexes, that it continues to increase up to the twentieth year; from 20 to 30 it undergoes a slight diminution of weight; and that it again increases from 30, to between 40, and 50; after which time it diminishes gradually.

In the adult, the weight of the brain, strictly speaking, that is, of the brain separated from the cerebellum and the protuberance, by a section of the crura, averages, according to M. Parchappe, 1 kilog. 175 grs.; that of the cerebellum, of the bulb, and the protuberance 175 grs., and of the cerebellum alone 160 grs. Meckel estimates the average weight of the cerebro-spinal axis at 1 kilog. 468 grs.; that of the spinal marrow 30 grs.; of the medulla oblongata about 12 grs.; of the protuberance 4 grs.; of the cerebellum 152 grs.; and of the brain at 1 kilog. 101 grs. M. Parchappe thinks this estimate too small, the average weight, according to him, being, for the encephalon 1 kilog. 352 grs.; for the brain 1 kilog. 175 grs.; and for the cerebellum 160 grs.

Now that we have the average weight of the encephalon, let us see if we can establish, throughout the animal scale, a parallel progression between its size, and the intellectual development;—how far it may be a truth, or an exaggeration. The brain of a sparrow weighs 1 gr. 11 centigr.; of a thrush, 1 gr. 91 centigr.; of the goose, 7 gr. 65 centigr.; of the ferret, 8 gr. 71 centigr.; of the rabbit, 26 gr. 77 centigr.; of the cat, 28 gr. 27 centigr.; of the beaver, 43 gr. 97 centigr.; of the dog, 99 gr. 32 centigr.; of the pig, 122 gr. 38 centigr.; of the wolf, 135 gr. 76 centigr.; of the ass, 377 gr. 20 centigr.; of the ox, 734 gr.; of the horse, 856 gr. 60 centigr.; of the dolphin, 1 kilog. 773 gr.; of the elephant, 4 kilogs. 895 gr.; and of man, 1 kilog. 468 gr. From this estimate of Haller, the conclusion is authorized, that there is no necessary ratio between the size of the encephalon and the intellect, else it would follow, that man would rank after the elephant and dolphin, and the ass would be six times more intelligent than the dog or the beaver. There must, therefore, be something more than mere weight and size in the functional superiority of the brain. Many physiologists have supposed, that this superiority depended on the proportion between the mass of the brain, and the rest of the body. But if this comparison were to hold, the linnet and sparrow ought to have double the intellect of man, since the ratio between their brain and the rest of their body, is as 1 to 14 or 18, while, in man, it is as 1 to 32. Others have imagined, that the solution of the problem might be found in the comparative weights of the brain and cerebellum. Measured by this standard, man would be on the same level as the ox, the ratio of weight between these organs being, for both, as 1 to 9.

The proportion of the brain with the spinal marrow, measured, in their transverse diameters, according to Sæmmering, shews a superiority in the human brain over that of all animals. This proportion might very well have appeared to Cuvier to be in accordance with the perfection of the intellect, as it shews the pre-eminence of the hemispheres over the organs of the external senses; but, even in this particular, the dolphin would have an advantage over man, in the greater width of the medulla oblongata. Our comparison, therefore, must not rest on the width alone, but on all the diameters, and we are then led to the con-

clusion, with M. Serres, that, comparing all the dimensions of the different parts of the brain simultaneously, man is found to excel all animals in the size of the brain.

Sæmmering and Tiedeman had already shewn that the intellect was more active in proportion as the size of the brain was greater than that of the encephalic nerves. This idea had been propounded by Sæmmering as far back as 1778. This opinion was adopted by Meckel, who points out the parts in which the augmentation takes place. "Accordinging," says he, "as the intellectual faculties become more perfect in the animal series, and in the different individuals of the same species, the cerebral mass is observed to grow upwards, forwards, and on the sides, the hemispheres become proportionably larger than the lower parts of the encephalon, and the brain becomes larger, comparatively, than the cerebellum." Other physiologists develop this view still more. Desmoulins and Majendie have fully proved that in the series of species, and even in individuals of the same species, the degree and perfection of the intellectual faculties are in constant proportion to the number, depth, and extent of the convolutions of the brain.

This exact mode of appreciation assigns to man the first rank, and enables us to explain the functional and morbid differences that constitute the acts of the intelligence, and even the different forms of mental alienation, the deep traces of which are so often to be found in the convolutions, as shewn in their atrophy, their softening, their œdema, and their inflammation, acute or chronic.

Thus the quantity and weight of the brain are shewn to possess a marked influence on the intensity of the intellectual acts; and this intensity seems to be in proportion to the anterior, superior, and posterior development of the hemispheres, as compared with that of the nervous centres and the nerves. In a word, the intellect has an invariable ratio of perfection with the number, size, and depth of the convolutions of the brain. These data, far from invalidating the explanations of Gall, on the contrary tend to confirm them.

GENERAL VIEWS OF THE ALTERATIONS OF THE BRAIN.

Before the time of Morgagni and Haller, science possessed but very few observations, and these incomplete, on the alterations of the brain. The principal lesions recognised in mania and demency were hardness, dryness, partial softening, sanguineous congestion, erosions and tumours of the brain. In 1764, Meckel is struck, in his researches, with the augmentation of consistence of the substance of the brain, the thickening of the meninges and the dropsy of the pia mater and ventricles. His experiments to determine the specific gravity of the cerebral substance in the insane, led him to suppose that the density of the brain is diminished in insanity.

Arnold attributes the disorders of the intellect, to a modification in the density of the substance of the brain. Greding, the most profound observer of the alterations of the brain, and who has given the best general exposition of their characters, distributes his observations into five classes, depending on their manifestations; as fury, melancholy, imbecility, maniacal epilepsy, and imbecile epilepsy. A single glance at this classification shews at once the man who has lived amongst a large number of the insane. These researches, so often misquoted, M. Parchappe has reduced into the form of a table. 100 cases of furious mania, 26 of furious epilepsy, 16 of imbecile epilepsy, 24 of melancholy, and 30 of idiocy; in the whole 186 cases. Amongst the alterations found on the dead body, the most remarkable are dropsy of the arachnoid, thickening of this membrane, fulness of the vessels of the brain, softness, viscosity, dilatation of the ventricles, granulations of the arachnoid, concretions of the pineal gland, and accumulations of fluid in the third and fourth ventricle. Greding also found in 216 cases, that the bones of the skull were much thickened in 167, and very thin in 38; that in the majority, the conformation of the skull was natural, and that the most frequent and manifest alterations occurred in the investing membranes.

In 100 cases, observed by Chiarugi, at the Hospital of St. Bonifacio, in Florence, there were 34 of œdema of the pia mater, thickening of the membrane, and dropsy of the ventricle; 15 in which the consistence of the brain was augmented, 3 of softening, 36 in which it seemed natural, and 5 in which he could discover no lesion. Results so inconclusive, are by no means surprising, from a man like Chiarugi, who attributed these lesions to the perversion of the activity of the brain.

Sæmmering, in his "Treatise on the Structure of Man," speaking of the function of the brain, attributes mania to the inflammation of this organ, and thinks that the thickening of the bones of the skull may cause stupidity by compressing the brain. Haslam's observations are very remarkable as regards pathological results; he points out particularly, in the insane, opacity of the arachnoid, infiltration of the pia mater, softening and induration of the brain, the dotted bloody appearance of the white substance, hyperæmy of the cortical substance, suppuration of the cerebral tissue, and of the pia mater.

It is unnecessary to follow, step by step, the advances of pathology as regards the brain up to the last twenty years, during which new and positive researches were made at Charenton, and the Salpêtrière, by Calmeil, Foville, Penel-Grandchamp, Delaye, Bouchet, Georget and Cazauvielh. Gall, whose ideas have frequently so just a bearing, endeavours to prove that mental alienation has its exclusive seat in the surface of the brain; he believes the cause of idiocy and imbecility to be a defective and incomplete organization of the brain, and that inflammation at first acute, afterwards chronic, accompanies frequently the different kinds of mental alienation. In insanity, he admits that a functional lesion precedes the organic, and he thus explains how a mental affection, lasting but a short time, may leave no trace discoverable after death; while on the other hand, when the disorder of the intellect has lasted for some time, profound lesions are always found, such as ossification of the vessels, a remarkable diminution in the white or grey substance, and various deposits on the surface of the brain. He also admits insanity to be produced by organic predominance of certain parts of the brain, and by an excessive development of their activity. Gall dwells particularly on the coincidence of thickening of the skull with atrophy of the brain as principal characters of chronic insanity. Spurzheim develops this doctrine still further: he believes the proximate cause of insanity to be in the brain, and that the same pathological appearances are to be found in it as in other organs, such as congestion, inflammation, suppuration, dropsy, ossification, and defect of development, and he even adds that many alterations of colour and texture might be discovered in the brains of the insane, if the persons who make such dissections would only be more attentive.

Georget, in his second work, fully admits this, and says "that he finds in the two substances, in the insane, a number of shades of colour and consistence, which, till then, he had overlooked." He further adds his belief that the infiltration of the pia mater, and the accumulation of serum, are the true causes of the general paralysis observed in insanity.

The neeroseopic observations of several able contemporaries were luminously resumed by M. Foville, in the *Dictionnaire de Médecine Pratique*, in 1829. It is stated in this article, that in the most acute cases of insanity, the cortical substance is of a very deep red; its blood-vessels, which, in the healthy state, are scarcely visible, are so distended, that they present open mouths on division; slight sanguineous effusions of blood, no bigger than a pin's head, are also observable; the consistence of this substance is increased at the surface, while it is diminished at the centre; but there is no adhesion of the membranes, this being a condition characteristic of chronic insanity only. In chronic alterations of the grey substance, when the outside stratum is peeled off, the parts exposed have a red, soft, mamillary appearance, resembling granulations in a wound. A diminution of the size of the convolutions frequently coincides with this alteration; they are atrophied either at their summit, or base, so that the intervals between

seem to be enlarged. In chronic insanity, the grey substance may also be so much softened as to adhere to the fingers.

The alterations of the white substance bear on colour, density, and texture; it is also the seat of sanguineous injections. When cut into, it presents an appearance as if dotted with bloody points; when this injection takes place in the finer capillaries, the appearance of the divided white substance is of mottled red. It is, sometimes, observed to be of a refulgent whiteness; it is then free from vascular injection, and its consistence is augmented; so as, in some cases, to be almost as hard as cartilage. M. Foville also alludes to œdema of the brain, and the abundance of serum compressing it internally and externally, and of small cavities that are met with in its substance.

The frequency of alterations of the meninges, in persons labouring under mental alienation does not escape him. In acute cases, the arachnoid preserves its transparency; but the pia mater is injected. In very acute cases, this injection is most observable in the anfractuositities of the convolutions. This state is accompanied by high venous congestion. Chronic alterations of the membranes are marked by opacity, thickening of the arachnoid, the formation of granulations and false membranes on its surface, and serous effusion into the cellular tissue of the pia mater, and of the ventricles. The dura mater is, sometimes, the seat of fungus; but this affection is rare, and, probably, has no bearing on insanity.

Coinciding with malformation of the skull in idiots, the adhesion of the membranes to the brain is sometimes so close, that any attempt to remove them detaches the cortical substance. In some cases, the atrophy of a cerebral lobe corresponds with that of the limb of the opposite side. Induration, however, is the most common condition of the brain in idiots.

The diseases of the meninges, according to M. Foville, have but a secondary influence on the disorders of the intellect. The different degrees of mental alienation correspond chiefly with the lesions of the substance of the brain; those of the grey substance, which are the most constant of all, corresponding to intellectual derangements, while those of the white substance produce lesions of the movements. In the views of this able physiologist, the grey substance is the essential part of the brain.

These leading ideas are further developed by Bouchet and Cazauvielh, who consider epilepsy to depend on a chronic inflammation of the white substance, as also that mental alienation depends on an inflammation, either acute or chronic, of the superficial substance. M. Calmeil, in a work specially treating of the *paralysis of the insane*, acknowledges that almost all the disorders observed in this class of patients are traceable to the existence of a chronic inflammation of the brain, whose chief ravages occurred in the surface of the convolutions, and in the membranes.

Mr. Davidson, who made autopsies in more than two hundred subjects, who had been insane, invariably found evident traces of lesion of the brain, and of its membranes, of the cortical substance and pia-mater more especially. He also found softening in various parts of the encephalon. Mr. Bertolini, of the Hospital for Insane at Turin, in his cadaveric researches on upwards of eighty subjects, found all the lesions already described and which we forbear repeating. He thus generalizes the result of his observations. In cases of furious mania, traces of inflammation, acute or chronic, were found in the brain. In melancholia, these traces were more faint; but they were deep, and very evident in demency and paralysis.

In our work, published about the same time, on *The Physiology of the Insane*, we dwelt on the relation between the lesions of the brain, and the indications and progress of insanity. We there established the following division: acute cerebritis, or furious mania; chronic cerebritis, (demency and imbecility); partial cerebritis (monomania, suicide, mania without delirium, melancholy); and sympathetic cerebritis in man (hypochondria), in woman (hysteria).

We consider acute, partial, cerebritis to originate in acute, partial, irritation of the brain, and it is characterized by the red colour of the cortical substance, which from being more than usually firm at first, becomes afterwards softened, as well as by a violet coloured injection of the whole substance; this morbid condition in very acute cases passes quickly into the state of softening. The augmentation of consistence, the induration of the white substance, and the discoloration of the grey substance, appertain to chronic cerebritis. These are general views of which the details will be developed in the sequel.

M. Ferrus proclaims in his clinical lectures at Bicetre with a confidence founded on his long experience, that the alterations of the brain, and nervous system, present as great a degree of certainty as the lesions of any other organs. In mania, monomania, and hallucinations, he finds turgescence of the brain, the reddish coloration of both substances, and a remarkable augmentation of consistence; in melancholy and chronic mania, a kind of shrinking, discoloration, softness, and œdema of the brain; in simple, or paralytic demency, adhesion of the pia mater to the surface of the convolutions, and opacity of the arachnoid; the grey substance is softened, and adheres in flakes to the membrane when an effort is made to detach it; in others the convolutions are indurated and atrophied.

According to M. Guislain, the cerebro-meningeal inflammation of the insane is more to be attributed to a capillary engorgement than to any decidedly active process; and this engorgement passes readily into organic derangement in a tissue so soft as the brain. He found the corpora olivaria in a state of induration in two-thirds of the epileptic, and atrophy of the brain in chronic mania, and the demency of old age. He supposes in insanity, the order of the phenomena to be as follows:—nervous excitement, congestion, irritation of the tissues, chronic secondary inflammation, disorganization, albuminous exudation, opacity of the membranes, and lastly, adhesion of the convolutions.

M. Parchappe obtained similar results from 130 *post-mortem* examinations made on insane subjects, who laboured under the disease in almost every variety and condition. The alterations he describes, though various, are precise, and he advises his fellow labourers in the field, to endeavour, amongst the diseases of the brain, to distinguish those which are characterized at the same time by constancy of the symptoms coinciding with constancy of alterations. This, indeed, is the chief difficulty we have to overcome, more especially in reference to all the lesions of the intellect, motility and sensibility. We shall see hereafter to what extent we think it possible to cope with this difficulty.

We may here, however, lay down an undeniable position, that the labours of so many observers amply suffice to demonstrate that for the brain as well as for other organs, we now possess a body of pathological facts; the results of which may be co-ordinated into a regular system of doctrine; the facts, indeed, abound to such a degree that their very multiplicity causes some confusion. We shall endeavour to establish the connection that exists between the organic alterations, and the character and progress of the symptoms, when we come to treat of each of the diseases of the brain in particular.

ANTIPERIODIC OINTMENT.—This ointment is recommended in the *Journal de Chimie Medicale*, in cases of periodic fevers, when the fits of children are so frequent, that they will not allow of the preparations of quinine being administered internally, and when the constitution is not disposed to absorption. It is also employed in friction on the vertebral region for three days. It is composed of lard, ninety-five grains; sulphate of quinine, fifteen grains; sesquioxide of iron; twelve grains; pure opium, fifteen grains.

APOTHECARIES' HALL, Oct. 10, 1844.—William Pleasance Beloe, William Leapingwell, Henry James Stokes, William Cholmeley, Samuel James Remnant.

CLINICAL LECTURE ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDINER GUTHRIE, Esq., Jun.

Cataract, the *Glaukoma* of Hippocrates, *hupokuma kataracta* of Galen, *Suffusio* of the Romans, *Gutta Opaca* of the Arabs, was supposed by Galen and the ancient Greeks and Romans, to be a disease of the crystalline lens, which they conceived, also, to be the seat of vision. They soon found the impossibility of maintaining these two opinions, for they were fully aware that during the rude operations then performed for the removal of a cataract, something was removed from the axis of vision and depressed below the pupil; this they supposed to be an adventitious membrane, formed by a deposition from the aqueous humor which occupied the space behind the pupil, and formed, as it were, a curtain before the lens.

Kepler, in the year 1604, proved by experiments that the crystalline lens being diaphanous, was incapable of retaining or reflecting light, and could only be considered as a double convex lens, peculiarly adapted for conveying the rays of light to a focus or point at the bottom of the eye. The real nature and seat of cataract was only known to a few, although it was privately noticed, and even publicly announced, as early as 1651. In 1707, Antoine Maitre Jan stated the fact rather as a discovery of his own, than as one he was about to confirm by his own observations. The works of Brissiau (1709), Heister, St. Yves, Petit, and Daviel, in succession, completely established what Maitre Jan had advanced, and the different names which cataracts have since received, followed as soon as it was known what parts were concerned in the disease.

Cataracts were at first divided into true and false—true when the disease admitted of removal by depression—the only operation then known;—false, when the complaint could not be perfectly relieved by this operation; and they were said to be *doubtful*, when the appearances partook of the nature of both. They were again named according to the particular qualities or appearances they were supposed to possess. Thence we have the hard or horny, the black, the stony, the amber, the grey, the cheesy, the flocculent, the fleecy, the milky, among the true cataracts; and glaucoma, protuberant cataract, tremulous or shaking cataract, and the abscess of the crystalline among the false cataracts; dryness of the crystalline, and attachment to its capsule, increase in size of the crystalline, and of its capsule, and a tendency to abscess, or ulceration, among the doubtful cataracts.

In addition to these there are cataracts from forcible displacement of the crystalline from external injury, spotted cataracts, congenital cataracts, membranous cataracts, from the formation of a new membrane behind the pupil; filamentous cataract; barred cataract; the starry or membranous cataract of the posterior capsule of St. Yves, or of the anterior capsule; the interstitial cataract, or of the humors of Morgagni, and the secondary cataract, or opacity of the capsule after a previous operation; the partial, or incomplete, when only a portion of the membrane is concerned; lenticular when the lens alone was supposed to be affected, mixed when the lens and capsule were diseased with diversity of substance; complicated when other parts were implicated; adherent where the cataract adhered to the iris; hereditary cataracts, where transmitted or common in families; elastic cataract, dependent on thickness of the capsule and soundness of the vitreous humor; and the encysted or hydatid cataracts of a spherical form, in which a fluid is contained in an entire and opaque capsule, the lens being dissolved or absorbed; capsulo-lenticular cataracts, when the capsule is opaque as well as the lens marbled or variegated, window or latticed, stellated, central and dotted according as they resemble the things which are understood by these different designations; conical or pyramidal when the protrusion of the cataract into the pupil

affected that form; siliquose or husky when it had a resemblance to a dried pea-shell; purulent or putrid, when accompanied by a cyst of purulent matter; and lastly, the arborescent, dendritic or choroid cataract, when a portion of pigmentum nigrum adheres to the capsule of the lens, which is not immediately perceived on a careless examination.

Cataracts have been termed ripe or unripe, with reference to their consistence, and the proper period for operation; but these terms are illusory. A cataract was said to be ripe, when it had attained a degree of firmness sufficient to admit of its being depressed, or extracted as a solid body. It was supposed to be in a state of maturity when of a grey, or pearly colour, when the patient was only able to distinguish between light and darkness, or to see the shade of an object when placed between his eye and the light. When this could not be done, the cataract was presumed to have become old, adherent, and complicated. A cataract was supposed to be unripe when in a recent, or incipient, or soft state; when the patient could still see objects in a moderate light, and when it was presumed it was not sufficiently firm to admit of depression; in which case it was generally found of a whiter colour. The opinion founded on the hardness, or softness, of a cataract, as dependent on its duration or colour, is frequently contradicted by experience; for cataracts of fifteen or twenty years' duration, and of a pearly colour, have been sometimes, although rarely, extracted, quite soft; whilst others of a year's standing, and of a light colour, have been occasionally found hard. Many persons are met with suffering with soft cataracts, who are almost entirely blind; whilst others can still distinguish objects, and even colours, although suffering from hard cataracts. This difference is most frequently seen after the pupil has been dilated by atropine or belladonna.

An important distinction ought always to be made between those cataracts, which have arisen constitutionally, and those which have occurred from local, or accidental causes, and especially with reference to the comfort of the sufferer, the local or accidental cataract being often confined under proper management to the eye which has been injured, either by external violence, or active inflammation, whereas, the constitutional form of cataract, is a disease which usually sooner, or later, attacks both eyes.

We are unaware of its commencement, until our attention is drawn to it by the symptoms attendant on its progress. It affects persons of all ages, but prevails among elderly and old people, males rather than females, and in them is almost always hard. It is found in the infant before birth, in which case it is usually soft, or capsular, but never hard. It occurs alike in persons of all temperaments, and has not been found to prevail in those of any known disposition, constitution, or idiosyncrasy. Scrofula and syphilis have each been considered as assistants in its production, but there is not sufficient foundation for this belief, unless the organ has been attacked locally. It has never been shewn that persons have been more liable to cataract, who have suffered severely from the constitutional symptoms of either syphilis or scrofula. On the contrary, the general and equal appearance of cataracts in females of all ranks of society, and the little comparative difference between the sexes, even including the direct syphilitic affection, must be satisfactory to every reasonable person that syphilis has no share in the production of cataract as a constitutional disease, and the most careful investigations have not been able to discover that persons who have suffered constitutionally from scrofula, or who were still supposed to be liable to or had a predisposition for it, were more subject to cataract, than those who were considered free from it.

Rheumatism and gout frequently attack the eye, and cause blindness by rendering the lens opaque, but this is a local affection, dependant on a constitutional cause, and repeated careful observations have proved that opacities of the lens are not more frequent in persons who have suffered from gout and rheumatism than

in those who have been exempt from those diseases. When gouty rheumatic inflammations attack the eye, and are not vigorously and properly treated, the complaint frequently terminates in opacity of the lens, which is not usually a cataract, but the more complicated disease called glaucoma, which is not relievable by operation.

Cataract in some people appears to be hereditary, although the transmission from parent to child seems by no means to be so direct, as in consumption, gout, or scrofula; for few instances are recorded of its prevailing in families to such an extent as to render it remarkable. It may originate in one branch of a family, and attack, in succession, several generations, without affecting any of the collateral branches. It may, then, cease without any assignable reason. Sometimes it attacks only the males; whilst the females are exempt, or *vice versa*. I have seen several children of the same family affected by congenital cataracts; and Janin, Morgagni, Petit, de Lyon, Richter, &c., all narrate similar facts.

The influence of the constitution on the formation of idiopathic, or constitutional, cataract, is beyond our comprehension. We can only acknowledge the fact, and admit, that few people who suffer from the complaint in one eye, escape, after a time, the disease in the other. It sometimes commences in both eyes at the same time; although, in general, one eye is first affected, the other following the same course, after a shorter or a longer interval; few people, living to an extreme old age, having had a cataract in one eye, without its occurrence in the other.

The reverse takes place in cataracts which are caused by external violence. In these local or accidental cataracts, there is no general predisposition; indeed, there may be so little injury committed, that the organ would seem to be almost unconscious of it. I have, at this time, under my care, a gentleman whose horse, in hunting eight months ago, fell with him in a thick hedge; he was conscious that a bush had struck his head, but not that his eye had been injured. A thorn had, however, penetrated the cornea and punctured the capsule of the lens, giving rise to opacity of that part, which will require to be removed by operation. The inflammation, which in this case followed the injury, was so slight, that the gentleman himself, and his family, could hardly believe that such an accident had really occurred.

If much inflammation should follow the injury, there may be great sympathy between the eyes, but this, in many cases, only amounts to an increase of sensibility, although it may extend to direct inflammation, which has been even known to alternate from one eye to the other in succession. This is a sympathy resulting from and terminating in inflammation, and may, if long continued, give rise to cataract, or any other serious evil. These results are, however, the consequences of an intensity of inflammation, which is always capable of producing them; but it has been rarely observed, that a person having received an injury of the lens of one eye, should have the sound one immediately, or even shortly afterwards, affected by opacity of the lens alone, without accompanying signs of inflammation. I am aware it is not an uncommon circumstance for the second to be gradually lost, after the first has been destroyed by long continued inflammation succeeding to external violence, but there is a sympathy of inflammation attacking the proper coats of the eye, which ought always to be expected, and which may frequently be prevented by proper treatment, and generally cured, even when it does take place.

Observation has confirmed, in regard to local cataracts, what reason had presumed. Persons have been found to suffer with cataract in one eye for years, without the other being affected, and it may be inferred that the cause was accidental, when the complaint has occurred in one eye in young persons, without affecting the other.

The four operations for cataract, performed by Mr. Guthrie by extraction, last Wednesday, have

succeeded remarkably well. There has been but little inflammation; the eyes are full; the incisions have united by the first intention; the pupils are round and clear, and the patients can discern objects distinctly. They are sitting up; have a good diet; the bandages are loosely applied over the eyes in general, and are occasionally removed to allow them to be washed and opened for a short time; a precaution which should always be observed with poor people, who are apt to strain and exert their eyes too much on finding they have recovered their sight, and which sometimes causes the edges of the incision to start, if not very firmly united. J. F.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We have now to consider what may be called the *structural diseases of the intestinal canal*. We have already glanced at many of the modes in which structural diseases take place from inflammatory action, both of the acute and chronic character; and we have had occasion to observe that many functional diseases arise in consequence of previously existing structural derangement, more particularly those diseases of structure that interfere with, and obstruct, the passage of the canal. These lesions naturally interfere with the alimentary function, more so, perhaps, than structural diseases in other organs, unless that disease is very considerable. We have already noticed ulceration as a variety of structural disease, and also thickening of the coats of the intestinal canal. This thickening constitutes a state of stricture, which may exist in the stomach, but more particularly in the intestines. Those persons who have laboured under chronic or sub-acute gastritis, frequently occurring, are apt to have their stomachs ultimately thickened; and gastritic dyspepsia, unrestrained by treatment, and re-excited again and again by stimulating food, is apt to lead to this result. In the stomachs of drunkards, there is a thickening of the submucous coats, and the muciparous glands are very much enlarged, and hypertrophied. When this thickening affects the central portions of the stomach, it sometimes produces no very remarkable symptoms. The most common effect to which this thickening gives rise at the pyloric end, is a difficulty in the passage of the food from the stomach into the duodenum, with painful feelings, and indigestion. An individual, under these circumstances, will offer all the symptoms of scirrhus, and stricture of a malignant character, and this is not to be distinguished so much by the nature of the symptoms themselves, as by the progress and the change they exhibit. The obstruction to the passage of the food causes very painful feelings three or four hours after. If, on the other hand, the cardiac extremity of the stomach is affected (and this is a much more rare case), the oesophagus is not unfrequently implicated, and there is more or less difficulty in deglutition. There is likewise apt to be wind in the stomach, causing flatulence; and these accumulations do not readily escape, whether there be thickening or not. This occurs also in malignant stricture of the cardiac orifice. Stricture may also affect the intestines as I shall mention afterwards.

I now advert to the general characters of *scirrhus of the stomach*. Scirrhus usually appears to commence in the submucous texture; but it subsequently invades the other textures. The symptoms of scirrhus are very uncertain, and depend very much on the part of the stomach which is affected. There is often pain and uneasiness complained of, and referred to some particular part; and with this, there may be symptoms of obstruction to the function of the stomach. When the disease is at the pyloric end, there is uneasiness, pain, nausea, and vomiting, at a certain period after eating. When digestion is com-

pleted, and the food has to be passed, then the resistance is felt. Again, with regard to the other, or cardiac orifice, there are symptoms of difficult deglutition, and there seems to be great constriction referred to the œsophagus and the whole throat, with a tendency to expel wind, without the ability to do so. Gastrodynia and pyrosis are present when the affection is at the cardiac end, but are less common than when it is at the pyloric end. Now, these symptoms may arise from a stricture of a non-malignant character. They may arise from contraction of the canal, and the consequent obstruction to the passage of the food; therefore, to judge of the presence of scirrhus, we must take other circumstances into account at the same time. The age of the patient must be considered. In most cases, it affects persons about forty or fifty years of age. I have occasionally seen individuals, as young as twenty or twenty-five, affected with scirrhus. In scirrhus affections of the intestinal canal, there is a remarkable complexion generally observed: a peculiar sallow hue of the skin, seeming to arise from a kind of anæmia, or deficiency of blood in the whole system, together with a kind of cachectic appearance; and after the disease has existed for some length of time, this cancerous hue becomes very marked. Then, again, we judge by the permanency of the symptoms. They are much more permanent in scirrhus than in common stricture; for, although common stricture may be a permanent affection, it is liable to be aggravated by temporary causes, such as indigestion, and various articles of improper food. But in the case of cancer or scirrhus, where the disease is once established, there is a tendency gradually to increase—a progressive tendency, which would confirm the suspicion that the affection is cancerous. There is, likewise, more marked emaciation observed in scirrhus affections, than in any other disease, and this becomes a chief means of distinction. There will be found, in connection with scirrhus, in by far the greater number of instances, an appearance of swelling in the region of the stomach, on careful examination. The symptoms of obstruction do not go on long, without the cancerous mass accumulating to such an extent, as to form a perceptible tumour in the region of the stomach. This may be felt in several situations; the most common being between the epigastrium and the hypochondrium. It is when it is seated at the pyloric end, that it produces the symptoms I have already alluded to: pain, distress, and vomiting, some time after taking food. On careful examination, when the patient's stomach is free from food, there will be found to be a resisting point, generally between the umbilicus and the right hypochondriac region. Sometimes, the tumour is immediately over the descending aorta, where it occupies the lesser curvature, at the posterior part of the stomach, and it has, in some such cases, been mistaken for aneurism. A pulsation may also be felt here, which is communicated upwards and outwards. In aneurismal tumours, the pulsation exists on all sides, whereas here it only extends upwards, or in a direction upwards and outwards. Then, as I said before, this swelling, in scirrhus, will be attended by various symptoms of chronic dyspepsia, and of obstruction to the passage of the food, three or four hours after eating; and this, in conjunction with constitutional symptoms. When at the cardiac orifice, there is, then, uneasiness immediately after taking food, cardialgia, pyrosis or waterbrash, and constriction of the œsophagus. There are also symptoms present, similar to those we find in the more aggravated forms of dyspepsia: frequent vomiting of various matters, sometimes merely food, with a little mucus and bile mixed with it; but, after a while, a black matter is thrown up, something like coffee grounds. This appears to be blood in an altered state; but sometimes hæmoptysis occurs, and blood itself is vomited. This constitutes one of the most distressing symptoms, and, if very severe, it occasions the death of the patient by the inanition it produces. The vomiting is exhausting, both from the quantity of matter brought up, and from the efforts made. Do not, however, suppose that this is always present in cancer of the stomach;

cancer of the stomach sometimes exists without any vomiting, or other distressing symptoms, being produced. I have myself had two or three cases of this kind. Vomiting, distress, and so forth, are connected with diseases affecting the orifices, involving the pyloric or the cardiac openings. Remember, too, that the symptoms of scirrhus of the stomach may resemble those of either of the varieties of indigestion I have mentioned. Such, indeed, is the form in which I have seen it developed in the highest degree. It is, here, connected with atonic dyspepsia, a want of power of the organs generally. The tumour, or swelling, when considerable, likewise produces other effects. When at the pyloric end, it very frequently presses on the adjoining parts, as the gall ducts, and hence may produce jaundice; it embraces in its cancerous claws the curvature of the colon, causing stricture of the intestine at this part, and, consequently, constipation. It has been known to involve the veins of the abdomen, and to give rise to dropsy. The causes of this disease are involved in some obscurity; there is, however, little doubt but that the various exciting causes of indigestion will, in persons hereditarily predisposed, or otherwise in a way we cannot define, develop cancer and scirrhus of the stomach. Habitual intemperance, mental depression, and particular trades—such as that of shoe-makers, from the posture they sit in—such are the exciting causes of the gastritic form of dyspepsia, a low kind of gastritis; and it is in such persons, principally, that the cancerous diathesis seems to be developed. There is but little doubt, that inflammation, long continued, or frequently repeated, will develop scirrhus disease in persons of a bad constitution.

The treatment of structural disease of the stomach will be very similar to that adopted in the different varieties of dyspepsia, modified according as one or other of the above-mentioned symptoms become developed. One reason, why I dwell more fully on the treatment of functional diseases, is, that these latter are, always, more or less predominant in connection with structural disease. They are not to be distinguished one from the other, generally speaking; the treatment, applicable to scirrhus and structural diseases, is that available in gastritic dyspepsia, or chronic gastritis. When there are symptoms of obstruction to the passage of the food, it is at once suggested to us, that lighter aliment ought to be taken; the quantity used at a time should be small, and not in too compact or solid a state. It should be liquid or gelatinous: jellies and broth are useful. It is also necessary to aid the digestive process by nutritive injections; as the stomach cannot contain enough food to nourish the body, it is found useful to inject broths and gruel, in sufficient quantities, into the rectum daily. When the pain is severe, of an inflammatory character, and is accompanied by great tenderness soon after eating, local depletion and blisters may relieve it; and when of a more permanent or specific character, then narcotics are necessary. The narcotics that answer best are: conium, henbane, aconite, stramonium, and belladonna. Opiates should be our last resource; for, although more powerful than any others, they derange the health more, and constipate the bowels. The symptoms, too, are sometimes relieved by such remedies as I have stated to be useful in chronic dyspepsia: such as, nitrate of bismuth, and nitrate of silver, in small doses. The vomiting, as well as the pains, may be relieved by a little hydrocyanic acid; salines and alkalies are sometimes useful. It is necessary, in these cases, as in dyspepsia, to get the bowels regular; and, therefore, we should use aperients, and even mercury in its mildest forms, to unload the liver.

Organic and structural diseases of the intestines come under the same remarks as the corresponding diseases of the stomach, whether non-malignant or malignant. The non-malignant may arise from the different causes I have mentioned: a thickening of the submucous coat, which may increase to such an amount, as almost to obliterate the canal. When obstruction takes place, then the mischief and disturbance begin. This thickening or deposit has a tendency to contract. The stricture does not take place all at once: the patient may live for years, the stricture meanwhile gra-

dually accumulating, so as to reach its greatest degree: the tissues gradually contract, and thus diminish the canal: the patient, by degrees, finds the necessity of taking food of particular kinds, so as to keep the bowels in a relaxed state, and the mode of life is adapted to this remarkable change of structure. It is just the same, in structural disease of the heart. Structural disease may, likewise, consist in adhesions from false membranes, deposited on the surface of the peritonæum, and hernia and intussusception may be thus formed. The inflammations, whether of the chronic or acute character, that originate all these changes of structure, very commonly commence in the colon, the rectum, or the ileum. It is necessary to be very guarded against attacks of enteritis, to subdue the pains, and keep the bowels in a free state for some time afterwards; because the causes of obstruction and stricture may, at any time, be developed from obstinate constipation, and its consequences—colic and inflammation. Remember what I said with regard to colic. When feculent accumulation takes place above the stricture, it is difficult to get rid of it; though, so long as the feces pass this point, and the peristaltic action is complete, they may be rejected: but, should accumulation take place, then there is obstinate obstruction and colic, ileus and inflammation, terminating in perforation, exhaustion and gangrene. Ulcers are frequently observed in the neighbourhood of the strictured parts. There is a tendency of the ulcers to form fresh passages by perforation, and sometimes fatal consequences have ensued from this cause. Fistulous abscesses have communicated with the external parts, and an artificial anus is thus produced. Sometimes, the matter does not empty itself into the peritonæum, but it gets between the muscles of the abdomen, or under the integuments, forming intermuscular abscesses, extending over a large surface. Now, malignant disease, or scirrhus, of the intestines, is, generally, gradual and progressive; when once established, it grows independently of the application of exciting causes, and, consequently, the symptoms gradually increase, and become more aggravated. Tumours may often be found in various parts in connection with this disease. They are, however, found in other states, in the region of the intestines; and we often meet with large tumours in the right iliac region, as also in the left, which are not removed when the bowels are put into a quiet and natural state; the constipation is removed, but the tumour still remains, and is often the seat of great uneasiness; and this appears to depend on a considerable thickening, not only of the intestine itself, but also of the adjoining parts. In the case of scirrhus, the tumour is of a more definite character, and harder, and is felt more distinctly. In scirrhus of the rectum, the evacuation of the feces is rendered more difficult. The treatment of stricture of the intestines is suggested, in some measure, by that of the stomach. It is of importance not to administer too much food at one time; the diet should be restricted to small quantities, frequently repeated, chiefly of milk, containing mild farinaceous food, and a small quantity of animal matter, neither much in bulk, nor too stimulating in quality. It is of the greatest consequence to keep the bowels free, and to maintain the feculent matter, throughout the intestines, in a slightly liquid state. The difficulty is to keep the stools in a proper state, and to give medicines that do not irritate much. The medicines which answer best, are: castor oil, sulphur, sulphate of potash, and the milder forms of pills: such as, rhubarb, with a small quantity of gamboge and colocynth, diluted with soap, and combined with a little conium or henbane, and a small quantity of blue pill now and then added. It is often necessary to aid the operation of all these, by injections. These medicines should be taken habitually: it is not enough to take them occasionally, but they should be daily administered. Some kinds of food are found greatly to assist the bowels. Scotch porridge, taken at night, will have this effect; and barley gruel, taken freely as an article of diet, instead of weakening, will be found to strengthen the stomach. Confection of senna is also a very good medicine in these cases. In stricture, or obstructions from thickening, which

are not scirrhus, great relief is often obtained from repeated doses of mild mercurials, which, if they do not remove the obstruction, certainly seem to check its progress. When a person has had a bad attack of constipation, the bowels are very apt to be out of order for some time afterwards; obstructions are apt to occur from time to time. The patient, here, requires the gentle influence of mercury, repeated at each recurrence of the attack. In the case of scirrhus, the advantage from the use of mercury is not so great, and it is necessary to use narcotics.

I will, now, briefly refer to *intestinal worms*—parasitical animals formed in the intestines. These are of three kinds, which are especially worthy of notice. The *round worm*, the *thread worm*, and the *tape worm*. The round worm, the *ascaris lumbricoides*, or *lumbricus teres*, is found in various parts, chiefly of the upper portion, of the canal. It has been found, also, in the gall ducts, and has been known to make its way into the substance of the liver. This form of worm varies from an inch and a half to twelve inches in length; sometimes, it is only solitary,—but, in some instances, a great number have been found together. In one case, it is said that five hundred were vomited in a fortnight. Dr. Hooper mentions a case, in which two hundred were passed, upwards and downwards, in the course of a week. They appear to feed on the mucus of the intestines, and to be produced by a diseased state of the bowels. Colicky pains, swelling and hardness of the abdomen, slimy stools, the appetite very often in excess or variable, foetid breath, loaded tongue, bowels very irregular, irritating discharge from the nose with a great tendency to pick it, starting in the sleep, with convulsions, pallidity of the face, dark circle round the eyes, dilatation of the pupils, loss of flesh, and all sorts of convulsive affections:—such are the signs which have been associated with worms. But some of them exist without worms, and some arise merely from intestinal derangement, particularly in young subjects; and, again, worms may exist without any of the foregoing symptoms. However, I think, we are justified in supposing that they are concerned in producing some of these symptoms, inasmuch as the removal of the worms is followed frequently by the cessation of these symptoms; so, likewise, it appears that the presence of worms in the intestines aggravates other diseases of every description. I remember the case of a child who had a severe form of whooping-cough, so severe, as to threaten some affection of the head;—in fact, the child had convulsive fits. I found that the child passed some round worms, and then the whooping ceased. The worms, no doubt, proved the source of reflex irritation, increasing the excitability of the spinal marrow, in a direction remote from the source of affection.

The next variety is, the *ascaris vermicularis*, or thread worm, as it is commonly called. It varies in size, its length being usually about half-an-inch. The rectum is the habitat of this animal, where it exists in myriads, and passes out in numbers into the bed upon which the patient lies. They are exceedingly troublesome and irritating, particularly at night. The patient, when he becomes warm in bed, feels *tenesmus*, and a desire to go to stool, and a slimy mucus is evacuated. Sometimes, other symptoms of irritation take place, and the urinary and sexual organs share the irritation of the rectum, and, with a frequent desire to make water, there are troublesome erections, and so forth. Sometimes, however, curiously enough, *ascarides* will exist in persons of very good health; and we are not sure of their presence, until we see them ejected from the body. This is the second variety of worms.—The *tania* I must mention to-morrow.

EXCISION OF THE ELBOW-JOINT.—Two cases in which this operation was performed with success, are recorded by Mr. Syme in the *London and Edinburgh Medical Journal*. In both cases the patients were dismissed cured within a few weeks after the operation, and in possession of useful limbs.

ADDITIONAL NOTE TO THE MEMOIR ON "POISONING BY COPPER."

By MM. DANGER and FLANDIN.

(For the Medical Times.)

In the series of our researches on metallic poisons, we were led to doubt that arsenic, copper, and lead, existed in the normal state of the human body. We mentioned, that we had come to this negative conclusion, not only from direct chemical analysis, but also from physiological experiments; and, therefore, that it seemed logical to infer (without, however, drawing an absolute inference,—such being impossible,) that the existence of a poison in the human body is incompatible with health.

Our readers (v. *Medical Times*, vol. ix, pp. 188 and 214,) will doubtless remember, that the experiments, we performed, were the following:—We mixed, for several months, in the food of dogs, a certain quantity of arsenious acid, and acetate or sulphate of copper, the doses being increased gradually, so as to enable them (by what physiology calls habit, but which chemistry will, perhaps, at some future period, explain more satisfactorily,) to take, without being in the least inconvenienced, large quantities of either of these poisons; thus, after seven months, we gave to a middling-sized dog a scruple of arsenious acid in his food. When these substances had been administered long enough to authorize the conclusion, that they had penetrated into the organism, and that the various parts were, in a measure, saturated with them, the animals were killed, and the poison sought for in the different organs, especially the muscles and bones. The result was negative; and yet they had taken, in their food, from ʒj. to ʒiiss. of arsenic or copper.

In July, 1843, at the request of several members of the committee, named by the Academy of Sciences, Paris, to examine our memoirs, we recommenced our experiments, relative to the effects of food, mixed with copper, and have continued them up to the present day (Oct. 1st, 1844), that is to say, for fourteen months. During this lapse of time, a middling-sized dog, which had previously exhibited the symptoms of poisoning, from the sulphate of copper, when introduced by the subcutaneous method, but had since become quite well, took about ʒij. of the same salt, dissolved in water before being mixed with its food, so as to render its absorption more prompt. In this case, the dose could never be raised, in the twenty-four hours, above grs. iij. or grs. iv.; a stronger one, tried several times, produced vomiting and anorexia. It is necessary to remark that, although the dose may vary, according to the animal, and according to the nature of the poison, yet there is a point which we can never exceed, without giving rise, instantaneously, to fatal results. During the whole time the experiment lasted, the dog rejected the copper by the stools only; as to the urine, our tests did not indicate any trace of the poison in it.

Having ceased giving the copper for four days, in order to permit that contained in the intestines to be evacuated, the dog was killed, and the autopsy performed. The mucous membrane of the intestinal canal was red, and highly injected, throughout its whole extent; in some places, it appeared softened, and converted into a pulpy substance, but no where did it offer any solution of continuity, or ulceration; no traces of hyperæmia existed in the œsophagus; the other organs were sound.

The different parts were next submitted to chemical analysis, according to the method described in our memoir, on "Poisoning by Copper," and the results were:—1° a small quantity of the poison was found in the liver;—2° none at all in the following organs: heart, lungs, brain, kidneys (nor the urine), muscles, or bones (one pound of each of the two last-named tissues was analysed). Nay, more; at the request of M. Chevallier, we gave him a pound of the bones and some of the flesh of the animal, and he, as well as ourselves, was unable to discover any copper in them. Our analyses were

performed in the presence of M. Pelouze, M.A.S., a member of the committee named to examine our memoirs.

A remark may here be made.—In our former researches, no copper or arsenic could be found in the liver, and, in the present case, that organ contained a small quantity. Ought it to be concluded, from this fact, that, when we stated the existence of a poison in the human frame to be incompatible with health, we drew too absolute a conclusion? We do not think so; nor do we apprehend, that such will be the opinion of impartial observers, however facts may be distorted by those who are determined to combat our theory. For, as we stated, no positive principles can be laid down in physiology; general ideas can alone be emitted, and now and then, perhaps, a rule be established, from which nature is found to swerve but as an exception. This is the only argument we shall bring forward, except in adding that, probably, the animal, being saturated with copper, was not precisely in its normal condition. Our last experiment, exactly similar to the preceding ones, proves that, under circumstances the most favourable for the absorption and assimilation of poisons, the different organs of the living body are not necessarily, and equally, penetrated; and that neither copper nor arsenic are transported by the blood into the various parts of the organism, so as to be discoverable by chemical analysis.

To repeat the circumstances which led us to undertake our researches, and to lay before the reader, in its true light, the controversy by which they have been accompanied,—we will quote the opinions of writers, who are admitted as authorities in legal toxicology.

Dr. Devergie, in his "*Traité de Médecine Légale Théorique et Pratique*," 1840 (vol. iii, p. 532), thus expresses himself:—"On the 19th April, 1838, I analysed, with Professor Orfila and Dr. Ollivier (d'Angers), the intestinal canal of Mme. L—, and found in it a small quantity of copper. On the 2nd August, by the same operation on the digestive tube of M. R—, I obtained copper in the incinerated mass. This coincidence struck me, and as, at that time, M. Hervey and myself were performing a series of researches on the residue, obtained from the incineration of the stomach and intestines, our attention was naturally directed to the subject; and we remarked that, in every case, a notable quantity of copper, lead, and even manganese, was to be found. Circumstances having occurred, which prevented our prosecuting these researches together, I continued them alone, and discovered that copper and lead existed in all the organs, even in the blood. Since then, I have never performed a medico-legal analysis, without finding copper or lead, wherever the individual had been ill, for however short a time. I therefore renewed my experiments, performing them on individuals of all ages, sick and healthy; and, in all, the result was the same, as shown in the following table:

TABLE OF THE PROPORTIONS OF LEAD AND COPPER IN THE HUMAN BODY.

	Sulph. of Lead. Grammes.	Sulph. of Copper. Grammes.
<i>Child just born.</i>		
Intestinal canal	0·001	0·001
<i>Child 8 years old.</i>		
Stomach	0·004	0·005
<i>Child 14 years old.</i>		
Intestinal canal	0·025	0·030
<i>Healthy adult woman.</i>		
Stomach	0·020	0·025
Intestines	0·030	0·035
Ditto (2nd analysis)	0·040	0·046
<i>Healthy adult male.</i>		
Intestines, calcined on a } strong fire	0·025	0·037
Ditto, slow fire	0·035	0·040
Vesica fellis	0·003	0·002
<i>Sick adult woman.</i>		
Intestines (phthisical)	0·010	0·010
Brain (a pound)	0·006	0·019

It may, therefore, be concluded, as shewn in the foregoing table:—1° that copper and lead exist in the stomach, intestines, and other organs;—2° that their quantity increases with the age; for, being very minute in the new born child, it is

four or five times greater in the adult;—3^o that the proportions differ in the stomach and intestines of the adult male and female; but, that we do not find more than one-forty-six-thousandth part of copper in the intestines, and one-forty-thousandth part of lead."

Professor Orfila, in the last edition of his "*Traité de Toxicologie*," 1843 (vol. 1, p. 643), says:—"It may be asked, since copper exists in the normal state of the animal economy, and in certain aliments,—will it not *always* be impossible for the chemist to say, whether that obtained is the result of crime, or not? And, should not toxicologists give up the idea of pronouncing a positive decision in cases of this description?—Or, in other words, can it be recognised, whether the copper obtained is that contained in the normal state of the body, or owing to one of the salts of that metal having been administered as a remedy, or given with a criminal design? I at once reply to this question in the affirmative, *so far as the different organs are concerned*; and may state, that the copper, contained in the intestinal canal or any other viscus, and resulting from the administration of one of its compounds, whether as a remedy or as a poison, may be obtained by processes which would fail completely in discovering the *normal copper* contained in our organs; all that is requisite, is, to follow attentively the different methods of analysis, to be able to affirm whether the metal was given as a remedy, as a poison, or otherwise. The proof of this important conclusion will be shewn, beyond a doubt, by the species of processes which must be employed, to obtain the normal copper contained in the different organs." The author then indicates these methods, and which are already sufficiently known, not to need repetition.

Finally, on this subject, M. Chevreuil has twice declared that his opinion is similar to that given by us, and the adhesion of this distinguished chemist makes us hope, that the Academy of Sciences will put an end to the doubts, which some apparently seek to propagate; the more so, as this subject may occur again in a criminal court, and if any obscurity remain, it will be prejudicial, not only to science, but likewise to the equitable decision of justice.

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSSWILL, Esq., Surgeon, Leicester.
(Continued from page 17.)

From the view just taken of the circulation, we learn that the functions of the various organs, concerned in the decarbonization of the blood, and the production of animal heat, may be concisely expressed, as follows:—

1st. The bowels are the channel by which the unburned, innutritious, and effete, portion of the food is discharged from the body.

2d. The kidneys are the organs by which the azote of the decomposed tissues is separated from the blood, in combination with carbon.

3d. The liver is that organ which secretes bile, especially from the non-azotised portion of the food: a compound rich in carbon, designed for combustion in the lungs, and which also separates, in the shape of bile, whatever of the decomposed tissues may have escaped the action of oxygen in the capillaries.

4th. The capillaries are the points, where the chief of the carbon of the disintegrated tissues is converted into carbonic acid, by the action of the oxygen parted with from the blood-globules, with evolution of heat.

5th. In the lungs, the functions may be regarded as two-fold; inasmuch as they have, first, to decompose the carbonic acid from the iron, brought to them by the blood-globules; and, secondly, they have to furnish oxygen to consume the carbon presented to them by the bile, after it has been separated from the blood by the liver.

6th. In the skin, the intention, similar to that in the lungs, consists in parting with carbonic acid and water, brought to the surface, and in absorbing oxygen from the atmosphere.

From the intimate connexion existing between these organs, engaged in the production of the same purpose, it is evident that the derangement of any one, in particular, must be followed by deranged functions of the whole, the result of which will be a diseased condition, if the healthy organs, co-operating in the same intention, cannot, by increased activity of function, compensate for the diminished amount of the disordered organ—or if, on the other hand, the function of the deranged organ be carried on in excess, provided those of the co-operating organs be not reduced in the same ratio,—an unhealthy amount of action results, which must reduce the power of the individual, by consuming that material which furnishes the result of the organic functions. Wasting of the animal body will be the result of inordinate excretion: a condition arising proximately from a disproportion between the amount of nutrition and the amount of waste.

The liver and the capillaries are organs which prepare the carbon of the blood, or render it in a fit condition for excretion: they are the purveyors of the skin and the lungs.

The skin and lungs are the organs by which this carbon is excreted from the body.

Hence, derangement, whether in the liver or capillaries, must be followed, primarily, by a change in the manner by which the carbon is prepared for separation from the body; and, secondarily, by a derangement of the organs by which it is separated: for, supposing the amount of blood-globules below that which may be assumed as a healthy standard, then the decomposed organic tissues, not meeting with sufficient oxygen in the capillaries, by which their carbon may be converted into carbonic acid, the liver is called into increased activity of function, in order that this carbon may be disengaged, in sufficient quantity to support animal heat, from the blood, in the condition of bile, which, circulating through the lungs, is there converted into carbonic acid, instead of having such change effected in the capillaries: an increased amount of function of the lungs is, consequently, the result.—Again, supposing the function of the skin to be deranged or interrupted, either by disease or by natural causes,—what follows? Congestion of the lungs, with an increased demand for functional results from those organs,—a call being made upon the lungs to perform that, singly and individually, which, in a healthy condition, they effect conjointly with the skin.

In the normal state of these various organs, each has a definite amount of function to perform; and it is easy to conceive, that, in order to sustain this healthy standard, a *balanced condition* is established between them; that, as a certain amount of oxygen is taken into the body, so a certain amount of carbon must be given out; and that, if one organ, individually, take on from any exciting cause an increased activity of function, the others, co-operating in the same intent, must be placed in the opposite condition; or if, on the contrary, any organ become diseased, and unable to excrete its healthy amount of carbon (provided the same amount be continued to be received into the body, in the shape of food), then the other parts, engaged in the same purpose, increase their functional activity, and endeavour to compensate for the diseased condition of the organ affected. A healthy condition, or that which may be regarded as an equilibrium of function, is rare, there existing a tendency to disorder and disease, in some particular locality, in almost every individual. This congenital state of organisation is called *hereditary tendency*. The organisation is hereditary, whilst the exciting causes to disorder are, almost invariably, external agents. In many instances, however, the organic tendency, itself, is acquired by indulging in those prejudicial habits which, by exciting some particular part to increased function, induce organic change, producing in such individual a condition of organism named *acquired*, but which the majority receive by hereditary descent.

I shall now proceed to illustrate my views, respecting complexion, as leading to an explanation of diathesis, or physical indications of tendency to certain diseases, or, more particularly, to the causes which produce the temperament of the individual.

This explanation will prove the more satisfactory, when viewed in connexion with the phenomena of colouring in the other divisions of the organic world; and upon investigation it will be found that, since a beautiful analogy does exist between the physical appearances of created life in every part of the globe, so, we may reasonably infer, that an equal analogy occurs in their production.

The color of all organic productions appears to vary, with the position those productions occupy on the earth; for, whilst the equatorial regions produce tints of the most opposite and beautiful character in the vegetable kingdom, these gradually degenerate in brilliancy, until approaching the limits of vegetation, where the most prevailing color is that of white.

Not only are flowers thus acted upon by climate, but birds and animals, inclusive of man himself, are almost equally influenced by the geographical position they occupy.

Before, however, I point out these phenomena in the brute creation, I shall endeavour to make my opinions as clear as possible, as to how variety of complexion is produced in man; explaining the results upon the individual constitution, after endeavouring to prove, that evident physical characteristics are the effect of particular organic operations.

(To be continued.)

ON ACCUMULATIONS OF FÆCULENT MATTER,

By A. W. CLOSE, Esq., Manchester.

THE mere accumulation of fæculent matter, in some portion of the large intestine, very often produces serious functional disturbance, and, not unfrequently, organic disease. The whole of the canal, to the sphincter ani, is subject to accumulation and distension; in the transverse arch of the colon, and in the rectum, this often takes place to a great extent. From pressure on the sacral nerves, and on the veins returning from the lower extremities, the patient complains of more or less numbness, neuralgic pains, heaviness in the movement of the limbs, and venous swellings. From pressure on the hypogastric plexus, and from the connection which that holds with the pneumogastric nerve, by means of the solar plexus, the functions of digestion and of the sensorium are considerably disturbed. From the arterial current to the lower extremities being impeded, more blood is determined to the head, occasioning head-ache, cerebral torpor, vertigo; and from the excrement (which in its natural state is consistent, soft, homogeneous, and cohesive) becoming hard, knotty, friable, and dry—an abundant source of impurity to the blood is created. The following case illustrates the subject:—

E. S., a housemaid, came under my care in Sept. 1842. She stated that, about six months previously, her ancles and legs began to swell, the veins became large (varicose), and a sore formed on the front of the tibia of the right leg. She consulted a respectable practitioner of this town, under whose care she remained more than two months. The ulcer healed, but her general health rapidly declined; she lost her appetite and strength; amenorrhœa succeeded; her abdomen began to enlarge, and continued to do so up to the period when I saw her; she was suspected to be *enciente*,—in fact, to the eye of the superficial and casual observer, she presented that appearance. At length, she was obliged to quit her place of service, and attended for some time as an out-patient at the Royal Infirmary, and was finally dismissed as incurable.

A very slight examination served to convince me that the abdominal enlargement was tympanitic. The varicose condition of the lower extremity having been the first abnormal symptom which presented itself, my attention was directed to it. What obstacle existed to the venous circulation?

No solid tumour could be detected either in the inguinal or abdominal regions; no enlargement of the liver. The only supposition that occurred to me was:—there may be accumulation in the

cæcum or colon, and my treatment was directed to that indication. She was ordered to take gr. v. of the pil. aloes c. sapon., of the Edinburgh Pharmacopœia, three times a day. Large fæculent motions were produced; the swelling of the legs and abdomen was gradually reduced; the appetite returned. In two months, the catamenia re-appeared, and up to the present time she has continued well.

I know of no better combination, in cases of constipation arising, either from a sluggish, torpid, condition of the intestine, or from a deficiency of bile, than the aloes and soap. The latter seems to act as the *adjuvans*, *corrigens*, and *constituens*, to the former.

Another case recently came under my care. A charitably disposed person requested me to visit Mrs. M—, æt. forty-five, of Ardwick. She stated that she had been a regular attendant at the Ardwick and Ancoat Dispensary, and afterwards at the Royal Infirmary, for upwards of twelve months. She had been for some time, and was then, unable to leave her bed; complained of weight and distension of the abdomen, loss of appetite, restless nights, and excessive debility. There was considerable abdominal enlargement, of a tympanitic character, and I thought I felt the transverse arch of the colon hardened and indurated. I gave her the aloetic pill, with small doses of calomel, which produced very copious, black, and exceedingly offensive, evacuations. In a fortnight, she was able to attend to her ordinary household duties, and declares herself to be in a much better state of health now than for many years.

Such cases are of frequent occurrence. These I have selected, because they had previously been under the treatment of talented and careful medical practitioners; yet the simple cause of the morbid condition had not been suspected.

Since I wrote the foregoing, I have observed that Professor Williams, in his very valuable lectures, now being published in the *Medical Times*, alludes to such cases. He says: "I have seen such patients who have had the appearance of advanced degrees of dropsy, and who have been pronounced to be labouring under organic disease, and tumours of various kinds. I remember the case of a patient, who, when brought into the hospital, was supposed to be affected with organic disease of the abdomen, and had been treated for such for some time, in whom the abdomen had been distended for six or eight weeks to a very great degree, inasmuch that the cartilages of the lower ribs were turned out,—and yet all the tumour vanished after a purgation of some days, and was produced solely by a vast accumulation of fæculent matter."

When the accumulation takes place during pregnancy, it gives rise to symptoms of a much more active and formidable nature. I could relate several instances, the history of which is similar, in all respects, to the following:—

Mrs. S—, of Hulme, had been going on well, for ten or twelve days after her accouchement, in January last, when I was hastily summoned to her. She complained of severe pain in the site of the cæcum, upon which she could not bear the most moderate pressure; had had rigors, followed by a hot skin, dry tongue, and thirst. In short, the symptoms were those of peritonitis. Leeches and fomentations were applied, calomel and opium administered, and in a few days she seemed to be well; but, on the night of the 12th of February, I was again called to her, and found her suffering under the same symptoms. I then suspected that, although there had been an apparently free and regular daily motion, some accumulation probably existed. Suitable and repeated doses of the aloetic pill were given, evacuations of hard and scybalous fæces followed, and she gradually, but completely and permanently, recovered.

I have observed that this constipated and accumulative condition of the bowels is, not unfrequently, the cause of organic disease. The distinguished Professor, whom I have quoted, says, "organic changes may arise." I attended, in the year 1842, with Dr. Wood and the late Mr. Fawdington, surgeon, of this town, a schoolmaster, who died of carcinoma of the sigmoid flexure of the colon. In his case, the origin of

the disease might fairly be attributed to a want of due attention to the regular action of the bowels; this, undoubtedly, is one of the most fruitful predisposing causes of the accumulation, and the main of the prophylactic treatment consists in inducing the patient to establish the custom of visiting, at a certain hour every day, the *templum cloacæ*. Most of the published cases of carcinoma of the colon and rectum will be found to have occurred in persons of sedentary habits, or of such active occupation as has led them to neglect attention to the calls of nature. We should anticipate that such would be the case; the irritation produced by indurated fæces, if long continued, must give rise to that slow, chronic, insidious action, which will be followed by morbid changes of the adjacent textures—induration and carcinoma—particularly if there be a concomitant carcinomatous diathesis.

In conclusion, I may mention, that I have met with more than one case of labour, which has been retarded, and rendered tedious, by a rectum filled and distended with compacted fæces.

ON THE ADVANTAGES AND DISADVANTAGES OF REPORTS

ON ANEURISM, SCIRRHOUS BREAST, AND REMOVAL OF OVARIAN CYSTS.

To the Editor of the "Medical Times."

SIR,—Medical literature now teems with hospital and other reports. The publication of cases has become so common, that no journal presumes to venture forth without them; no book or treatise appears that is not well stored with them; they are published by wholesale and retail, now in numbers, now singly, sometimes with remarks, oftentimes without word or comment; sometimes complete, they convey an useful lesson in themselves; oftentimes incomplete, and hastily produced, ere sufficient time has elapsed to test the value of the treatment or remarks, they are,

"Deformed, unfinished, sent before their time,
Into this breathing world, scarce half made up,"

and I may add,

"And that so lamely and unfashionable,"

that few will be at the pains to wade through daily and even hourly reports, with the chance of adding nothing to their information. Having said thus much, to shew that the subject is of some importance, and likely to have some influence in practice, I trust it will not be considered unreasonable, at the present time, to consider under what circumstances this style of literature is likely to prove advantageous to the profession, and under what circumstances prejudicial, and, therefore, requiring controul.

Without searching the archives of our profession for the origin of these reports, I think I may fairly presume that the first cases that were published had for their object the illustrating of some disease not previously described, and were sent forth in this humble attire, because, in an age that was not so well adapted to book-making as the present, they were considered too short to make a treatise of, and yet too important not to be mentioned. Sir Astley Cooper took advantage of these individual cases, and, by collecting them from all parts of the country, compiled a work on fractures and dislocations, with remarks on the diagnosis and treatment, so clear and so just, that it must be always considered one of the greatest boons to surgical literature. Thus, too, after operations for hernia, by watching the symptoms during life, and careful dissections after death, he was able to point out a new covering, and the cause of failure of many operations. There can be no doubt of the value of such cases, published collectively and individually, and while fresh in the memory of the authors; other cases may likewise be useful, as illustrating any particular plan of treatment; these, necessarily, require a few remarks, as in the cases of concussion, published in the *Medical Times*, where the author observes that the treatment consisted mainly in a close watching of the symptoms, perfect rest, and regulation of the bowels, as opposed, I imagine, equally to those who advocate the universal use of

the lancet, and to those who would never bleed. Having thus admitted the advantages of reports, I wish to shew, under what circumstances they are useless, and are even injurious. They are useless, I think, when cases are published before they are complete; injurious, when they are sent forth to the world as successful, before sufficient time has elapsed to test the merits of the treatment; and valueless, when published singly or collectively, without one word to direct us to the interesting points of the case. Thus, I recollect seeing in the *Lancet*, a few weeks ago, a paragraph, headed "successful treatment of aneurism by pressure," (I forget whether it was popliteal or femoral), the report terminating by its being still a pulsating tumour, which the surgeon thought was somewhat smaller than when the pressure was first applied. Such cases prove nothing, and therefore the publication of them should be reprehended, as calculated to leave a wrong impression on the mind, when the memory of the report has faded away, and thereby to induce others to postpone (as far as we at present know) the only means of cure. They should, moreover, be condemned as bearing the appearance of puff, putting forth vain promises, and creating false hopes, more especially as there is no evident reason, why the surgeon cannot wait sufficient time to test the propriety of the treatment, before he publishes it.

I recollect also seeing, a few months ago, in the Provincial Medical and Surgical Journal, published by a highly respectable surgeon, and one who would not willingly mislead, the reports of several cases of the cure of scirrhus of the breast by operation; each report terminates by the wound healing two or three weeks after the operation, and the patient being presented well. Now, it is known to most of your readers, I dare say, that Sir Benjamin Brodie, in one of his very able lectures, rather condemns than recommends the operation: he says there are few cases in which he should think it right to propose it, and he does not publish his opinions before they have, in some measure, been sanctioned by time; he has carefully watched the result of those cases where the operation has been performed, and he unhesitatingly states that the disease speedily returns in the majority; and I have very little doubt, that if the surgeon, I allude to, were to publish the results of his cases at the present time, now that a few months, instead of a few weeks only, have elapsed—that, in more than one instance, the disease would be reported to have returned. The early publication of these cases, then, is injurious, as tending to confuse the much mooted question, as to the propriety of operating in such cases. Hospital surgeons perform this operation, the patient goes to the country from whence she came, the disease returns, and with it all hope flies, and she lays herself down to die; at the same time, perhaps, as the surgeon is boasting of having conferred an important benefit on her by the removal of the disease. I am convinced that our surgeons, if they had only half the zeal of Sir Astley Cooper, might, by reporting the results of such operations, after the lapse of a year or two, do much towards the settling of this disputed and questionable operation, and probably save their fellow creatures much needless pain and anxiety.

The reports of cases, without word or comment, I have long looked upon as useless, as few will take the trouble to read them; but still there are cases, which carry in themselves the best lesson, and should rather be published without a word of recommendation, such as, when a particular operation, or a new plan of treatment, is still *sub judice*. Here, remarks by a high authority, while yet in want of a sufficient number of facts to judge from, are worse than useless; they are mischievous, for, in the words of Andral, "nothing tends more to give a false direction to science, than presuming to anticipate facts, and attempting to solve a problem, of which we do not as yet know all the elements." Thus, on an operation for the removal of an ovarian cyst, which Mr. Key performed more than a year ago, he remarks, in *Guy's Hospital Report*, of 1844—"that, *ceteris paribus*, if the constitution of the young ovarian patient be unaffected by the disease, her nervous system tranquil, and the arterial action

free from inflammatory tendency, I cannot see any objection to submitting such to this operation." Is this Mr. K.'s opinion, now? I think not, or we should have heard of similar operations performed by him; for he must have had many opportunities during the last year, if he had sought for them. I conclude then, that, on mature reflection, he condemns an operation, which, if he had only waited till now before publishing his remarks, he would never have recommended. Such cases, then, are only useful as statistical tables, when honourably reported, and observations may be useful as merely illustrating the plan of treatment pursued, the apparent causes of success, or want of success. Lately, an attempt seems to have been made to afford new statistical tables, by the publication of many cases of a certain class of disease. Thus, 60 or 70 pages of *Guy's Hospital Reports* have been devoted to dry, minutely reported, cases, without any sort of encouragement to peruse them; thus, we have brain cases of different degrees of severity; hernias of every description; strictures with perforations; extravasations, relieved and unrelieved, without any sort of arrangement or classification; such can be of little use as statistical results, unless we are well assured that they are not selected cases, but the whole that have been under treatment during a certain time, and not collected according to the fancy of the student, whose duty I believe it is to report them; and who will frequently gloat over a successful case, while one unsuccessful and equally interesting is left unrecorded. But they have had so many hints on the subject, that I look forward to an amendment in the forthcoming number, and having drawn your attention to the subject I am content.

And remain,

Your obedient Servant,
CHIRURGUS.

October 1st.

[We agree in much that our correspondent writes, but we conceive he would draw the line on the publication of cases, with a cruel and mischievous rigidity. Reports may either corroborate or suggest good practice, and the great bulk of the profession will thank us as much for wisely deciding for them between two equally lauded modes of treatment, as for trumpeting into fame a suspicious novelty. The best reports we have recently seen, and of the sort most likely to be practically useful, are those we have the honor of publishing by Dr. Rigby.]—Ed.

NOTICES TO CORRESPONDENTS.

Would not Medicus (Worcester) do well to call in some friend to the case?

We have this week received several communications on medical points, from anonymous correspondents. We beg to inform our modest friends, that while the fact of being anonymous, offers a strong objection to publicity, fame is defrauded by the concealment of their names.

Mr. Rogers, of Bristol, has our thanks for the courtesy of his attention. We have been able to make but a slight use of the journal he has sent. We seize this opportunity to thank Mr. Crosse, of Norwich, for the equal kindness and trouble shewn by him, in giving us the very full report of the Norwich meeting, as recently published in our journal.

A Correspondent calls our attention to the subscription just set on foot by members of the Provincial Medical and Surgical Association, in behalf of a former fellow labourer, Dr. Hennis Green, the recent editor and proprietor of the Journal for so long a time, at a ruinous expence, devoted by that able physician to the service of the Association. Considering how long he edited that journal, to every body's advantage but his own; and how (at his loss) it has subserved the prosperity of that extending Association, we trust that two opinions will not prevail as to the opportuneness of the moment for paying that gentleman a handsome, and we fear not useless, testimony, to the disinterestedness of his labours, and the high-mindedness of his scientific zeal. Any co-operation (neither unpractical nor stinting,) our office can give, will in every way be given for so desirable an undertaking. We believe that Dr. Burgess, of Margaret

Street, has undertaken the duty of Secretary to the Committee, of which Dr. Jeffreys is Chairman.

Captain Caldwell, of the 47th Regt. residing now in Vichy but ordinarily in Audley-square, London, sends us a short statement of some of the recent, doings of Alexis, in that town. The following extracts will not be uninteresting to some of our readers:—

"Monsieur Marcillet, having put Alexis in a state of magnetic sleep, I sat by him and took his hand. I requested him to tell me my character, which he did most correctly. He then related to me the circumstance of my having endorsed two bills some years ago for a friend, which were protested. He told me the amount of the first, and also that of the second, with the expenses upon them. He said I was obliged to pay both bills and expenses. I then gave him a small paper parcel, containing a gold onyx pin. It was enclosed in such a manner as to render it impossible for any one to guess, by feeling, what was in the parcel. In a short time, Alexis told me what the parcel contained. He also told me that I bought it rather more than two years and half ago in Ireland, in a small town, about 25 leagues from Dublin. (I bought the pin at Birr, in the King's County, Ireland, in October, 1841; and, as near as I can now recollect, Birr is about 70 miles from Dublin.)"

At another scene the following phenomena were shewn:—"At the same hotel, Alexis being in a state of magnetic sleep, my sister gave him a small paper containing a morocco leather case, in which there was a mosaic view of St. Peter's. Alexis told her the mosaic was on copper; also that the morocco case was of red leather, and described the view of St. Peter's. At the same seance, my sister gave Alexis a little box, in which there was a seal. Alexis described minutely the seal, and named two of the initials out of the three which were upon it. At the request of Monsieur Marcillet, I have briefly related the above facts." Mr. H. Hunlock, who was also present, thus writes. "Alexis, being in a state of magnetic sleep read three words correctly and with little difficulty which I had written on a card and securely enclosed in several folds of paper. (The words were Prenez bien Garde)—He also told me my character."

We have received an exquisitely-written address by Dr. Wright, delivered at a Conversazione, convened by the Independent Order of Odd Fellows in the Town-hall, Birmingham. The funds from the sale of the small pamphlet are to be devoted to the support of the Queen's Hospital, Birmingham, —another reason, if that were necessary, for our readers' purchase of the pamphlet. It may be had of Mr. Lyon, Birmingham, or his agent (for the sale of this pamphlet) Mr. Churchill, Princes-street, Soho.

A Country Surgeon's long letter on Medical Clubs will not be overlooked.

Mr. B.—We shall not forget the "Birmingham strife," when it assumes more palpable form.

The "Times" and Medical Reform.—A correspondent directs our attention to a paragraph in the Times, speaking of a "Committee Meeting of the Medical Protection Assembly as composed of the élite of the Profession,—and then announcing, as the only persons acting, Messrs. Simpson, Hodson Rugg, and Curtis, aided, of course, by the too-notorious Dr. Jordan Lynch, of York—as the Apothecaries' list describes him." The matter calls for no remark save one,—that, if the Editor of the Times thinks such persons the élite of the Profession, he must have a very contemptible notion of our body, or a very erroneous one of three of its members; unless, as our Correspondent says, "the word élite mean with him a selection downwards." We suspect he has been hoaxed by one of the "élite," who are not—we fear—the most trustworthy of authorities.

G. A. L. will find all he asks by consulting the file of the Medical Times during the last year.

A Practitioner's letter on the London University Examinations, shall be published if he give his name. If he will not, we shall confine ourselves to a brief reference to its contents.

Mr. F. A. Leader should buy our Almanack, and enquire at the hospitals for himself. His object is very praiseworthy; and we would go further to second his efforts, but the law of newspapers very properly imposes reserve,

The Medical Book List, and one or two other articles in type, are unavoidably postponed till next week, till which time we have to crave the indulgence of numerous correspondents.

Medicus, Manchester.—A good translation of a French work on the subject has appeared in America, and may be had at Wiley and Putnam's. We have forgotten the author's name.

T. K.—We regret we cannot give our correspondent advice, but an application to any of our hospitals will give him all he seeks for. Mr. Lawrence, who has recently, in the Times, expressed his anxiety to see out-patients at St. Bartholomew's, would no doubt be happy to prescribe for the case named.

Mr. Mitchell, the publisher, has sent us a lithographic portrait of Dr. Forbes Winslow, the author of several popular works—among the rest, of the Treatise on Insanity, we had occasion some time since to notice. The portrait is well executed.

W. R.—The quotation was not given as ours, but as used by another. The other phrase is attributed both to Napoleon and Louis XIV. There is no doubt that Napoleon used some such expressions before the occupation of Paris by the Allies.

THE MEDICAL TIMES.

SATURDAY. OCT. 19, 1844.

— The condition
Of our affairs exacts a double care,
And, like bifronted Janus, we must look
Backward as forward.

MASSENGER.

THERE is doubtless no surer test of the general worth of the New Bill, than its effect on the General Practitioner. He is emphatically the British Doctor. The interests of the Profession are his: and as his order has charge of the dearest and most momentous concerns of society the position of the General Practitioner intimately affects the interests of the whole community.

The present grievances of the General Practitioner are—we need scarcely say—numerous; but the greatest of them may be pronounced that by which a number of small associations, dignified with the names of Colleges and Universities, can let in on him, at any price, or with any competency they please, a swarm of eager and unfledged rivals. A corporation is, by its very idiosyncrasy, gifted with an aldermanic appetite for fees, and nineteen, each struggling which can attract most money to its coffers—the increased attraction being always lower professional competency and easier examinations—must obviously do a world of mischief. If allowed full swing for another half-century, we could demand State protection on no other ground than that we had, and the Quacks had not, diplomas. Diplomas would be the only difference between us and the men we sought to repress,—for fees, not merit, would be our title to professional rank. We trace to this source most of our practical complaints.—First: we are too numerous for our work: our assistants, in some cases, are much worse paid than footmen: our equals in professional station are obliged to take refuge, by dozens, in the fixed salaries of railroad policemen, and others with more honourable posts pine away with less receipts in deserted surgeries. Who fails to attribute this to the competition among our corporate rulers,—a competition not for scientific superiority, but to see which shall get most money, by letting in on us most new rivals? Again, we have been unable to resist the conspiracy of associated bodies to get professional attendance from us at a rate incompatible with

professional respectability. The Boards of Health, and the sick clubs, have forced hundreds of our body to work ten times as hard for one-tenth the former payments. We attribute this to the fierce competition engendered among us by the hosts of new men daily let loose on us. Then the Boards of Guardians have produced results of a similar kind. The resistance of the honourable and gentlemanly practitioner has been overcome by the too hazardous threat, and clear certainty, that London, Edinburgh, or Dublin could be advertised, and numbers of "clever young surgeons" got, who would gladly accept the reduced rate. This mischievous evil—impoverishing to us, but killing to the poor—lies at the door of the one great cause, the premiums to the Colleges for making more Surgeons than are wanted.

Now, with all the faults of the New Bill, no one disputes that it will rid us of this our greatest and most practical grievance. The New Bill, in giving us a Supervising Council, with plenary powers to fix the qualifications each College shall demand—and making that demand equal throughout all—gives us a guarantee that our new men will sustain worthily the scientific character of our Profession, and that the supply of labourers will bear a better and more reasonable proportion to the work that is to be done. If, as so many tell us, the *res angusta domi* lie at the bottom of much of the Profession's discontent and uneasiness—this enactment of the Bill, humble and unshowy as it looks, will do more practically for the present generation, than a dozen grander schemes of formal revolution.

A second nuisance, inseparable, just now, from our calling, is the encouragement the laws offer to illicit practice. It is not the toleration of the mischief that does the greater harm, though that of itself is matter for serious complaint. It is the laws' indirect encouragement to quackery, which accounts for the prevalence of that monster vice. If a man, with his eyes open, and on due information, put his perilled body under ignorant tinkering, he is much in the position of the man who goes thimble-rigging or horse-racing, or subjects himself to any other species of transparent villainy; and in proportion as he acts from eupidity, or vulgar prejudice, do we pity or ridicule him. With the greatest wish to lessen human suffering, one is yet almost tempted, in reference to such men, to exclaim with Horace,

Sit jus, liceatque perire poetis:
Invitum qui servat, idem facit occidenti:
Nec semel hoc fecit; nec si retractus erit jam
Fiet homo, et ponet famosæ mortis amorem.

The victims truly to be pitied, are those whom the law entraps, or allows to be entrapped in nets which, set by ignorant avarice, are bated with all the outward semblances of legalized and competent skill. At this moment, nine-tenths of our enormous, and all-pervading, quackery, is carried on under the gloss of law, and the guise of medical competency. Without speaking of the patent medicines, which pay for a Government certificate of goodness—*alias*, a stamp—just enough to make them *piquant* and valued, and just too little to discourage their sale (a national abuse that should not be perpetuated another day),—we know that universally, in the popular mind, a notion exists, that every shop with blue and red bottles in the window, is the abode of a kind of doctor, not very easy to discriminate from the legal nondescript, called General Practitioner or Surgeon-Apothecary. We know, further, that no law exists, or is enforced, which prevents any vagabond—careless provided *he* live how many die—from pre-

senting himself to the public as Surgeon or M.D. He may take charge of a broken leg—set or amputate it at pleasure: attend, prescribe, or dispense his drugs for all the varied and complicated symptoms that may succeed, and he is not only beyond the reach of law, but our courts of justice will enforce his demand for payment for the fearful assistance he has rendered. With such facts before us we need not dilate on the anomalous, the equivocal, the deceitful position in which our laws must present the accomplished General Practitioner of this country to the public. He is not *par excellence*, the *Physician* or the *Surgeon*: his title is assumed at will by any uneducated schemer who finds it worth his while to be unprincipled; and from the multiplicity of sources, some unknown, and some very worthless, from which his medical degrees may be taken, or falsely said to be taken, the very altars of the professional temple are infested with pretended priests, and every motive is offered for the public's not placing in our order the confidence we really deserve. Now, the three clauses of the new bill which give us one source for our professional title, ("the Council of Health") one clear and certain mode of distinguishing us from druggists and pretenders—the annual public registration list, and one penal law, fixing the names of Fellows and Licentiates of Surgery and Medicine to all medical men, and punishing their assumption by all others—these clauses, we say, will at least mitigate many of these injustices, if they do not wholly remove them. They will strip quackery of many of its most mischievous disguises—they will present to the people the general practitioner, not in his rôle of *apothecary*—hateful word—but in his own proper and exclusive title of Doctor; and if the Profession, turned into one powerful and strictly united Faculty, by a uniform enrolment in one national registration list, do not realise practically the advantages the Bill thus offers them, theoretically, if they really do not rise to the improved position, and keep over the quack the increased superiority which the statute offers, then we have greatly mistaken the character of their attainments, and the elevation of their mental and moral worth. We repeat, that the Bill, though it fails to take the effective step which its own general spirit asks and vindicates, is yet, to the General Practitioner, anything but an encourager of illicit rivalry. When quackery is made to stand on its own bottom, and ask for fees as quackery, its only chance of success will be in securing public confidence. If it attain so singular an aim, the fault will not be wholly that of the populace.

PROGRESS OF FRENCH SCIENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Oct. 10, 1844.

On Orchitis.—In a preceding letter (*vide Medical Times*, vol. x. p. 493), I mentioned that, in a case attended by Dr. Cullerier, the disease, after resisting the ordinary remedies, yielded to the operation proposed by Dr. Vidal (de Cassis). Before relating the particulars of this case, I will add, to the details already given, Dr. V.'s opinions as to the varieties of this affection. They are three in number: 1° *vaginalitis*, or acute inflammation of the tunica vaginalis;—2° *epididymitis*, or inflammation of the epididymis;—3° *orchitis parenchymatosa*, or inflammation of the testicle itself. The two first do not require a very active treatment, but, in general, yield to simple hygienic rules; should they, however, be complicated with acute hydrocele, the puncture, as recommended by Prof.

Velpeau, and which penetrates only into the tunica vaginalis, so as to evacuate its contents, will be sufficient. This, however, is mere loss of time in the third variety, and it is here that the incision of the albuginous envelope is followed by such beneficial results. As to the compression, recommended by Friek, of Hamburg, Dr. V. has not found it more efficacious than antiphlogistics, rest, &c. Case: M—, ætat 24, of a lymphatic temperament, had been affected with orchitis on the right side, two years ago. On the 20th September, after a long walk, the same disease appeared in the left testicle; it must be remarked, that, three months before, he contracted a blenorragia, which, though slight, still persisted. The disease having increased, notwithstanding the remedies employed, Dr. Cullerier was called in on the 25th, and found the parts in the following state: testicle considerably swollen, painful when touched, of a round figure, and extending upwards as high as the inguinal ring; spermatic chord voluminous; vas deferens firm; fever. Ordered: venesection $\frac{3}{4}$ xij, narcotic and emollient cataplasms, and a purgative. No relief; on the contrary, the pain extended into the abdomen, and increased in intensity. Ordered: 25 leeches, and narcotic lotions, *loco dolenti*. No amelioration followed, and blood was drawn a second time from the arm; the pain became intolerable, and was accompanied by vomiting, and delirium; no fluctuation, nor transparency. It was at this stage of the disease, that Dr. Cullerier decided upon plunging a lancet into the tumour; the tunica vaginalis, opened, allowed a few drops of blood to escape, but gave no relief; the instrument was, therefore, pushed somewhat deeper, and a noise similar to that produced on piercing a membrane, stretched to its utmost extent, indicated that it had divided the tunica albuginea testis; two teaspoonfuls of blood only escaped; little or no pain. Three hours after, the symptoms had notably diminished; the patient slept three hours the ensuing night, and the next day, the testicle, when examined, was found smaller and softer, and presented a small flabby swelling where the incision had been made. Thirteen days after, the patient was quite well.

Accouchement at the Natural Time, in a Woman affected with Deformation of the Pelvis.—This case, published by Dr. E. Laborie, is interesting, inasmuch as it proves that, after the destruction of one cerebral hemisphere, and considerable lesions in the other, the foetal life does not become extinct; and that, in a case of legal medicine, the mother must be examined, as well as the child, in order to say whether infanticide had been committed or not. A question may here be asked: How far a surgeon may consider himself authorised to destroy a living being, his mission being, not to take, but to save, life? The Cæsarian operation is a highly dangerous one, and, therefore, to save a child, a useful member of society may become a victim; but ought it not to be had recourse to, notwithstanding the danger, when the fœtus is still alive, instead of an operation which is inevitably fatal; more especially, since numerous cases have been recorded in which both were saved? Thus, from 1801 to 1832, Michaelis enumerated 110 operations; of these there were 62 deaths, and 48 cures; or 5 to 7½; and in these, it was performed successfully a second time on ten women.—Case: M. —, ætat 18, born of healthy parents; lower limbs deformed; during childhood, suffered from pains in the head, stomach, and intestines; menstruated when 17, for the first time; since then, the catamenia came on regularly every month, until the 24th Nov., 1843; nothing remarkable during pregnancy; labour pains declared themselves on the 2nd Sept. The next day, on examination, the os tincæ was found to be dilated; the head presenting itself in the anterior, left, occipito-iliac position, its diameters being:—bi-parietal, 5½ inches:—occipito-frontal, 6½ inches:—occipito-mental, 7 inches; uterus projecting forward considerably; trunk of the natural length, but limbs short, and, when this takes place, according to Professor Dubois, there is always a malformation of the pelvis, whereas the deformities of the vertebral column may exist, and sometimes to a considerable extent, without such being the case; antero-posterior diameter of the pelvis, 2¾ inches.

The forceps were then applied, though with some difficulty; after several ineffectual attempts, they were removed, and the woman, being very fatigued, was put into a warm bath. Having re-applied the forceps, three hours after, but with no better result, Dr. Danyau determined upon perforating the cranium, through the left parietal bone; this done, a leaden canula was introduced by the opening, and three injections made, by means of which a considerable portion of the cerebral substance was evacuated. Ten minutes after, the child was extracted; it weighed 7 lbs., and presented nothing abnormal; and though the head was considerably flattened, and the right parietal bone fractured, it moved its lower limbs when they were touched, and breathed several times; three inspirations took place, four minutes after the birth, two more a minute after that, and respiration then continued with regularity for about twelve minutes; the heart was felt to beat after the fifth inspiration; it began to decrease when respiration ceased, and finally became irregular, and disappeared about an hour after birth. —Autopsy: Skin pale; lower limbs contracted; a square opening existed in the left parietal bone, of about an inch in diameter; right parietal fractured, the fragments pushed inwards; effusion of blood in the cranium; left hemisphere wanting, right softened here and there, and presenting several spots where the blood was effused; lungs floated in water; heart containing a small quantity of liquid. Nothing remarkable in the other organs. —*Annales de Chirurgie.*

Typhoid Fever.—In this affection, in which Professor Andral and Dr. Rayer administer diluents alone, and Professor Bouillaud inculcates repeated venesection, Professor Cruveilhier has adopted the following treatment: the patient must take, per diem, as a tisane, citric acid lemonade lb. j., properly sweetened; a draught containing ʒj. of syrup of lemons, an equal quantity of the same in an enema. The mortality is not greater than when an energetic method is employed. The cases of this affection, which have been so numerous this year, have borne out the fact announced by Dr. Ranque, of Orleans, viz.: the existence of a peculiar lesion of the gums. It resembles the spots produced by the nitrate of silver on the gums, affects the upper or the lower jaw, and differs according to the stage of the disease; thus, at first, it presents itself under the form of whitish irregular spots, or linear streaks like a ribbon; at a later period, it affects the surface of the gums to a greater or less extent; finally, if the disease terminates favorably, it forms an ulceration which heals gradually. (The formula for the preparation, —1^o of the syrup limonum (*syrup d'acide citrique*) is: R. Acid. citric. ʒj. Aquæ distill. ʒxxx Syrup. simp. lb. j. Dissolve the acid in the water, and add the dissolution to the boiling syrup; —2^o, that of citric lemonade (*limonade citrique*), is R. Syrup. acid. citric. ʒj., Gum. Arab. ʒj., Aquæ puræ lb. ij., Alcohol. citr. med. ʒj. M.)

On Iodine Injections in different Diseases.—1^o Dr. A. Guépratte published, in the last number of the *Journal des Connaissances Médico-Chirurgicales*, several cases observed in the clinical wards of Professor Velpeau. —(A.) *Hygroma.* Selles (James), ætat 60, strong and hale, was affected with a voluminous hygroma on the left elbow. On the 6th June, the tumour was emptied, and the iodine solution* injected without causing any pain. Inflammation took place the next day, and was followed by a purulent secretion, which escaped by the opening made, when the tumour was pressed. The patient left the Hospital on the 14th day, the swelling still containing a liquid. —(B) *Ganglion.* Martinengo, 36 years old, affected with a ganglion on the back of the right hand. 6th June: puncture having been employed, a turbid, reddish, dirty liquid escaped, and the iodine injection was then made; no pain; next day, as in the preceding case, inflammation came on sufficiently intense to cause insomnia; fluctuation was felt, and on pressure pus flowed out. These symptoms gradually diminished in intensity, and he left the Hospital, three weeks after, imperfectly cured. —(C) *Hydro-*

cele.—Daumont (Louis), 62 years old, good health, came to the *Charité* on account of a voluminous hydrocele, which commenced ten years previously. The serosity was withdrawn, and the iodine solution injected; no pain during the operation; but, soon after, violent inflammation came on and lasted two days, and then disappeared. A month after, an obscure fluctuation being felt, Professor Velpeau plunged a lancet into the tumour, and through the opening a considerable quantity of a citrine-coloured serosity, at first limpid, and afterwards mixed with pus, escaped. —Grammont (Louis), 22 years old; similar affection, of recent formation; no pain during the operation, but, the next day, the inflammatory symptoms declared themselves, and, after lasting three days, decreased; cure obtained in five weeks. —Courtois (Louis), ætat 19; same affection on left side; tumour voluminous; commenced two months ago; general health good; operated on, on the 28th June, smart pain produced by iodine injection, which lasted about six hours, and then diminished, re-appearing with the usual inflammation, five hours after, and finally decreased again on the 1st July. Though far from being cured, the patient left the Hospital on the 6th July. From these observations, the author concludes:—that iodine, in some cases, causes no pain during the operation; in others it produces severe suffering; that, after 12, 18, or 24 hours, it gives rise to inflammatory symptoms, which in hydrocele yield to rest and emollient topics, whilst, in hygroma and ganglion, they end in suppuration;—that in all cases iodine is not infallible;—that in hydrocele, if a reaction does not take place, the cure is not effected; and therefore, in successful cases, the patient cannot pursue his usual avocations, as it has been asserted;—that wine is more certain in its action, the only advantage iodine possesses being that it is more easily prepared.

Encysted Bronchocele.—According to Dr. Bouchacourt, this disease is not seated in the thyroid gland, but in the lymphatic glands situated near it;—that of all the methods recommended, injection is that which offers the greatest chance of success;—that a mixture of one part of the tincture of iodine with two, three, four, or five, parts of water, is sufficiently irritating;—that it is not necessary to inject a quantity of the iodine solution equal to that of the liquid withdrawn: one-half or one-third is in general sufficient, and it may be left in the cyst without inconvenience;—that the hypertrophied thyroidea generally diminishes from the excitation produced by the injection; should this, however, be insufficient, iodine may be given internally and rubbed in at the same time;—that an appropriate treatment must be administered, according to the constitution of the patient. In one of the cases recorded, Dr. B requested M. A. Guilliermond to analyse the liquid removed, and it was found to be composed of albumine (in considerable quantity) combined with soda, a green resinous matter, colouring substance of the blood, osmazome, cholesteroline, fat, mucus, and a notable quantity of chloruret of sodium. —*Bulletin de Thérapeutique.*

3^o *Hydatiform Tumour of the Wrist.* (*Tumeur en bissac de Dupuytren.*)—Pouraine (Louisa), a servant of all work, 28 years old, health good, entered the *Charité* on the 6th March, 1840. About eleven years ago, while going up stairs with a basket, she fell on the back of her left hand; two or three days after, a small swelling appeared, just above the annular ligament of the carpus, about the size of a nut, followed by another near the thumb, about two months later. Both remained stationary for about seven years, when a third made its appearance, and the three increased considerably. An incision, made at this period, permitted about a tablespoonful of small, yellowish-white, sticky globules, surrounded by a species of jelly, to escape; they resembled, in the words of the patient, pearl-barley. No amelioration following this operation, she came to Paris, and was received in one of Professor Velpeau's wards; when examined, she presented the following symptoms: on the left fore-arm and hand, there existed a multilocular tumour, divided into two parts by the annular ligament; skin of a natural colour, no heat, nor pain; fluctuation; tendons of the palmaris brevis and radialis internus raised by the tumour, so as to divide it superiorly into two other por-

tions, internal and external: the latter about the size of a filbert, the former of a pigeon's egg, limited externally by the tendon of the palmaris longus, internally by that of the flexor carpi ulnaris, which it causes to deviate from its natural direction, and inferiorly by the annular ligament of the carpus. On the 11th of March, Professor Velpeau plunged a trocar into the tumour, and caused, by pressure, about half a tumblerful of yellowish globules, similar to rice, to escape. These globules, to the naked eye, seemed to be formed of a cyst, containing a gelatiniform matter; with a lens, the envelope could be distinguished more readily. An iodine injection was made by the opening. The inflammation, which followed, was intense for 24 hours, and then yielded to lotions of goulard water, and perfect rest; so that, on the 30th, mercurial frictions were made to hasten the absorption, the parts being then in the following state: the swelling, situated exteriorly to the tendon of the palmaris longus, is reduced to a hard kernel; that internally is hard and more uneven, but is about the same size as before. From the 11th to the 18th of April, pressure was made with strips of sticking plaster, after which the mercurial frictions were renewed until the 30th, and pressure again continued until the 8th of May. On the 9th, when she left the hospital, there was on the carpus a very small swelling, formed by the internal aponeurosis; the hand offered a pasty feel; movements of flexion easy. On the 15th, the patient came to the consultation; the parts had diminished considerably; she was, nevertheless, requested to continue rubbing in for some time longer. —*Gazette des Hôpitaux.*

Paralysis of the Bladder, cured by the administration of the Secale Cornutum.—Dr. Duhamel communicated to the *Société de Médecine Pratique* the following case:—Madame M., ætat 40, requested me to call, on account of violent colicky pains, similar to those of labour; by the touch, the os tincæ was found to be tumefied, and between its labia a foreign body was felt; the uterus was as developed as in the third month of pregnancy. Uncertain as to the exact diagnosis, I ordered a warm bath, and a narcotic draught, which relieved the patient, so that, twenty-four hours after, she evacuated her urine and fæces without any trouble. Next day, the uterus was found to be in its natural position, and the foreign body, felt the day before, had disappeared. For a week, all went on very well, after which, she was taken with ischuria vesicalis, and pain in the hypogastrium; uterus in its normal position; on using the catheter, from three to four quarts of a limpid, inodorous, urine, were removed. This operation was repeated for three days, in the hopes that the contractility of the bladder would return; but as this did not take place, a large blister was placed on the hypogastrium, and two others on the upper and inner part of each thigh; no amelioration followed. I, therefore, following the example of Dr. Guersant, jun., who administered to some old men, after the operation of lithotomy, the secale cornutum, so as to enable the bladder to reject the remains of the calculus, prescribed ʒss of this substance, to be taken daily, in four doses. No effect having been produced, ʒj was given, per diem, and soon after the bladder began to contract; at first, only a quarter of its contents was evacuated, the day after, one-half, and the third day, the whole; and it has continued to do so ever since, though a fortnight has now elapsed. The urine, which, a day or two after catheterism, had become turbid and foetid, now presents its normal characters. As to the state of the uterus, it appears that it is owing to a commencement of pregnancy, since the patient affirms, that she feels the movements of the fœtus. In the discussion which followed the recital of this case, Drs. Tanehon and Equisier declared that, in the urine of women, while pregnant, the surface is covered with a whitish, greasy pellicle, called *kestéine*; this is never seen under any other circumstance. The former added, that it may be perceived as early as a fortnight after fecundation.

Rhagis (Treatment of).—Professor Velpeau recommends placing tents of lint, imbibed with the following mixture: R. Calomel. ʒj, decoct. althææ ʒiv. M. Three or four days are sufficient to obtain a cure.

* Professor Velpeau's iodine injection is thus composed; R. aquæ puræ ʒij, tinctur. iodin. ʒi. M.

Fracture of the Patella—New Apparatus.—In this case, the method recommended by Dr. Malgaigne (*vide Medical Times*, vol. ix. p. 103), having failed in uniting the two fragments, and producing intense pain, Dr. Robert, in whose wards at Beaujon, the patient had been received, replaced it by the following apparatus:—two iron rods, of the thickness of the fore-finger, and about nine inches in length, were fixed in a board of sufficient length to reach from the heel to the upper part of the thigh. The limb was then placed on an inclined plane, the foot being at the summit, and the board, well padded, was placed under the limb, to which it was firmly attached; in this position, the upper transversal rod corresponded to the inferior portion of the femur, and the lower to the upper part of the leg, and coaptation was procured by means of a band applied, in the figure of 8, round the articulation and the iron rods. The cure was thus obtained, with a very slight separation of the fragments. This apparatus is advantageous, inasmuch as it does not press upon the important vessels situated in the ham.—(*Ann. de Therapeutique*.)

Academy of Sciences; Sitting of the 7th Oct.—Baron Chas. Dupin in the chair.—Received "Memoir and Proceedings of the Chemical Society, part 9."

On the Quantity of Potass and Soda contained in Sea-Water.—M. Ballard read a memoir, in which he stated that, by processes discovered by him, and now employed in the south of France, he could, notwithstanding the contrary opinion announced by Murray and Wollaston, obtain from sea-water an indefinite quantity of sulphate of soda, and enough potass for all commercial wants. Further, that if the efforts he is now making be crowned with success, the quantity of sulphur obtained from the oxo-sulphuret of calcium, hitherto rejected as useless, will, perhaps, be sufficient to supplant the *solfataras* of Italy.

Academy of Medicine—Sitting of the 8th Oct.—Dr. Rochoux requested that all communications, relative to the plague, should be sent to the committee named, and not read.—Dr. Nacquart said, that the communications might be read, but that no discussion ought to take place before the committee presented its report.—The president stated that it was thus, that the *Conseil* interpreted the decision taken by the Academy.

On a supposed Fossil Human Skeleton.—Dr. Londe informed the Academy, that he had been requested to examine a skeleton, discovered in a quarry of gypsum, at Pantin, near Paris. On visiting the spot, with a distinguished geologist—M. Baron, we found it to be the skeleton of a man, which was enclosed in the gypsum. This fact being sufficiently interesting to be examined by a committee, the Academy named the following members: Drs. Dumeril, Blandin, Pariset, Londe, Orfila. This committee purposed visiting the quarry on Saturday next, at four p.m.

Dr. Capuron read a report on a memoir of Professor Hirtz, of Strasburgh, on the following question: "Ought the brevity of the funis to be considered as an obstacle to accouchement?" The learned reporter, though he does not concur in opinion with the author of the memoir, still considers this paper of sufficient interest, to authorize the following conclusions: Thanks to the author, and his being placed on the list of future correspondents. (Adopted.)

On the Venous Pulse observed on the back of the hand in acute diseases. Memoir read by Dr. Martin Solon, M.A.M.—In general, the denomination of venous pulse is applied to the reflux of blood from the right auricle into the jugular veins. In some cases, these pulsations are isochronous with the arterial, and are produced by a repletion of the cavities of the heart, or by the insufficiency of the tricuspid valve. In the latter case, during the systole, the blood is driven into the auricle, and from thence into the vena cava superior, to which it communicates a pulsative movement. This species of venous pulse is well known, and, therefore, it is not to it that I purpose drawing the attention of the Academy; but to that of the dorsal veins of the hand, which, being the continuation of the pulsations of the radial and cubital arteries, deserves, far more than the other, the denomina-

tion of venous pulse. I particularly observed it in the two following cases. 1^o E. L., a painter by trade, ætat. 23, of a lymphatico-sanguineous temperament, general health good, experienced in May last, from exposure to cold, when in a state of perspiration, dyspnoea, cough, and pain in the side. The symptoms continuing, he entered Beaujon Hospital two days after (29th of May), and was bled immediately. The next day, on examination, pneumonia was found to exist on both sides of the thorax; breathing short and frequent; skin hot; pulse full and strong, 110; thirst; anorexia; beating of the heart powerful—(venesection to be performed directly, and repeated in the evening; to be cupped on each side of the thorax; pectoral tisane).—30th and 31st May. On each day, he was bled, morning and evening.—1st June. No amelioration; pulse still strong and full; ordered venesection, to be performed in the evening only.—2d June. The blood, drawn the day before, still presents the inflammatory crust; the heart still beats energetically; pulse full and frequent; urine pale, limpid, slightly acid, density 1.010, no deposit. The continuation of the thoracic symptoms, though upwards of lb. ix. of blood had been drawn, led me to conclude that they were owing to the contractions of the heart, and consequently I prescribed:—R. Antimon. tartar. gr. v., julep. gum. Arab. ʒiiss.* syrup. papaver. alb. ʒj. M. Sumat. cochl. magn. q. q., 2dâ horâ.—During the day, several vomitings and liquid stools, and, in the night, an abundant epistaxis, the quantity of blood lost being about lb. ij.—3d. Face pale; frequent syncope; add to the draught, tinct. opii gtt. x.—Slight amelioration the following days.—On the 10th, I remarked that the dorsal veins of the hand pulsated in a manner similar to that of the superficial arteries; they were prominent, round, transparent, of a roseate, blue colour, and presented a movement of diastole and systole, appreciable not only to the finger, but also to the eye, isochronous with that of the radial artery. Pressure on the wrist increased the size of the veins, and the strength of the pulsations; the contrary took place when it was performed on the fingers. A most minute examination shewed, that these pulsations were not owing to the motion of the subjacent arteries or tendons, and that the heart, with the exception of the energy of its beatings, presented nothing extraordinary. This phenomenon persisted for about a week, and coincided with the diminution of the other thoracic symptoms. On the 13th, the urine was less limpid, increased in density (1.015), and became cloudy on the addition of nitric acid; and, on the 6th July, the patient left the hospital quite cured.

The precautions taken in studying the venous pulse in this case, by making it cease by pressure on the brachial artery, and rendering it more visible by intercepting the circulation in the veins of the wrist, indicate, beyond a doubt, that the pulsation of the dorsal veins of the hand was communicated by the *vis à tergo*, which the arterial blood received from the heart, and transmitted to the venous system. But, is the action of this central organ of the circulation sufficient to produce the venous pulse? Although it favours the development, still I do not think it is the sole cause, for, if so, the phenomenon would be more frequent in cases of hypertrophy. It is the fluidity of the blood, which enables it to pass rapidly through the capillary system, without losing the impulsion received, that is the principal cause of this symptom, of which opinion the following case is a proof:—S. —, 18 years old; good constitution; throbbing of the heart feeble; pulse normal; affected with pleuro-pneumonia on the left side, which had already reached the second stage; bled three times on the 16th, 17th, and 18th, September; he presented, on the 19th, the phenomenon just described on the back of the hand. It disappeared in this case much sooner than in the preceding one, because the fluidity of the blood was not aided by any increased action of the heart. Other practitioners have, under

* *Julepum Gummi Arabici*. R. Gum. Arab. ʒij., syrup. simp. ʒvi., aq. distill. flor. aurant. ʒj., aquæ puræ lb. ss. M.

similar circumstances, observed the venous pulse; thus, Dr. Ward remarked it on a female, recently delivered, and who had been bled frequently on account of the existence of pneumonia (*London Med. Gaz.* June 1832); and Dr. Graves has also seen it in two women, one affected with pneumonia, the other with peritonitis; both had been bled copiously.

What has just been said, concerning the venous pulse, explains why, in some cases, the flow of blood in venesection takes place in jerks, isochronous with the pulse; and in this it differs from what occurs in the jugular and subclavian veins; the blood, here, could not be propelled into the veins of the arm and those of the hand, on account of the valves which exist in these canals. Considered in a pathological point of view, the development of the venous pulse is of the utmost importance. For, if it be owing to the fluidity of the blood, the physician, on observing it, will bleed with moderation, performing it only when the augmentation of the febrile symptoms renders the circulation more active. When, on the contrary, it is produced by the preceding cause, complicated with increased action of the heart, counter-stimulants ought to be preferred to venesection. Finally, in showing that the veins participate in the arterial movements, the venous pulse indicates clearly that the circulation is under the influence of the heart alone. As a symptom, it will guide the practitioner in determining the quantity of blood which may be drawn in acute diseases, and, in this respect, it is deserving of serious attention.

Dr. Rochoux remarked, that the expression—*isochronous* with the pulse, is not correct. Dr. Martin Solon ought to have said, *nearly isochronous*; the more so, as the pulsation varies in the arterial system, according to the distance from the heart; thus, the radial artery does not pulsate simultaneously with the tibialis antica.—Prof. Cruveilhier had observed this phenomenon at the bend of the arm; but, here, evidently, it was produced by the beating of the subjacent artery; this, it is true, could not happen in the cases mentioned by Dr. Martin Solon; but might it not have been caused by an impulsion transmitted from a distance?—Dr. Martin Solon, in reply, stated, that the valves of the veins are sufficient to prevent its being transmitted from the heart; moreover, it did not exist above the spot indicated.—Professor Velpeau said, that, about six or eight years ago, he was requested to visit a patient in a medical ward, who was affected with typhoid fever. On examination, he found that evident pulsation existed in all the veins of the arms, and this could not be attributed to the impulsion transmitted by the arteries.—Dr. Martin Solon: The fact, just related by Prof. Velpeau, comes to the support of my opinion, since it is well known that, in typhoid fever, the blood is more fluid than in the normal condition.—After some further remarks from Professor Blandin and Dr. Dubois d'Amiens, the discussion was closed.—The president then thanked Dr. Martin Solon for his communication, which should be sent to the *Comité de publication*.

Dr. Nacquart repeated a proposition, already made by Dr. Desportes, that the proceedings of the day should be made known previously, so as to enable the different members to be prepared for the discussion.

Artificial Anus.—Professor Blandin communicated a case of artificial anus, produced by strangulated hernia, and cured by an operation. It being the intention of the professor to make some remarks on this subject, on Tuesday next, the case shall then be given at length.

Tumour situated on the head.—Professor Moreau presented a child, just born, who had on the occiput a tumour, larger than the head, soft, and which seemed to contain a liquid, and to communicate with the interior of the cranium; the least pressure gives great pain, as shown by the child's screams.—Professor Velpeau: This is an uncommon case, and may be considered as analogous to that observed in spina bifida. Evidently, it communicates with the interior of the cranium by a small opening, and contains serosity. Might not the operation, recommended by Dr. Dubourg, in hydro-rachitis, be performed?—Professor A. Bernard: After a careful examination of the pedicle,

I consider the tumour to be formed of cerebral substance as well as serosity (*hydro-encephalocoele*), and, consequently, that the operation would probably be followed by fatal consequences.—Dr. Guersant, sen., thinks the operation ought not to be performed, as it will inevitably be followed by purulent inflammation and death.—Professor Blandin expressed a similar opinion; as to hydro-rachitis, there is no similarity between it and the present case, for, in the latter, the brain might be wounded; now, that can never take place in the former.—Professor Moreau stated, that, if nothing were done, the child was doomed to die; and, therefore, he thinks it may be said here, "*Melius anceps remedium quàm nullum.*"

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the Products of the Oxidation of Proteine.—Mulder was induced to institute the following researches, in consequence of Bouchardat's assertion, that a substance similar to glue may be extracted from fibrine, by boiling. Some fibrine of the blood of an ox, and white of an egg, were boiled together; the liquid was decanted, and boiled anew in water. It was then evaporated to dryness, the residue acted on by alcohol, and then cold water added. If fibrine or albumine be boiled in water, during the first four hours, the soluble parts will be abstracted, whilst an insoluble portion remains behind. If the boiling be repeated with fresh water, and continued for some hours, new quantities of the formerly insoluble substances are dissolved; and so on, for several times. The residue loses more and more of its carbon, its hydrogen and nitrogen, retaining a super-abundance of oxygen, until the composition at last remains constant. This soluble part of fibrine and albumine, as above obtained, is almost entirely soluble in water, and contains less carbon, hydrogen and azote, but more oxygen, than proteine. Mulder found that the product, obtained by the boiling of these substances, is composed of the same elements as the *tritoxide of proteine*, prepared by him from proteine and chlorine, by means of ammonia.

40	Equival. of Carbon	.....	=	51.45
32	.....Hydrogen	.....	=	6.72
5	.....Azote	.....	=	14.92
16	.....Oxygen	.....	=	20.93

Thus the formula, $C_{40}H_{32}N_5O_{15} + H_2O$, (proteine consists, according to Mulder, of $C_{40}H_{31}N_5O_{12}$). The same body is generally found in the inflammatory crust of the blood, and can be easily obtained by boiling. It is soluble in cold water, insoluble in alcohol, ether and oils, and without reaction on vegetable colours. It is precipitated from the watery solution by nitric, sulphuric, muriatic, phosphoric, and tannic acids, by chlorated water, bichloride of mercury, acetate of lead, nitrate of silver, and sulphates of zinc and of iron. It is not precipitated by dilute acetic acid, by neutral salts, by ferrocyanate of potassa (which generally re-acts so strongly on combinations of proteine), nor by chloride of barium. The body which remains undissolved, after frequent boiling, is constantly composed of:—

40	Equival. of Carbon	.....	=	53.36
31	.....Hydrogen	.....	=	6.75
5	.....Azote	.....	=	15.45
14	.....Oxygen	.....	=	24.44

The formula is, therefore, $C_{40}H_{31}N_5O_{14}$. This is, then, the same body as *Laer* obtained from the hair, by treating it with alkalis. In this regard, albumine entirely differs from fibrine. By boiling, it does not pass first into binoxide, but directly into tritoxide, of proteine. That, which remains undissolved, is unchanged albumine. Bouchardat maintained, that fibrine is dissolved in a great measure by highly diluted muriatic acid. He calls the dissolved part, *albuminose*: the undissolved, *epidermose*. The so-called *epidermose*, which has not the smallest analogy to the substance of the epidermis, is very probably nothing but binoxide

of proteine. The *albuminose*, that is to say, the substance dissolved by muriatic acid, then precipitated by carbonate of ammonia, and extracted by alcohol, is, according to Mulder and Von Baumhauer, nothing else than tritoxide of proteine. The tritoxide of proteine may, also, be prepared from the serum of the blood (freed of fibrine, albumine and hæmatine) by precipitation with metallic salts. Bouchardat maintained that fibrine, and particularly the inflammatory crust, contains glue, but the foregoing investigations shew that the substance, considered by him as glue, is tritoxide of proteine. No trace of glue could be discovered by Baumhauer in the buffy coat. Further analyses show, that this inflammatory crust contains more oxygen, and less carbon, hydrogen and azote, than the pure fibrine or proteine, and that it is thus a mixture of proteine and oxyproteine. After a quarter of an hour's boiling, 14.2 parts of soluble substance (tritoxide of proteine) were extracted from the inflammatory crust, whilst pure fibrine, when boiled for a quarter of an hour, only furnishes traces of oxyproteine. Thus, it is fully ascertained, that *tritoxide of proteine pervades the inflammatory crust*. Mulder believes that the insoluble part of the inflammatory crust, is binoxide of proteine, and not fibrine. He further asserts, that both binoxide and tritoxide of proteine are constantly formed from the fibrine of the blood, by respiration; consequently, he considers the fibrine as the chief, if not the only, bearer of oxygen in the blood; it is the principle, from which the secretions are formed. Among others, the following conclusions may be drawn from the interesting discoveries of Mulder. On boiling meat, a part of the proteine becomes converted into a binoxide: consequently, it is rendered difficult of solution; whilst another part is turned into tritoxide, which is easily dissolved and absorbed. Albumine not undergoing the same change as fibrine, material differences become established between boiled meat and boiled albumine. In respiration, a real oxidation of the blood, or rather of its proteine, is going forward; and in inflammation, where a greater quantity of binoxide and tritoxide of proteine is formed than in a normal state, the oxidation is considerably increased.—(*Schmidt's Jahrbücher der gesammten Medicin.*)

Tetanus, a consequence of neglected Scarlatina.—A girl, 13 years of age, was attacked with scarlet fever, and, notwithstanding, she went out after a few days, at a temperature of 3° R. Soon after, she was seized with violent head-ache, difficulty of respiration, and vomiting; the head, neck, and chest, swelled considerably. These symptoms increasing, the author was called in, at 8 o'clock p.m. He found the patient lying on her back, with difficult breathing, dilated pupil, full pulse, skin moderately warm, face pale. She could not see, and complained of a burning pain in the gastric region, and a tendency to vomiting. A copious venesection was made, and strong derivatives applied to the skin. But, before the leeches and internal remedies could be employed, another convulsive paroxysm took place, during which the balls of the eyes were rolled upwards and sideways with great rapidity. This attack of trismus was followed by violent opisthotonos. The head, from being placed in a straight line with the body, was drawn backwards, the spine and limbs rigidly fixed, and the whole body then violently convulsed with spasms, which lasted, in the first paroxysm, from 20 to 30 seconds, and, in the following ones, from one minute to a minute and a half. At last, the body lay quite stiff for a moment, after which the pulse and respiration gradually re-appeared. Immediately after the second paroxysm, leeches were applied to the head, a blister upon the spine, and, during the intermissions, musk and opium were alternately administered, with *potio River. et Spir. Minderer*. After the seventh paroxysm (about one o'clock a.m.), the face became red, and assumed an expression of indescribable anguish. Half an hour afterwards, a copious perspiration and sleep ensued. Calomel was then administered internally, and mercurial ointment rubbed in over the spine; a violent attack of tenesmus, which ensued, was removed by a few doses of opium. On the following day, salivation appeared, and continued for 10 days. Febrile symptoms now manifested

themselves (without, however, any degree of violence), and were marked by distinct remissions in the morning, and, in about a week, the patient was perfectly well. (*Dr. Höring, Ibidem.*)

Iodide of Potassium, as a Remedy in Syphilis.—The following are the results of 400 cases, treated by the author, either alone or in conjunction with Dr. Kluge. 1.—Intolerance of the remedy did not occur, either when administered alone, or in combination with iodine. Only in one case, that of an irritable girl, violent oppression of the chest and dry cough occurred. A moderate venesection was instituted, and the remedy was again had recourse to, without any injury, after the lapse of some days. 2.—The author frequently observed irritation and increased secretion from the nose and eyes, accompanied with fever, and erysipelatous swelling of the eye-lids, and sometimes attacks of indigestion. These symptoms usually disappear in a few days, even while the remedy is being continued. When the above symptoms became more troublesome, the remedy was discontinued for some days and then re-administered in smaller doses. 3.—Perspiration was never increased. Diarrhoea sometimes appeared, but readily yielded to small doses of opium. The faces generally assumed a darker appearance, probably in consequence of increased biliary secretion. 4.—The urinary secretion was constantly increased, at first attended with a sediment, subsequently clear and of a straw colour. 5.—Towards the 5th or 6th day, the author generally observed an eruption of small pustules, but never any other kind of exanthema. 6.—In the second or third week, he frequently observed gentle salivation, but never ulceration of the gums, unless mercury had been taken previously. 7.—In irritable women, menstruation was accelerated and increased. The tendency to miscarriage, in pregnant women, was easily removed by a moderate venesection and a temporary discontinuance of the remedy. 8.—He did not observe any diminution of the breasts or testicles. 9.—Iodide of potassium never seemed to interfere with the powers of reproduction; appetite and digestion generally improved; hectic fever and colliquative perspirations disappeared. 10.—A short time after its administration, the remedy was found in the urine, and sometimes in the blood; therefore, the author concludes that it operates by contact. In primary ulcers, the remedy has hardly any effect; but, in secondary syphilis, the more the constitution is deteriorated, the better the remedy acts. Its effect is exceedingly marked in syphilitic ulcers of the mouth, the tongue, and the throat, especially when of a pustular character; whilst it does not succeed so well in the superficial condylomatous ulcers. The author even cured several cases, which had already assumed the appearance of laryngo-phthisis, and were combined with disease of several bones. Of three cases of ozæna, cured by this remedy, one was particularly interesting, the septum narium having already been partially destroyed, notwithstanding the usual treatment had been unsuccessfully employed for six weeks. On account of some local pains, moderate venesection, with opium, was sometimes necessary during the first fortnight. *Condylomata acuminata* if primary, did not yield to the remedy, but were completely cured, if they were preceded by chancre. *Condylomata, lata* if of old date, and in cachectic subjects, were rapidly cured by the administration of the above remedy.—*Syphilitic Eruptions.* The greater the tendency to cachexia, the surer the action of the remedy. In patients of strong constitution, and irritable temperament, its operation is not so certain. It exhibits a favourable effect in roseola, lichen, psoriasis (if the spots are not hard and red), ecthyma, and tubercles (which easily run into ulcers). It had no effect, whatsoever, in *iritis syphilitica*. *Syphilitic pains of the bones, and syphilitic or mercurial rheumatism*, are safely and radically cured by iodide of potassium, after having obstinately resisted all other methods of treatment. In *syphilitic nodes, and caries of the bones*, it is to be preferred to other remedies. But if the swelling is painful and red, abstractions of blood must first be instituted; then, a blister is to be applied; after which, incisions must be made for the discharge of the matter, and then iodide of potassium is to be administered inter-

nally. As to the diet, during the use of the remedy, the author orders it to be very sparing: as little food as possible, no meat, confinement to the room. Formerly, he administered the remedy by itself, in solution (from 10 grains to one drachm, daily); but latterly, he has added from one quarter to four grains of iodine. If the mixture be very disagreeable to the patient, an addition of simple syrup may be made.—*Dr. Hauck in Schmidt's Jahrbucher.*

ON THE ACTION OF CREASOTE.

By I. P. McDONALD, Esq., M.R.C.S., Bristol.

My attention was first directed to the action of creasote in pulmonary affections, by Mr. Wheeler, the highly talented apothecary of the Clifton Dispensary. I have had, subsequently, frequent opportunities of exhibiting it in various diseases, with the most marked success. In cases of chronic bronchitis, and in phthisis, even in the worst forms, its effects have been very manifest, as far as my experience goes, curing the former, and palliating the latter, to a considerable extent. But its effects, as a remedial agent, are more manifest in dysentery and dyspepsia. In dysentery of the sub-acute kind, as generally seen in this country, I have witnessed its effects, and have been surprised to find that the disease has yielded to it, when the usual remedies have been of no avail. In dyspepsia, in all its varied forms, I have latterly used creasote, and I have no hesitation in saying, that it is in all such cases the most valuable remedy we have. I have at this moment, under my care, two or three patients with dyspepsia of some years' standing, who are rapidly proceeding to recovery, under the action of this medicine. The general mode in which I have seen it administered, or have administered it myself, is as follows:—In pulmonic affections:

R Creasot. m. x.

Spt. æth. sulph. c. ʒij.

Decoct. cinchonæ ʒvj.; or

Tinct. cinch. comp. ʒvj.

Aquæ ad ʒvj.

Ft. Mist. sum. 4t. part., 6tis horis.

In abdominal visceral affections:

R Creasoti, m. xij.

Pulv. g. acaciæ ʒj.

Aq. font. ʒvj.

Ft. Mist. sum. 4t. part. 6tis horis.

A CASE OF COMPOUND FRACTURE OF BOTH TIBIA AND FIBULA, WITH A FEW PRACTICAL REMARKS,

By RICHARD KING, Surgeon, Ashton-under-Lyne.

THIS case occurred in a boy, ætat. 14, of a healthy constitution. The accident happened as follows:—He was riding on horseback along the road, when another little boy came behind the horse, and gave it a blow with a stick, which caused the horse to plunge forward. The boy was thrown with great violence; and, on endeavouring to arise, he found he was unable to do so. He was, accordingly, brought home, a distance of one mile. I was sent for at 6 o'clock p.m., half an hour after the accident occurred; on my arrival at the house, I found the boy labouring under great pain, together with the shock caused by the injury, and some, though not much, loss of blood. On cutting off the shoe, and removing the stocking, I found the tibia and fibula driven out a little above the internal malleolus. The tibia was broken off at the epiphysis, and the fibula about two inches above the external malleolus; the wound, which was perpendicular, and the length of which was three inches, together with a transverse wound of two inches, corresponded to the lower extremity of the horizontal one; both bones protruded about four inches. On examining the wound, and passing my finger behind the protruding bones, there was a large cavity filled with coagulated blood, which was removed with a syringe, in order to see if any of the principal vessels were divided. The accident appeared of so serious a nature, as at first, to lead me to pro-

pose amputation to his parents, as the only means of saving his life (and to which they readily consented); but, on considering the boy's age, and his being of a good constitution, it was determined on giving him a chance of saving his limb. With the kind assistance of Drs. Hunt and Booth, I commenced by first endeavouring to reduce the protruded bones; but, after many ineffectual attempts, I abandoned it, and carefully removed two inches of the bones, and a second time thought to reduce the remaining portion, in which I also failed, until the longitudinal wound was enlarged an inch and a half; they then readily admitted of reduction; the wound was brought together by four points of suture, and a roller applied; an anodyne draught was given, with cold evaporating lotions, externally, to the part. (The boy suffered very little during the operation.) There are a few important observations connected with this injury, which I will give in detail, after thus briefly sketching down the case. No bad symptoms ever set in all through; there was little or no suppuration; no exfoliation. The wound healed kindly: and I may mention the position which seemed most favourable, viz.; laid on its external surface, the leg semi-flexed on the thigh. The boy is now, three months after the accident, able to walk, with only the assistance of a stick; he has perfect use of the ankle-joint. There is a slight degree of shortening, which corresponds to the portion of bones removed; there is also thickening about the joint, but which is gradually lessening.

The remarks which I would wish to make, and deem of practical importance, both in a physiological and surgical point of view, might be divided into two sections:—First, as regards the injury; and secondly, the treatment to be adopted in such cases. We know, from experience, that injuries so approximated to a joint, and one of such magnitude as the ankle, may be attended by the most serious consequences, particularly if the surgeon endeavour to save the limb. In this case, the tibia was broken off at its junction with the epiphyses, leaving its articular portion in connection with the joint, and driven out for the space of four inches through a lacerated wound in the soft parts; the fibula also protruded; its extremity was considerably spiculated; the foot was very much everted, and the bones protruded below its plantar surface; therefore, it was impossible to examine what extent of injury the joint had suffered; but, from the nature of the accident, it was deemed sufficient to have caused more or less injury. Secondly, as to the treatment of these injuries. The difficulty arising to this remark, is, to determine whether the limb ought to be saved, or amputation be performed, as soon as the patient recovers from the shock. This case, from its successful issue, and from the little disturbance which occurred, would induce a surgeon (in similar cases) to propose saving the limb; but I believe, in the majority of cases where such injury occurs, amputation is preferable.

RUPTURE OF THE HEART.

By J. HOWARD NORTON, M.D., M.R.C.S.E., &c.
Shirley, near Southampton.

I was called, on the night of Oct. the 6th, to see a man, named Charles Blackman, carpenter, who had fallen down, apparently in a fit, and was dead before I could reach him. The account, that his wife and a fellow-workman gave me of his previous state of health, was, that he had several times complained of a severe pain in the anterior portion, and at the left side, of the chest, but always continued to work at his trade up to the time of his death, and was considered a strong and active workman. The day previous to his decease, he had carried his carpenter's bench a short distance, and after having done so, complained to a fellow-workman "that he felt something inside him to have given way." On the following evening, he was seized, whilst in bed, with an acute pain in the chest, which he described as being very intense; he however walked down stairs to the yard, and almost instantly expired.

At the post-mortem, ordered by the coroner, I

found, on the left side of the chest, extensive and old adhesions between the pulmonic and costal pleuræ (he having had several ribs fractured many years ago); both lungs were otherwise healthy. On opening the pericardium, I found it filled with dark coagulated blood; on examining the heart, I found a rupture, one quarter of an inch in length, at the superior part of the right ventricle, communicating with the cavity of the pericardium. The heart was enlarged without thickening of its walls; it was softer than natural; externally it presented signs of chronic inflammation; there were no pseudo membranes, or fibrinous adhesions; internally it had a pale and flabby appearance. On examining the surrounding parts, I found a common sewing needle, one inch and a half in length, imbedded in the cellular tissue attached to the anterior portion of the pericardium, but not piercing that membrane; this foreign body was evidently the exciting cause of the disease of the heart, which led to its rupture. No information could be obtained from his relations, as to how the needle had entered the body.

ON THE USE OF THE SPLEEN.

(To the Editor of the 'Medical Times.')

SIR,—Permit me to make a short reply to Mr. King's remarks upon my views concerning the Spleen—the organ of *good*, and not, as he terms it, of *ill-humour*, if it be true, as I think, that "*Splen ridere facit*." If I may venture to judge from those remarks, Mr. King has yet to learn what my views are. He seems to be impressed with the idea, that I consider the spleen to be a *heart*: he could not be more mistaken. For I look upon it as precisely *the reverse of half one*.

If the spleen *had* been a heart—or, rather, half one, an auricle and ventricle—in which the veins from the digestive tube had terminated; and if the *splenic vein*, and its continuation—the portal vein, and its ramifications in the liver, had been *an artery*, like the pulmonary artery or the aorta; then, no physiologist since Harvey's time could have helped seeing, that the commencement of the hepatic afferent vessel was subservient to the propulsion of the blood through the liver. The difficulty which physiologists are unable to surmount, consists simply in the hepatic afferent vessel, of which the spleen is the root or commencement, being *different* from the pulmonary and general afferent vessels, of which the two halves of the heart are the roots or commencements. If there had been no difference, there would have been no difficulty; but if the difficulty be commensurate with the difference, then it could not possibly be greater; for the hepatic afferent vessel is diametrically the reverse of the pulmonary and general afferent vessels. Now, if two things are diametrically different from each other, then the uses or actions of those two things, if they have any, must also be diametrically different. The hepatic afferent vessel, then, I repeat, is diametrically different from the pulmonary and general afferent vessels: thus; into the commencement or root of the hepatic vessel—the spleen, arterial branches go—the branches of the splenic artery; but into the commencements or roots of the pulmonary and general afferent vessels—the two halves of the heart—*venous trunks* go—the superior and inferior venæ cavæ and the pulmonary veins. Out of the commencement of the hepatic afferent vessel, *a vein*—the splenic and its continuation, the portal—comes; but out of the commencements of the pulmonary and general afferent vessels, an *artery*—in the one instance the pulmonary, and in the other the aorta—comes. The trunk and branches, therefore, of the hepatic afferent vessels are *VENOUS*; but the trunks and branches of the pulmonary and general afferent vessels are *ARTERIAL*: the commencement or root of the hepatic afferent vessel, is *THE SPLEEN*; but the commencement or root both of the pulmonary, and of the general, afferent vessel, is *HALF A HEART*. As, then, the hepatic afferent vessel is, anatomically, diametrically different from the pulmonary and general afferent vessels, so also must it be *physiologically*. Now we know, that the pulmonary and general af-

ferent vessels, of which the two halves of the heart are the roots or commencements, produce a *constant* and *rapid* motion of the blood, through the capillaries of the pulmonary and general vascular systems; and, therefore, I say, that the hepatic afferent vessel, of which the spleen is the root or commencement, produces—not a constant, but an *intermittent*, and not a rapid, but a *slow*—motion of the blood through the capillaries of the hepatic vascular system. That is my view concerning the spleen, which I will cease to advocate the moment one fact is adduced, and demonstrated, to disaccord with it.

As to Mr. King's own opinion, that the spleen acts as "a sort of safety valve to the portal circulation" "in the same way as the tricuspid valve acts as a safety valve to the pulmonary circulation," I have no remarks to offer; further than that I can perceive neither comparison, nor contrast, between the spleen and the tricuspid valve. But between the spleen and half a heart,—and between the trunk and branches of the hepatic afferent vessel, and the trunks and branches of the pulmonary and general afferent vessels,—yes; and between the *thymic* vascular apparatus, and the *thyroideal* vascular apparatus,—I see an oppositeness, or diametrical difference, both anatomically and physiologically, as plainly as I do between an artery and a vein.

To conclude. Suppose a man is shewn in which direction the North Pole is; ought he not then to be able to point due south? And by the same rule, when a physiologist is shewn that the spleen is anatomically the reverse of half a heart, ought he, if he knows the use of half a heart, to remain ignorant of the use of the spleen?

I remain, Sir,

Your most obedient servant,
JOHN JACKSON,

Sept. 25, 1844.

APPLICATION OF ELECTRIC POWER TO THE BLADDER AND UTERUS.

(To the Editor of the Medical Times.)

SIR,—I shall be glad, if you will permit me, through the medium of your paper, to draw the attention of the profession to my method of applying galvanism and electricity, internally, in some affections of the uterus and of the bladder. It is now long since electricity was recommended as a stimulant in these cases, but the application of it has always appeared to me to have been faulty, which may account for its not having been more successful. It has been usual to pass, what is termed, a shock through the pelvis, by bringing the wires connected with the apparatus into contact with the two opposite sides of the body: now, I believe, that the galvanic current passes by the nerves, even by a circuitous course, in preference to taking a more direct one, through a worse conductor, and that, therefore, the part intended to be acted upon has, in most cases, escaped the influence of the fluid altogether. To remedy this defect in its application, I invented an instrument (one of which I send inclosed,) which I have found perfectly successful. It consists of a glass tube, eight or nine inches in length, and from half to three quarters of an inch in diameter, having a pointed metallic wire running through its centre; one extremity of the tube is covered by a smooth, rounded, silver cap, about half an inch in length, firmly cemented to the glass, against the inner surface of which, the point of the wire makes contact at pleasure; the other extremity of the tube is furnished with a spring box, containing a spiral spring, which breaks the circuit, by throwing out the wire a short distance, whenever the finger of the operator is removed from the ring at the end of the wire, provided for that purpose; this cap and wire ring are covered with silk or varnish, to prevent the hand of the operator from forming a part of the circuit. From this description, it is easy to see that, if the wire ring be connected with one of the poles of a galvanic battery, by means of a long flexible conductor, and the tube introduced into the vagina until the silver cap is in contact with the uterus, or other part intended to be

operated upon, the other pole being at the same time applied, by means of another flexible conductor, to a neighbouring part of the body, externally, a very direct shock may be administered through either the uterus or bladder. I have succeeded, by this means, in establishing the menstrual discharge in chlorotic cases of *emansio*, and in restoring it in cases of *suppressio mensium*, after other means had long been tried unsuccessfully; and also in restoring the tone of the bladder, in a tedious case of retention of urine, after difficult labour, which had resisted all the usual remedies for a fortnight. I use a common, vibrating, galvanic battery, and commence with a low power, gradually increasing it as the patient can bear it. In the case of suppression of urine, last mentioned, the water appeared to be expelled from the bladder with considerable energy, and after three or four applications of the instrument, for a few minutes at once, the patient needed no further assistance; the catheter had been previously required two or three times a day. I will not take up your time longer at present, but if you should think the particulars of the cases, referred to, sufficiently interesting, I shall be happy to furnish you with them, or to answer the enquiries of any of your medical friends upon the subject.

I am Sir,

Your obedient servant,
F. C. GOODWIN, M. D.

Manchester, Oct. 16., 1844

[Our readers may see Dr. Goodwin's instrument at our office.—Ed.]

THE FASCINATION OF SERPENTS.

To the Editor of the "Medical Times."

SIR,—I was somewhat surprised, on reading your number of the 28th ultimo, to find, in an extract from "Schlegel's Physiognomy of Serpents," the *power of fascination* of serpents, "stigmatized as *pretended*," and still more, at the facts and arguments stated, in confirmation of that thesis. The first-mentioned fact given is:—"It is true that most animals appear absolutely ignorant of the danger which menaces them, when they find themselves in the presence of animals as cruel as serpents. We often see them walk over the bodies of those reptiles, pick at their head, bite them, or lie down familiarly beside them." * * * Now, having observed, as far as was in my power, the habits of birds and serpents in tropical climates, I have witnessed nothing to confirm the truth of the above statement, nor do I believe it. What has become of the boasted *instinct*, or, perhaps, *reason* of animals, when they expose themselves, thus wantonly, to so great danger? Not having had the advantage of perusing Mr. Barton Smith's memoir in refutation of what has been advanced on the fascination of the rattle snake, it is not in my power to bring forward any arguments to refute the facts, in the several instances, which he is said to have related; and those, mentioned by Dampier and Russel, that "many tree snakes seize their prey by twisting their slender tails around their victim." I have never had an opportunity of seeing, and, therefore, can neither confirm nor gainsay. But the power of fascination, to a certain extent possessed by the *cobra da capella*, *cobler naja*, exerted on a rat, previously to the infliction of the death-wound by its deadly bite, I have seen. As the history of this fact would demand too much space at present, I shall proceed to narrate an instance of *direct fascination*, practised by a reptile on a small bird, as seen and acted in by myself:

Quaque ipse miserrima vidi,
Et quorum pars magna fui.

if it may be permitted me to say.

In the hot season of the year 1816, while sitting reading in the verandah of the house, then occupied by me on the esplanade at Trinkomalé, in the island of Ceylon, my attention was attracted by the plaintive cries of a small bird, and, on looking in the direction of the noise, I observed, sitting on the top of a low wall which divided the court yard from a tobacco field, at the distance of, perhaps, ten yards, a large *Iguana*, *Lacerta iguana*,

a reptile, probably about three feet in length, with "the dorsal suture denticulated, with a denticulated sac at the throat;" that is to say, with sharp spikes, like a *chevaux-de-frise*, on his neck and back, and on the bag beneath the throat, and altogether a formidable looking creature! A very small bird, of what family I do not know, was flying at a short distance above and about the head of the reptile, which sat with extended jaws, and eyes fixed upon its poor little intended victim, whose circles of flight became less, and nearer the mouth of its *basilisk* enemy, every instant. Being satisfied of what would be the result, and unwilling to see the catastrophe completed, I suddenly descended the steps of the verandah, took up a large clod of earth, threw it at the reptile, which had not been disturbed from its purpose by the movement made, hit and knocked it over into the field, where it lay stunned for an instant, and then ran away among the plants. The poor bird, apparently little larger than the humming-bird, of course flew away, after its escape from a cruel death! If this was not an instance of *fascination*, or perhaps of *mesmerism*, what was it?

If you think the above remarks and narrative, worthy of a place in your excellent and useful periodical, when space may be found, you will much oblige a constant reader and subscriber.

PHILO-FUSIS.

Lisleux, Calvados, France, 2d October, 1844.

DR. COSTELLO AND THE ROYAL FREE HOSPITAL. (No. 1.)

To the Editor of the "Medical Times."

SIR,—By your publishing in your last number a reiteration, from Dr. W. B. Costello, of his connexion with the Royal Free Hospital, I presume that you have not read a joint note from Mr. Greville Jones, Mr. Gay, and myself, in one of the Medical Journals in which we, as surgeons of that hospital, denied the fact of Dr. Costello holding the appointment he professes to have been elected to in that institution.

I beg leave now, on my own part, through your pages, to repeat that there is no such officer as that of "Surgeon-lithotritist to the Royal Free Hospital;" hence the designation of myself and some others as his "*colleagues*," in Dr. Costello's last paper, was a liberty which no person actuated by honourable feelings would have presumed to have taken.

After your attention has been thus drawn to the subject, I am sure that your own sense of gentlemanly propriety will no longer allow you to lend your columns to the dissemination of erroneous statements; statements which, in the long run, cannot but redound to the discredit of the writer.

I am, Sir,

Your obedient servant,
WILLIAM ECCLES.

Old Broad Street, 15th Oct., 1844.

(No. 2.)

To the Editor of the "Medical Times."

SIR,—In the last number of your journal, Dr. Costello has announced me as one of his *colleagues*. Will you do me the justice and favour to state, through the medium of your pages, that I am not a *colleague* of, nor in any way connected with, Dr. Costello.

I am, Sir,

Your obedient servant,
JOHN GAY.

12, Pavement, Oct. 12th, 1844.

[We have read these two "much ado about nothing" notes with more pain than we can express. As Medical Journalists, anxious for the high standing of our brethren and for peace among men of good will, we avow that we know of no less agreeable mode that could have been adopted for informing us that there really is a Mr. William Eccles, of Old Broad-street, and a Mr. John Gay, of the Pavement, both veritable surgeons to a public institution; and we cannot but consider it most unfortunate that the literary

achievement which should first present their names to the astonished notice of our readers, should have been this easy and self-complacent assumption of consequence over one whom—if we mistake not—the unanimous voice of surgeons throughout Europe places in a somewhat different order of scientific merit. Were we ill-tempered, we might say, and perhaps with some justice, that, apart from this high-minded attempt to wound the peace of a professional brother in the busy service of a small vanity, public eulogy is exhausted when it proclaims that Mr. John Gay, of the Pavement, and Mr. Wm. Eeles, of Broad-street, passed the London College of Surgeons. But let us go farther, and suppose these gentlemen to be all that their fondest friend thinks. Are they yet the sort of men entitled to look down on the surgeon, whom, appraised by the correct standard which makes them important personages, they blindly assail as that unfortunate gentleman—their inferior? If we are not mistaken, Dr. Costello was for nearly two years the attached pupil of Dupuytren, for seven years the bosom friend of Gall; and, with some people, the respect and confidence of a Gall and a Dupuytren, would serve as a fair set off to the *indescribable* contempt of even a Gay or an Eccles. Dr. Costello acquired also the difficult distinction of a physician's diploma in the most distinguished of medical universities—that of Paris; is a Licentiate of the Edinburgh College of Surgeons, and London College of Physicians; has been crowned for a medical work by the French Academy of Medicine; conducted the Editorship of a Cyclopedia of Surgery, whose value as a scientific work can hardly be over-estimated; and may, finally, claim to be recognized as, if not the very best, at least, one of the two best, operators for lithotomy in Europe. Now, if Messrs. Gay and Eccles have so queer a notion of the claims of gratitude or of themselves that they think their scientific reputation injured by being called "Colleagues" by such a man—all we can hope is that they will get the public to think so too, for no better luck could befall them than to be taken at their own estimate—or us than that they should be worth it:—the world will be all the richer if they are the two Hunters ("inglorious" though not "mute") they would have us, after their own non-contagious example, think them. One word for Messrs. Gay and Eccles' second hallucination, which more modest, though less harmless, than the first, has reference to a matter of fact. Announcing first that the notice of Dr. Costello, as "Surgeon Lithotomist to the Royal Free Hospital," was our work and not his—and we claim an Editorial privilege to preface papers with the author's fitting titles—it does strike us as somewhat singular that in this tragedy of "Drunken Denmark," Hamlet is so completely swallowed up in the grave-diggers. The surgeons of the Royal Free Hospital are constantly supposed on the stage, and there is no Mr. Marsden! Now, do Messrs. Gay and Eccles know no more of Mr. Marsden than their letters? Is their memory of *past* favours so bad that we must acquaint them that he is not only the principal surgeon, but the founder, and if gratitude and administrative tact have weight with the Governors, the principal director of the Institution? Now, does he disclaim Dr. Costello as his colleague? If he do, why is he, the *principal*, silent?—if he do not, why are the *subordinates* loquacious? But we go further, and ask has he not appointed beds for the operation of lithotomy, under Dr. Costello? Has he not introduced Dr. Costello to superintend operations in lithotomy? Have not operations been performed? Have not Messrs. Gay and Eccles witnessed them? And may the short statement of facts not be that the appointment of Dr. Costello (from the absence of a London surgical diploma) has necessarily waited for a short time the official ceremonies necessary to turn it from a *de facto* to a formal surgeonship, and that Messrs. Gay and Eccles, aware of this small matter, have, with some ill-taste, and much ill-feeling, availed themselves of the silly quibble for the purpose of causelessly mortifying and injuring a worthy and inoffensive professional brother. We close this singularly disagreeable squabble with the hope

that Messrs. Eccles and Gay will select a more benevolent occasion for their next display of officiousness and mistaken zeal. Each may be as great a man as he writes to us that he is—but the old advice applies all the better,

Nec Deus intersit nisi dignus vindice nodus Inciderit. —ED.]

PENCILINGS OF IMMINENT MEDICAL MEN.

DR. LETTSON.

(Concluded from page 42.)

What is the measure of his value, who, in the midst of this world of men and women, hurrying to and fro on the one errand of individual interests, throws his life into the common treasury of mankind with a freedom that would put to the blush the general mode of parting with so small a matter as a contribution to a poor's-box? For the worth of such a man, there is no measure. It is endless as his own desires and efforts for the well-being of humanity. The miraculous descent of the angel into the pool of Bethesda could hardly have been matter of more interest to the blind, the halt, and withered, that crowded its five porches, than the visits of a man like this to those unhappy regions where poverty and disease found a world of their own as distinct, as completely cut off from the other, as if the beings who composed it were wholly of a different creation, and the places themselves a portion of a different globe. He is the benefactor of all grades; for Charity, or Love, is not merely the giving of alms, but the giving of relief; by money, or by sympathy, or no matter in what shape it shows itself, the principle is one;—surpassing Faith; surpassing Hope, the sister and helpmate of Faith; because it is the groundwork of them both. Addressing itself to the cure of mind and of body, like a consummate physician it leaves surgery to the last; never wounding, if the cure can be effected otherwise; and when necessity demands the knife, by every appliance in its power preparing for the ordeal, and soothing when it is past. There is truly as much charity in the manner as the act. How fully this was appreciated by Dr. Lettson, one may trace in the following extract from his "Life of Dr. Fothergill:"—

"One instance," (of Fothergill's benevolence) "amongst others, I am urged to communicate here, as death now equally precludes the power of bestowing, and the gratitude of acknowledging, future bounties. Captain Carver is a name known in the annals of misery, to which he was reduced by long-continued want. Disease, its natural consequence, gave him access to Dr. Fothergill; and, I am informed by his widow, that, as often as he applied for medical relief, the Doctor as often accompanied his prescription with a liberal donation. But Captain Carver was not an importunate solicitor. The mind not hardened by familiarity of refusal, or that hath not acquired, by frequent struggles, the art of suppressing its emotions, possesses that diffidence, which is the inseparable associate of worth. Between diffidence and want, many were the struggles of Capt. Carver; but, overcome at length by frequent acts of the Doctor's generosity, a jealous suspicion of becoming troublesome to his benefactor, determined him to prefer that want, from the deprivation of the necessities of life, which put it out of the power of his choice; death soon tramples over famine. What a conflict of sullen greatness does this tragedy exhibit! When his fate was communicated to the Doctor, how tender was his expression! 'If I had known his distress, he should not thus have died!'"

"The King has since graciously condescended to allow the widow Carver an annuity."—Pity, that the grace was not granted in the lifetime of the deserver. Pity, that royal reward of letters, so scanty at its utmost in its individual regard, should so seldom be extended; and even when it is, should be stained by the compulsion that merit is subjected to, of intriguing for its due!—"The unfortunate husband was only known to me on his death-bed. In the early stages of his disease, he was able to wait upon Dr. Fothergill; but in the

progress of it, being confined to his bed, the Doctor requested me to visit the Captain at his lodgings; and my first interview was within three days of his decease. It was after his funeral that I felt myself more immediately interested in the succour of the widow and orphans. As the Captain died penniless, he was buried, to avoid expense, in the poor's ground, a part of the churchyard usually appropriated to the abject poor. When I reflected upon the utility of his travels, I considered him as a public loss, and his offspring as the children of the public; and I presented the widow with a few pounds to clothe and feed herself and children. But the money thus designed to satisfy her hunger, she employed otherwise: she had the corpse of her husband taken out of the poor's ground, and buried in ground containing the ashes of higher company; and over it she raised a decent monument to his memory. His travels, however, will prove a more durable monument than stone: and, though the dust with which we are mixed avails not to the living or to the dead, yet I was sensibly touched with this instance of posthumous affection, and have since endeavoured to mitigate the miseries of a mind endowed with such tender sensibilities."

Dr. Lettson appears throughout life to have felt acutely for those who, from a position of independence, had fallen into poverty. No doubt their pain is greater than theirs who have been born and educated within its sphere, even, perhaps, though the latter may never have been much pressed by its necessities. We have not all the strong mind to resist the dejection that comes with reverses. The altered carriage of a friend proves him worthless as a friend, and the natures of some men will see nothing more than his baseness,—but will feel themselves rise upon the slight—become rather exalted than depressed. Such are rare instances. The run of mankind sink with their fortunes. The wound of a knife would be preferable to many of these, especially the more virtuous, to the averted glance of a former acquaintance. It is extraordinary it should be so; but it is: and one may, without libelling human nature, ask the question, whether the majority of men would not rather be called "bad," than "poor?" Education makes no difference in this. It is a failing as apparent in the informed as the ignorant; and more so, for their circumstances afford more opportunities for the "slur." Those only who are born with much rule over their dispositions, or have acquired it, are free from this prolific source of misery; an observation which would lead one to believe that our system of education is fundamentally wrong, for another and a stronger reason than its obstinate attachment to dead languages; and that, in the absence of daily exercise of the inclination till it becomes subjugated to reason, all cultivation of the reason, or the intellect, does but little to advance the happiness of the race. The instruction of the mind in the philosophy that is to govern the heart to a virtuous and profitable end, is deferred until a time when the heart has taken its own bent, and is always difficult, and mostly impossible, to be moved. While, however, that system is wanting, by which liability to the miseries consequent on a thousand revolutions we meet with in life, would be very much prevented, the next best thing to fall back upon is the kindly offices of the generous heart. Would, for the happiness of the world, there were a few more men like our admirable Dr. Lettson!

"In 1782, he was sent for to visit an old gentleman, seventy-four years of age, who resided in the county of Essex. This gentleman had been a great American merchant; he had kept a princely house, and his heart was literally made up of generosity. The American war ruined him; but his creditors, valuing his upright character, permitted him to reside at his house in the country, with a genteel allowance, until his affairs could be settled. The protracted American war destroyed the prospect of retrieving his affairs; his allowance was, therefore, taken away. He fell sick, and consulted Dr. Lettson. When the Doctor visited him, the gentleman said to him, pointing to his garden, 'Those trees I planted, and have lived to see some of them too old to bear fruit. They are part of my family; and my children, still dearer

to me, must quit this residence, which was the delight of my youth, and the hope of my old age!" The Doctor, upon quitting the apartment, left, enclosed in a letter, a cheque to relieve his immediate necessities. He also purchased the house—which was freehold—for £500, and gave it him for life. The poor merchant's health was restored; his garden continued to be the object of his love, and a source of delight to his old age; and he daily blessed his worthy benefactor."

Rare are the examples of such charity as this: done so completely; with such delicacy. With what beauty this quality irradiates the character of man!

It is not, however, to be supposed that our worthy Doctor was ignorant that severity is needful now and then, and often as a positive ingredient of benevolence.—It is related of him, that he was in the practice of carrying the produce of his fees carelessly in his coat-pocket. His footman, being aware of this, used to make free with a guinea occasionally, while the coat hung up in the passage. The Doctor, having repeatedly missed his gold, was suspicious of this footman, and took an opportunity of watching him. He succeeded in the detection; and, without even noticing it to the other servants, called him into his study, and coolly said to him: "John, art thou in want of money?" "No," replied John. "Oh! then, why did'st thou make so free with my pockets? And since thou did'st not want money, and hast told me a lie, I must part with thee. Now, say what situation thou would'st like abroad, and I will obtain it for thee; for I cannot keep thee. I cannot recommend thee; therefore, thou must go." The Doctor procured John a situation abroad, and he went.

Yet, even here, the grand principle was at work. What the effect of such indulgence was on the mind of the delinquent, afterwards, is not told; was, most likely, unknown.—In the following anecdote we have another practical evidence of the Doctor's belief that

"Earthly power doth then shew likest God's,
When Mercy seasons Justice!"

"It was my lot, a few years ago," (Dr. Lettsom relates the adventure himself,) "to be attacked on the highway by a genteel-looking person, well mounted, who demanded my money, at the same time placing a pistol to my breast. I requested him to remove the pistol, which he immediately did. I saw his agitation, from whence I could perceive he had not been habituated to this hazardous practice; and I added that I had both gold and silver about me; which I freely gave him; but that I was very sorry to see a young gentleman risk his life in so unbecoming a manner, which would probably soon terminate at the gallows: that, at the best, the casual pittance gained on the highway, would afford but a precarious subsistence; but that if I could serve him by a private assistance, more becoming his appearance, he might further command my purse; and, at the same time, I desired him to accept a card containing my address, and to call upon me, as he might trust to my word for his liberty and life. He accepted my address, but I observed his voice faltered: it was late at night; there was, however, sufficient star-light to enable me to perceive, as I leaned towards him, on the window of the carriage, that his bosom was overwhelmed with conflicting passions: at length, bending forward on his horse, and recovering the power of speech, he affectingly said: "I thank you for your kind offer,—American affairs have ruined me;—I will, dear Sir, wait upon you."

The man kept his word; and Lettsom finding, on enquiry, the account he gave of himself to be correct, after making an unsuccessful application in his behalf to the Commissioners for relieving the American sufferers, presented a memorial on the subject to the Queen, who, it is said, procured the man a commission in the army; and his name subsequently appeared on two occasions in the *Gazette*, for promotion, on account of good conduct.

In religion, Dr. Lettsom was of the persuasion of the Quakers. It is not to be thought, though, that he any more than any other man of large and benevolent understanding, was bigoted to his

creed. He himself has given a very brief, but very graphical, account of the growth of his mind upon this subject. "I was born," he says, "a Quaker, and, what is still more strange, I was born so within the tropics. I was brought up in notions which encouraged ideas of a favorite people; of a little remnant; of a chosen few, and such like narrow principles. As I loved reading, I acquired the power of thinking; and considering that all our society together, compared to the universal creation, was in less proportion than a grain of sand to the great globe, I entertained more ample notions of the universal parent." Had not his mind taken this happy and liberal bias in his youth, how much of the good wherewith he afterwards benefitted the world would have been lost, is a question worth solving. And how many are turned from the contemplation and adoption of a course of universal benevolence and good-will towards men, by the influence of a heggarly prejudice in favour of a few intrinsically unimportant opinions, is worth thinking of also.

Lettsom was undoubtedly happy in his education under men of amiable natures; especially in the case of Samuel Fothergill, as noticed in the introduction of this sketch. The first cause of Fothergill's interest in Lettsom, was his seeing him, when a lad of seven years of age, go through a negro dance. The Quaker minister looking on, with his grave face relaxed into an expression of delight at the simple performance of the child, is a picture of rare beauty. He can scarcely be a bad man that can take pleasure in such objects. From this time Fothergill took upon himself a joint trust with Lettsom's guardian, and throughout most faithfully fulfilled it. Lettsom was not ungrateful. It was impossible he should be, with his nature.

His recollection of his old master, Sutcliffe, does him great honour. After settling in London, he sent him repeated invitations to visit him, offering a hundred pounds to defray his expenses. At length Sutcliffe came, ignorant what welcome his former apprentice had provided him beforehand. He stated his desire of retiring from his practice at Settle, in favour of his son, and of commencing practice himself, as a physician; but apprehended the difficulty of obtaining a diploma as a bar. In reply, Lettsom drew forth, and put into his hands, a diploma, procured with a view to greet the worthy instructor of his youth. "My lad," exclaimed Sutcliffe, with tears in his eyes, "this is more than I know how to acknowledge."

Strange, indeed, would it have been, if a man of so pure, so charitable, a life had escaped calumny. He who would conciliate the good opinion of the world, must not dare to injure it in its own! The charge of vanity has been raised. Let us believe Dr. Lettsom was open to it—what then? There are spots in the sun; but there is not everywhere that light of virtue, which dazzles so that the hlemish is lost sight of. Doubtless, there is no man perfect; and since in every one some fault must occur, a little vanity, when there is great virtue for its ground, is as pardonable as any.

With an apothegm of his own, we conclude this sketch. Not intended for the light, it gives, therefore, as far as it goes, a faithful idea of his mind, and shews its caste, as would fully be expected, of a tendency moral and philosophical.

"Methinks the state of man is not unlike that of a fish, hooked by an angler. Death allows us a little line; we flounce and sport, and vary our situation; but when we would extend our schemes, we discover our confinement; checked and limited by a superior hand, who drags us from our element whensoever he pleases."

STATE OF PROFESSIONAL FEELING.

At a meeting of the Medical Profession, Oxford, J. Symonds, Esq., in the chair—the following resolutions were passed:—

I. That this meeting recognizes the necessity of some legislative enactment "for the better regulation of medical practice throughout the United Kingdom," and is, therefore, thankful for the opportunity afforded by Sir James Graham of examining the details of a bill recently submitted to Parliament and the profession for that purpose.

II. 1. That the establishment of a "Council of Health and Medical Education," if justly constituted; 2. The gene-

ral registration of all qualified practitioners, if compulsory; 3. The medical examination and certificate by the College of Physicians; 4. And the "uniformity of qualifications and fees for testimonials,"—are propositions severally entitled to the approbation and support of the profession.

III. That though certain provisions of the proposed Act are of themselves desirable, yet the omission of any clause for the suppression of unqualified practice is regarded by every member of this meeting as most injurious to the public health, and unjust to the regular practitioners; for, although the title of the Council implies care for the public health, and control over those to whom it is entrusted, yet, by the toleration of empiricism, that care is abandoned to those who are denounced in the preamble as "ignorant and unskilful pretenders."

IV. That as no legislative measure can be considered complete and satisfactory without some efficient restriction upon the practice of the unqualified, it is the decided opinion of this Meeting that a penal clause, easily applicable by summary process, is required to render the bill acceptable to the profession and beneficial to the community.

The speakers were: Messrs. G. Hitchings, T. Cheate, H. Lupton, T. Allen, H. T. Palmer, F. Whittaker, — Barratt, J. F. Wood, J. R. Holmes, and S. Walker.

A Medical Meeting was also held at Crosby Hall by the Tower Hamlets Medical Association. Dr. Cook took the chair. The speakers (who went at the Bill tooth and nail) were: Dr. Ansell, Mr. Toulmin, Mr. King, Mr. Liddle, Mr. Wallace, Mr. Byles, Mr. Forster, Dr. Ward, Dr. Barrett, Mr. White, and Mr. Self. The burden of the speeches were: "protection—protection—protection!"

On Friday last, a full meeting of the medical profession of Bristol, was held in the theatre of the Philosophical Institution. Mr. W. Mortimer, was called to the chair.

Dr. Symmons, said he thought they were greatly indebted to Her Majesty's Government, for having introduced the measure. Sir James Graham was the first Minister of the Crown who had brought forward so general and extensive a measure of medical reform. He thought the bill, as a whole, had been carefully framed, though it was faulty in some of its clauses.

Dr. Symmons moved the following resolution:—

"That this meeting has great pleasure in expressing its obligation to Sir James Graham and her Majesty's Government for bringing before the Legislature the long-aggitated question of medical reform, and also for laying the 'Bill for the better Regulation of Medical Practice throughout the United Kingdom' on the table of the House of Commons, so that it may be well considered by the medical profession during the Parliamentary recess."

Mr. Colthurst having seconded the resolution it was carried unanimously.

Mr. J. C. Swayne, moved;—

"That this meeting cannot concur in the justice or propriety of abolishing the existing enactments against unqualified practitioners, upon the plea of their inefficiency, but urges the practicability of making the law in this respect more simple and effective."

Mr. Staples seconded the resolution, which was passed unanimously.

Mr. Waldo moved the third resolution:—

"That this meeting considers the appointment of a 'Council of Health and Medical Education' to be highly advantageous, but that its constitution is unsatisfactory, inasmuch as the 'Licentiates of Medicine and Surgery are not adequately represented.'"

Carried unanimously.

Dr. O'Brien moved the fourth resolution:—

"That this meeting views with much satisfaction the beneficial results that must accrue from an authorized register of licensed practitioners, especially if such be compulsory and published annually."

Carried unanimously.

Mr. Simerdon proposed, and Mr. Stanton seconded, the fifth resolution, which, after some discussion and the addition of some words, was passed in the following form:—

"That this meeting believes the penal clauses will be inoperative in defending her Majesty's subjects from the mischievous practices of ignorant and unskilful pretenders, as expressed in the preamble of the bill, unless they include all those who act in the capacity of a medical man without legal qualification, for the purposes of gain. And that we hereby call on the Government to introduce a stringent clause into their bill prohibiting unauthorized practice by a penal enactment, to be carried into effect by some cheap and easy proceeding before a bench of magistrates, or by any other mode easy of access."

At a meeting of the Medical Profession of Chester and the surrounding Districts, convened for the purpose of taking into consideration the provisions of a Bill introduced into Parliament by

Sir James Graham, "For regulating Medical Practice throughout the United Kingdom," which was held at the Chester Infirmary, on Thursday, Oct. 10th, 1844 :—

Present :—Dr. Thackeray in the Chair ; Dr. Llewelyn Jones, Mr. Dobie of Gresford, Mr. Brierly of Tattenhall, Mr. Bromfield, Mr. Bage, Dr. Phillips Jones, Dr. Davies, Mr. Moffatt of Hawarden, Mr. Weaver, Mr. John Harrison, Mr. Hamilton, Dr. Edwards, Mr. Hodson, Mr. McGregor of Farndon, Dr. Williams of Mold, Mr. Lilly, Mr. Willmott, Mr. Leete, County Asylum, and Mr. Brittain, Honorary Secretary.

The following resolutions were adopted :—

1.—It is the opinion of this meeting, that the present state of the Medical Profession requires numerous and speedy amendments; and whilst we cordially admit that many of the proposals made by Sir James Graham would materially effect desirable and extensive improvements, still we conceive that there should be appended to the bill a decisive protecting clause, to punish the unqualified, and to protect the public from the practices of untaught and unskilful pretenders.

2.—That this meeting do resolve to present petitions to both Houses of Parliament, embodying the substance of the preceding resolution, and that the following be the form of the petition :

The Petition of the legally-qualified Medical Practitioners of Chester and its Neighbourhood, present at a Meeting held in the Board Room of the Chester Infirmary, Oct. 10th, 1844.

HUMBLY SHEWETH,

That your petitioners deploring the present anomalous condition of the Medical Profession throughout the United Kingdom, and concurring in the expediency of its revision by the Legislature, whilst they hail with satisfaction certain general measures relating to the education and government of the Profession, as contemplated in the Bill introduced into Parliament by Sir James Graham, they yet feel called upon to protest against those clauses which involve the removal of restrictions upon unqualified practice, and PRAY that if it should be thought expedient to repeal those Acts which afford any protection to the Profession, such stringent clauses may be introduced into the present Bill, as shall prevent all unqualified persons from engaging in the practice of medicine and surgery. Your petitioners, therefore, most humbly appeal to your honourable House to take the matter into your serious consideration.

And your petitioners, as in duty bound, will ever pray, &c.

3.—That the Most Noble the Marquis of Westminster be respectfully requested to present the Petition to the House of Lords; and that the City Members be respectfully requested to present it to the House of Commons; and that they, together with the County Members, be solicited to support the prayer of the same.

4.—That copies of the Petition, together with the resolutions adopted at this Meeting, be sent to each Member of Parliament in the County and North Wales; and likewise to the Medical and Chester Papers.

5.—That a Committee be appointed to carry into effect the resolutions adopted at this Meeting, and that all expenses contingent thereupon be defrayed by a subscription among the members.

That the following gentlemen form the Committee :—Dr. Thackeray, Mr. Weaver, Dr. Phillips Jones, Mr. Hamilton, Dr. Edwards, and Mr. Brittain; and that the latter gentleman be requested to act as Secretary.

6.—That the best thanks of this Meeting be given to Dr. Thackeray for the courteous and able manner in which he has presided over the Meeting.

PERISCOPE OF THE WEEK.

VICARIOUS MENSTRUATION FROM A FUNGUS GROWTH OF THE DENTAL PULP.—Mr. S. P. Hullihen mentions the following case in the *American Journal of Dental Science*. Some time since, a young lady, about seventeen years of age, applied to him with a fungous growth in each of the second molars of the under jaw, which had assumed rather a novel character. She stated that the fungi made their appearance in both teeth at the same time, about four years before, and that for the last two years she had been much troubled with a bleeding from them, which occurred regularly once a month, and continued several days. She being anxious to have the teeth preserved, he destroyed the morbid growth to all appearance, and plugged the teeth.

In a few days they became sore and painful; the plugs were removed, and a slight bleeding commenced, which continued for three or four days, and then the tumours entirely disappeared. He was then induced to plug them again; but in about three weeks the teeth became sore, the plugs were removed, and a bleeding ensued as before. He then suspected it to be a case of vicarious menstruation, which it proved to be, and mentioned it to the family physician. At his request he plugged them again, and the result was precisely the same as before. The teeth were then removed, and the patient was put under a course of treatment by her physician, which effected a cure.

FACIAL NEURALGIA.—In the *Lancette Francaise*, is detailed the case of a toothache which presented itself a short time back at the consultation of M. Velpeau, suffering intensely for eleven years with facial neuralgia. He bore unequivocal marks of blisters, moxas, and setons having been applied in great numbers, and had moreover taken a prodigious quantity of Meglin's pills. Some surgeon had attempted a cure of the complaint by dividing one of the branches of the tri-facial nerve, and he had extracted (as has often happened) all the teeth of the upper jaw on the affected side. After examining him it was found impossible to devise any method that had not already been fruitlessly employed, when M. Pajol, a young physician, thought of asking him if he had ever been the subject of lues venerea. He admitted that he had had a bubo, for which he had not undergone a specific treatment. Upon this intimation, M. Velpeau prescribed for him a treatment with the proto-ioduret of mercury. By the employment of this remedy the man recovered, and did not again suffer from neuralgia. It is very probable that many osteocephalic pains are nothing else than syphilitic neuralgia, particularly when it is remembered that they sometimes yield in a miraculous manner to the application of several blisters to the part affected, as M. Ricord has fully established; and that, where the blister has not succeeded, a deep incision over the seat of pain has answered the same intention. The efficacy of repeated blisters against neuralgia is well-known, and Dr. Marchal, of Calvi, has shown that in certain cases of cranial neuralgia, a deep incision of the parts has had a most prompt and sedative effect on the pains.

OBSTINATE HÆMORRHAGE FOLLOWING THE EXTRACTION OF A TOOTH.—Dr. J. Hartmann states in the *Neumeister's Repertorium*, that a man of robust and vigorous constitution who had ten years previously had an incisor tooth in the lower jaw extracted, followed by obstinate hæmorrhage, had another incisor tooth of the same jaw removed, shortly after which profuse hæmorrhage occurred, and continued in spite of medical treatment, for five days, when he was conveyed in a state of great exhaustion to the general hospital at Vienna, where Dr. Bataffa, surgeon in chief of the district, determined to have recourse without delay to compression, which he practised in the following manner :—he prepared a cone, made with wax, the thickness of which corresponded with the diameter of the alveolus; this he soaked in a styptic mixture and then introduced it into the cavity. He afterwards applied two flat pieces, prepared from the same mass, of sufficient extent to cover over the alveolar orifice, and then placed over the whole a square plate, maintaining it *in situ* by a narrow bandage, conducted transversely in the direction of the angles of the mouth, and inclined downwards to the chin. In this place the bandage was drawn towards the occiput, in a line with the vertex, and terminated by being carried round the forehead. The patient was enjoined to preserve absolute repose of mind and body. A potion was prescribed for him, composed of barley-water, acidulated with *Haller's acid elixir*, and administered through a funnel. The hæmorrhage was arrested, and the patient rapidly regained his strength. After the third day the apparatus was removed without a return of the bleeding, and he left the hospital on the sixth day, cured.

EXTIRPATION OF THE SUPERIOR MAXILLARY BONE.—According to a statement in the *Revue Clinique*, M. Lisfranc recently performed the operation for the removal of the right upper jaw bone, in a case of cancer affecting its structure.

The first incision commenced at the external commissure of the lips, and extended to the middle of the malar bone. A second was made along the side of the nose, from the lip to the internal angle of the eye, so as not to injure the lachrymal sac. The flap having been raised up, the parts on its inner side, namely, the nose and the middle of the lip, were detached from the subjacent bones, and pushed on one side, in order to gain as much light and room as possible. The bone being much softened, the operation could not be completed in the ordinary way. The vault of the palate was divided with a chisel, the use of which M. Lisfranc prefers to that of the chain-saw, the former instrument acting more rapidly; after which, the extirpation of the diseased parts was accomplished by the scissors, the forceps, and the fingers. The operation was performed with remarkable promptitude and skill, and was unattended by any serious hæmorrhage.

INSANITY CAUSED BY EXCESSIVE DRINKING, FOLLOWED BY ANASARCA.—M. Brière de Boismont narrates, in the *Gazette Medicale*, the case of a foreigner, fifty years of age, of middle size, and lymphatic temperament, who had contracted a habit of drinking to excess, so that two or three bottles of brandy would be swallowed in a few minutes. These repeated excesses brought on an attack of delirium tremens eight years ago, which left a weakness of intellect. For some months past he required to be watched every moment; if he was lost sight of for a moment, he escaped, entered the first wine shop that presented itself, and left his watch, hat, or waistcoat, to pay his expenses. After one of these debauches, he was brought to M. Brière's establishment. His face was thin, his complexion yellow, his eyes dull, and without expression; tongue white, and no appetite. To all questions addressed to him, he replied "wine, brandy!" and put himself in a passion when he did not get what he wanted. At night he was quiet in bed; his step was firm, and there was no trembling in his limbs. The memory was weak, and he required to be told a thing twenty times before he could remember it. During the first three days he took little food, and coloured water was given him to drink. By degrees he got accustomed to the house, eat like the rest, and no longer asked for drink. Two months after his entrance, his appetite diminished daily. The face became lean, and assumed an earthy colour: he remained motionless in a corner; and his legs became, soon afterwards, anasarcaous. The horizontal position, nitrous drinks, and purgatives were prescribed, the infiltration began to diminish somewhat, and it then became stationary. The nitrate of potash in large doses and purgatives were given, and compression was also employed, thereby producing some amelioration. The loss of appetite, however, remained the same, and he continued to emaciate. His appearance gave indications of a serious organic attack. The mode of treatment hitherto pursued having produced little good, and the disease progressing, the dropsy was regarded as owing to deprivation of the habitual stimulants; consequently half-a-bottle of wine at each meal, with a glass of brandy, was prescribed. Scarcely had he been under this treatment eight days, when a most remarkable change was produced in his whole being. The effusion diminished, the physiognomy improved, the appetite returned, and, without having recourse to bandages, the swelling was radically cured in less than a fortnight. Isolation, and the moderate use of fermented liquors, had a favourable effect on his intellect. This patient, who had been the subject of complete dementia, a year after his admission could converse reasonably, although his ideas upon certain subjects were weakened. His memory, which seemed lost, eventually recovered almost all its strength. He related the events of his life, described the processes which he had observed in the arts, and desired to return to his family. One hallucination remained. Every day at three o'clock he saw his wife come into the room—she spoke to several persons in the house, but never addressed him. He has left the establishment quite cured; but it is pretty nearly certain that his *penchant* for spirituous liquors will occasion a relapse.

COLLEGE OF SURGEONS OF ENGLAND.

FINANCES.—The RECEIPT and EXPENDITURE of the College, in the Year from the 30th of June, 1843, to the 30th of June, 1844, were as follows, viz.:—

The RECEIPT amounted to £12133 6s. 9d. from the following sources of Income, viz.:—

Court of Examiners	£9486	0	0
Release of Member	10	10	0
Sale of Lists of Members, Catalogues, &c.	77	17	6
Sale of Duplicate Specimens	117	14	0
	£9692	1	6
Dividends on Investments in Government Securities	1463	15	3
	£11155	16	9
Sale of £1000 Three per Cents. Reduced Stock	977	10	0
	£12133	6	9
Balance in the hands of Bankers on the 30th of June, 1843	1405	8	5
	£13538	15	2

The DISBURSEMENTS amounted to £13230 6s. 7d. divided under the following heads, viz.:—

I. College Department—including Council, Courts of Examiners, Auditors, Diploma Stamps, Collegial Prize, List of Members, Salaries, Wages, Coals, &c.	£5915	8	11
II. Museum Department—including Catalogues, Specimens, Spirit, Bottles, Stationery, Studentships, Salaries, Wages, &c.	4714	4	6
III. Library Department—including the purchase and binding of Books, Salaries, &c.	940	5	8
IV. Miscellaneous Expenses—including Taxes, Insurance, Furniture, Law Expenses, &c.	1115	5	8
V. Repairs and Alterations	276	0	10
VI. Expenditure under Deeds of Trust—including Hunterian Oration, Lectures, and Jacksonian Prize	269	1	0
	£13230	6	7
Balance in the hands of the Bankers, 30th June, 1844	308	8	7
	£13538	15	2

SUMMARY.

Incidental Income	£9692	1	6
Permanent ditto	1463	15	3
	£11155	16	9
Incidental Expenditure	£9068	0	1
Permanent ditto	4162	6	6
	£13230	6	7

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 526.)

POTION, ALKALINE GUMMY: ten to sixteen grains of sub-carbonate of potash, dissolved in eight ounces of solution of gum, and sweetened with six drachms of syrup of white poppies. Mode of exhibition—by spoonsful every hour, in the treatment of puerperal peritonitis.

POTION, ANTHERMINTIC: one ounce of syrup of Corsican moss, four ounces of distilled camomile water, two drachms of tincture of jalap, mixed together. Mode of exhibition—by spoonsful during the day.

POTION, ANTAACID (Chevalier): five ounces of distilled water, four drachms of mint water, three drops of liquid ammonia, mixed together. To be taken in two doses in cases of acidity.

POTION, ANTIDYSENTERIC (Richter): eight grains of the alcoholic extract of nux vomica, dissolved in six ounces of water, to which is added, one ounce of mucilage, and one ounce of syrup of marsh-mallow. Mode of exhibition—two spoonsful every hour.

POTION, ANTI-EMETIC OF RIVIERE: half a drachm of bicarbonate of potash, dissolved in three ounces of water, and sweetened with an ounce of simple syrup. Mode of exhibition—a spoonful to be taken every ten minutes, and a coffee-spoonful of lemon juice immediately afterwards. Used in cases of spasmodic vomiting.

POTION, ANTI-GONORRHEAL (Delpech): one ounce of mint-water, one ounce of orange-flower water, one ounce of syrup of lemons, one ounce of resin of copalba, one drachm of sulphuric acid, and a sufficient quantity of gum tragacanth, mixed together, secundum artem. Mode of exhibition—in the same way as Chopart's potion.

POTION, ANTI-SCORBUTIC: one ounce of syrup of bark, four ounces of fumitory water, two drachms of spirit of horseradish, mixed together. Mode of exhibition—a spoonful every hour.

POTION, ANTI-SCROPHULOUS: one drachm of sub-carbonate of soda, dissolved in three ounces of camomile water, to which is added, one ounce of syrup of gentian, and one drachm of tincture of bark. Mode of exhibition—by spoonsful during the day.

POTION, ANTI-SPASMODIC: one ounce of syrup of orange-flower, two ounces of distilled lettuce water, two ounces of distilled linden-water, thirty drops of sulphuric ether, ten drops of Sydenham's laudanum. Mode of exhibition—by spoonsful every hour or two, the bottle being shaken each time.

POTION, ANTI-SPASMODIC (Form. Hosp. Paris): four drachms of syrup of opium, two drachms and a-half of simple syrup, four drachms of orange-flower water, three ounces of common water, half a drachm of sulphuric ether. Mixed together, in the order above described, each article having been carefully weighed, and kept in a well-stoppered bottle. Mode of exhibition—as above.

POTION, ASTRINGENT (Hospital St. Antoine): two drachms of powdered bistort root, one ounce of syrup of quinee, rubbed together in a porcelain mortar, and two drachms of tincture of catechu, and four ounces of water added. Mode of exhibition—by spoonsful every hour, in the treatment of hemorrhages, atonic mucous discharges, &c., the bottle being shaken each time it is used.

POTION, WITH THE HYDROBROMATE OF POTASH (Maugé): twelve grains of the hydrobromate of potash, dissolved in three ounces of lettuce-water, to which one ounce of syrup of marsh-mallow is added. Mode of exhibition—by tea-spoonsful in the four-and-twenty hours, in scrophula.

POTION, SEDATIVE: two ounces of lettuce-water, two ounces of linden-water, one ounce of syrup of diacodium, two drachms of orange-flower-water. Mode of exhibition—a spoonful every hour.

POTION, WITH THE WHITE OF EGG (Ricord): two ounces of lettuce-water, one ounce of syrup of diacodium, and the white of one or two eggs, mixed together. Mode of exhibition—by tea-spoonsful during the day, in diarrhoea and subacute dysentery.

POTION, WITH THE CARBONATE OF AMMONIA (Hamilton): twenty-four grains of the carbonate of ammonia, dissolved in three ounces of peppermint-water, to which are added, two drachms of syrup of roses. Mode of exhibition—in two doses, in chronic diarrhoea.

POTION AGAINST PELLICULAR ANGINA (Billard): ten grains of gum tragacanth, two ounces of distilled water, ten grains of proto-chloruret of mercury, one drachm of orange-flower-water, half an ounce of syrup of chicory and ipeacacuanha, mixed together, and shaken each time it is used. Mode of exhibition—a coffee-spoonful every half hour.

POTION AGAINST CROUP: two grains of tartar-emetic, dissolved in four ounces of distilled water, to which is added, half an ounce of syrup of ipeacacuanha, and half an ounce of oxymel of squills. Mode of exhibition—a spoonful every half hour.

POTION AGAINST NEPHRITIC PAINS: equal parts of olive oil and syrup of lemons, mixed together. Mode of exhibition—one or two tea-spoonsful are sometimes sufficient to allay the pains.

POTION AGAINST GANGRENOUS THRUSH: two drachms of almond soap, dissolved in two ounces of mint-water, and two ounces of fennel-water, to which is added, half an ounce of syrup of marsh-mallow, and two drachms of carbonate of

magnesia, triturated together in a marble mortar. Mode of exhibition: by coffee-spoonsful during the day.

POTION OF CHOPART: in a bottle of sufficient capacity weigh, in the following order, two ounces of resin of copalba, two ounces of rectified alcohol, two ounces of syrup of balsom of Tolu, two ounces of peppermint-water, two ounces of orange-flower-water, two drachms of nitric alcohol. Mode of exhibition—three or four tea-spoonsful in the morning, fasting, in the treatment of blenorrhagic discharges.

POTION, CORDIAL (Form. Hosp. Paris): four ounces of red wine, six drachms of simple syrup, two drachms of tincture of cinnamon, mixed together. Mode of exhibition—by tea-spoonsful during the day, in atonic affections.

POTION WITH THE CYANURET OF POTASSIUM (Bally): four grains of the cyanuret of potassium, three drachms of simple syrup, rubbed together in a glass mortar, and two ounces of distilled water, gradually added. Mode of exhibition—by coffee-spoonsful every two or three hours, as a sedative.

POTION, DIURETIC (Hospital de la Charité): four drachms of honey of squills, one drachm of nitric ether, half a drachm of liquid laudanum, four ounces of distilled water of valerian, four ounces of peppermint water, one ounce of syrup of the five roots. Mode of exhibition—by spoonsful, every two or three hours, in the treatment of anasarca, dependant on disease of the heart, &c.

POTION, DIURETIC (Hospital de la Charité): six ounces of parsley-water, eight ounces of (water of) the acetate of ammonia, eight ounces of oxymel of colchicum, mixed together. Mode of exhibition—by tea-spoonsful during the day, in dropsies.

POTION WITH TARTAR-EMETIC: eight to twelve grains of tartar-emetic, dissolved in four ounces of distilled water of arnica, to which is added, half an ounce of simple syrup. Mode of exhibition—by spoonsful every hour, in the treatment of tetanus.

POTION, FEBRIFUGE: twelve grains of sulphate of quinine, two drops of sulphuric acid, rubbed together in a glass mortar, with three ounces of distilled water, and one ounce of syrup of gentian. Mode of exhibition—in a single dose, before the fit of an intermittent fever.

POTION AGAINST PASSIVE HÆMORRHAGIES (Gall): half a drachm to two drachms of extract of bark, dissolved in four ounces of peppermint-water, to which is added, four drachms of tincture of cinnamon, and twenty drops of the thebaic tincture. Mode of exhibition—a tea-spoonful every two hours, for women who have passed the critical period, and who have some sanguineous discharge from the uterus.

POTION, OILY: ten grains of powdered gnm tragacanth, rubbed in a glass mortar, with an ounce of syrup of eapilaire, to which is added, gradually and alternately, four drachms of oil of sweet almonds, and three ounces of hyssop-water. Mode of exhibition—by spoonsful every hour, in coughs and colds, the bottle being shaken each time it is used.

POTION, OILY (Form. Hosp. Paris): one ounce of oil of sweet almonds is added to the gummy potion of the same formulary. Mode of exhibition—by tea-spoonsful during the day, in the treatment of coughs and colds.

POTION, WITH IODINE: one ounce of syrup of orange-flower, four ounces of the distilled water of saponaria, ten drops of tincture of iodine. Mode of exhibition—by spoonsful during the day,

MEDICAL PROTECTION ASSEMBLY.—A correspondent assures us, that this body finds it difficult to "protect" itself from some troublesome aggressions of the Dun family. He asks, "if the members of the committee are responsible for the heavy debt incurred in doing nothing." The answer is, of course—Yes—as also for all future responsibilities. We regret that the subject does not allow of the insertion of a note which, from the nature of its topics, cannot be over delicate in its allusions.

Metropolitan Mortality for the Week ending Saturday, October 12th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1018	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	259	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	124	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	162	152	157
Diseases of the Lungs, and of the other Organs of Respiration	282	312	256
Diseases of the Heart, and Blood-vessels	31	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	58	66	69
Diseases of the Kidneys, &c.	7	6	5
Childbirth, Diseases of the Uterus, &c.	17	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	4	6	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	57	74	71
Violence, Privation, Cold, and Intemperance	15	26	26

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SUMMARY.

Oct. 26.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, with New Views on the Nature, Causes, and Treatment of Mental Diseases. By PINEL, Physician to the two National Mad Asylums of France, &c. Translated, with Illustrative Notes, by Dr. COSTELLO 69

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THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

Article I.—Function of the Spinal Marrow, Bulb, Protuberance, Crura, Optic Lobes, and Cerebellum.

Article II.—Functions of the Brain strictly so called, or of the Cerebral Hemispheres; Sensations; History of the Senses; Cerebral Sensations; Memory, and its Seat; the Will, its Seat, its Effects on Mobility, Utterance, and the other Cerebral Operations,—Sleep, Passions, Aptitudes, Instincts, Propensities.

ART. I.

FUNCTIONS OF THE CEREBRO-SPINAL ORGANS.

THE nervous system has been always regarded as the apparatus through which the animal receives his sensations, and determines his movements. This great property, known under various denominations, as the vital principle, nervous power, irritability, sensibility, excitability, or nervous fluid, was for a long time considered as being uniformly diffused through the nerves, and the various ganglions of the nervous system. More than a century back, however, some observers, amongst whom may be mentioned, Lapeyronie, Sancerotte, and Sabourant, sought to establish differences, not only between the different phenomena of the intellect, sensibility and motility, but even between the different parts of the nervous apparatus presiding over these phenomena. The history of the physiology of the nerves presents in this respect, here and there, a few observations most singularly correct, but, failing in proof, and overlaid by incredible hypotheses, which have only increased the confusion in which the whole subject had been enveloped.

It was reserved for our own times to arrive, by means of observation and experiment, more especially, at a series of results confirmatory of each other, and thus to found a new era for the study of the nervous system; it is only latterly that physiological analysis has been enabled to penetrate into the functions of this system, to isolate them, the one from the other, and severally to assign to each of them a determinate seat. It has thus been shewn, to demonstration, that the spinal marrow, the medulla oblongata (bulb), the optic lobes, cerebellum, and cerebral hemispheres, although implicated in a community of functions, have, besides, functions peculiar to each, are endowed with distinct properties, and perform acts differing essentially from each other. It is these new acquisitions to our knowledge, that throw

the investigations of a former period into the shade, and that compel us to establish the distinction of diseases of the nervous system, on the new anatomical basis only, which experimental physiology has discovered, and which clinical observation enlarges and consolidates from day to day.

I.

FUNCTIONS OF THE SPINAL MARROW.

The nervous organ, contained in the cavity of the spine, is unquestionably the most essential of all; it is the primitive source of sensibility and motility, as the excitor of the principal functions of the viscera, and as the direct agent of the cerebral determinations; in these several respects, its functions in the organism are pre-eminent.

In its anatomical structure, it is formed of four cords of white substance,—two anterior, and two posterior; the four laminae of grey substance corresponding to these are continuous with the roots of the spinal nerves, and these roots are much smaller in their anterior, than in their posterior origin. This inequality of size seems to correspond, also, with a difference of function first pointed out by modern physiology; the fasciculi and posterior roots are destined for sensibility, while the anterior preside specially over motility. If we irritate the posterior fasciculi of the spinal marrow, we determine a vivid sensibility in the parts corresponding; if we irritate the anterior, we give rise to quick and sudden contractions, and if we destroy these fasciculi altogether, we produce paralysis of the limbs.

Here we have two great physiological results, perfectly distinct, which science acknowledges and proclaims; their definitive acceptance, however, may require some restrictions. Some very able and conscientious observers have shewn, that the line of demarcation between these two great properties is not so defined as it has been assumed; thus, for instance, in exciting the sensitive roots, muscular contractions have been occasionally observed, and, on the other hand, in exciting the motory roots, the sensibility of the parts, supplied by them, has been developed. Cuvier does not admit any difference of function in the origin of the nerves; he thinks, their being organs of sensation, or of motion, depends on the organs, or the surfaces in which they are ultimately ramified. The pneumo-gastric nerve would furnish a striking example of this arrangement, being a nerve of contraction and motility in some regions, and a nerve of sensibility in others. These ideas acquire fresh support from the interesting experiments lately published by M. Jobert.

Bellinghieri's experiments tend to conclusions differing still more widely on this point; he thinks the fasciculi of the white substance of the spinal marrow are the seat of motility, and its grey substance that of the cutaneous sensibility; that the anterior cords and the nerves proceeding from them preside over the movements of flexion, and the posterior ones with their nerves over the movements of extension. Hence, that theory of muscular antagonism, the importance of which Rolandi exaggerates, but which, perhaps, has not

been appreciated at its real value. He assumes the existence of this antagonism in the muscles of organic life also, but with phenomena that cross; thus the anterior fasciculi act as organs of contraction on the sphincter of the bladder, and as organs of relaxation on the sphincter of the anus, while the posterior fasciculi act inversely, being organs of contraction for the anus, and of relaxation for the bladder.

These ideas have an air of human precision, that ill accords with the large laws of our organization; and yet I deem them worthy of serious examination, especially in reference to clinical observation. How forcibly we must be struck, in the general paralysis of the insane, with the progressive extinction of the contractility in the muscles of the tongue, the œsophagus, the intestinal canal, and the sphincters of the bladder? A veritable paralysis, affecting sometimes but one of these organs, sometimes several, extending at last to the cutaneous surface, and to the entire muscular system. In such cases, we must admit a similar succession in the disorganization of the different fasciculi, constituting the cerebro-spinal axis, and this is but a repetition of the effects attributed to them by Bellinghieri.

His opinion as to the action of the white medullary fasciculi on the movements of flexion and extension, is marked with great justness of observation. We often see those local paralyses, which seem to affect singly, either the flexor muscles, or the extensors solely. I have seen paralyses affecting the extensors of the leg, giving to the patient that singular gait, in which the leg and foot are thrown forward as if they were dislocated. The same phenomena of local paralyses are observed in the flexors and extensors of the arms, hands, and fingers. From these well circumscribed lesions, we are forced to admit a special circumscribed alteration of the nervous fasciculi that govern the movements of the muscles. We may, then, without adopting entirely the opinion of Bellinghieri, suppose in the anterior fasciculi, which are eminently motory, that there are cords, some of which are specially destined for movements of flexion, and others for extension. Hence, in this great function of motility are there important distinctions to be made; the motility which is voluntary, and that which is partly voluntary, must be distinguished from that over which the will has no influence. We see, then, that much remains to be done for the elucidation of the various phenomena of this function, besides demonstrating that the anterior fasciculi govern motility in general.

We must admit, under similar reserve, the functions of sensibility too exclusively restricted to the posterior fasciculi and roots. The common acceptance of the word, "sensibility," is apt to mislead, as tantamount to pain. But it must not be understood that other nerves are insensible; were the motory nerves insensible, they would not perform their functions. Sensibility, therefore, must not be confounded with painful sensibility. The motory nerves themselves, so called insensible, in the morbid state, become the seat of intense pain.

In the present state of our knowledge, it is impossible not to admit two chief functions in the spinal marrow, sensibility, and motility; but we must also admit that these two properties present complex phenomena, and that they undergo, more especially in the superior centres, in the cerebellum, optic tracts, and cerebral hemispheres, new modifications. In traversing these centres, the motory fibres become special organs for the movements forwards, backwards, sideways, as well as for those of the arms and legs. In the same manner, serious affections of the brain shew that sensibility is variously affected in the different regions of the skin, the mucous and serous membranes, and in the different parts of the body.

According to Flourens, the spinal marrow, medulla oblongata, and tubercular quadrigemina alone, excite immediately the muscular contractions; the cerebral lobes only *will them*, but do not excite them; the power of co-ordinating the movements, willed by certain parts of the nervous system, resides in the cerebellum. These results have not yet been invalidated by any serious experiment.

Legallois was one of the first to lay the foundations of the physiology of the spinal marrow, by demonstrating that each portion of the trunk receives its life from the portion of the spinal marrow from which the nerves issue: that the different parts of the spinal marrow may act independently of each other; and that, besides its sensitive and motory properties, it is endowed with a kind of energy, or obscure power of will, more marked in proportion as the subject is young. This singular power has been proved to demonstration by M. Calmeil. He has shewn by numerous experiments, that after the brain has been removed in reptiles, young birds, and even young mammals, the spinal marrow is still capable of receiving excitations, and of *willing movements that are calculated and durable*. The spinal marrow, therefore, possesses a kind of volition; secondary, no doubt, but still demonstrable, more especially in the serpent, lizard, and frog; and M. Lallemand observed, that the anencephalous foetus exhibits an analogous faculty. These physiological data enable us to account for the somnambulist executing regular, and almost rational, movements, without the intervention of the brain, and for certain movements, which, in spite of all the power of will in the brain, certain patients can neither direct nor repress.

II.

Of all the organic functions, respiration is one of those most immediately subjected to the action of the spinal marrow. If we open the skull of a young rabbit, and remove the brain, by successive layers, from front to back, as well as the cerebellum and upper part of the medulla oblongata, the animal continues to breathe, but as soon as our section reaches the origin of the eighth pair, the respiration ceases at once. On the other hand, when we cut the spinal marrow a little above the intercostal nerves, the movements of the ribs are at once paralysed; but the breathing still continues, because the accessory nerves of Willis, which Sir C. Bell calls the external respiratory, and the portio dura of the seventh pair remain intact. If another section is made on the level of the second cervical pair, above the insertion of the spinal nerve, the diaphragmatic, and the external respiratory, the muscles of the heart and shoulders are paralysed, but the movements of the glottis and of the face continue. A third section, made above the origin of the pneumo-gastric nerves, will at once stop the movements of the glottis and respiration.

These results prove that the different movements of respiration derive vitality from the superior part of the spinal marrow.

M. Flourens has shewn, that the entire destruction of the spinal marrow does not immediately stop the circulation; that the heart does not cease to beat definitively until the respiration is stopped by the removal of its superior portion; that the destruction of the lumbar portion slackens the circulation of the blood in the lower extremities, while it continues with unabated activity throughout the regions that

still maintain communication with the rest of the spinal marrow.

The digestive functions, and the secretions in general, that take place in the capillary system, are placed in much more direct dependance; a circumstance readily explained by the multiplied connexions between the spinal marrow and the ganglionic system. It is by reason of their anastomoses, that the digestive functions are slow in persons affected with chronic lesion of the spinal marrow, and that the large intestines are subject to its almost direct influence. By dividing the spinal marrow, between the fifth and sixth dorsal vertebra, in a dog, Krimer abolished, instantaneously, the power of voiding the excrements. By a section, in the vicinity of the lumbar vertebrae, he observed the urine to become clear, and to be charged with various salts and acids, while the ablation of the cerebellum, or of the brain, produced little or no change in the ordinary qualities of this fluid. Dupuytren had called attention to the promptness with which catheters, fixed in the bladders of persons labouring under paraplegia, become covered with saline incrustations.

Conclusive experiments have also shewn, that the principal nervous action, for the excitation of the generative organs, resides in the cervical and dorsal region of the spinal marrow. Erection is one of the most frequent phenomena, resulting from wounds of its cervical portion; it is not, of course, attempted to deny that it also arises from impressions on the brain; but it is through the spinal marrow that this influence re-acts on the organs of generation.

Nutrition also participates in this same influence, and it has been shewn that its activity depended more on the size of the spinal marrow than on that of the brain itself.

In regard to the production of heat, and cutaneous perspiration, M. Flourens has also shewn that it exercises an important influence. In paraplegia, the skin is dry and swollen, and the cutaneous perspiration is abolished. This coincides with a diminution of the heat. Admitting the influence of the brain, the lungs, and great sympathetic on the development of caloricity, still it cannot be doubted that lesions of the spinal marrow produce great changes of temperature in the parts under its influence.

III.

It is chiefly in the transmission of the determinations of the brain, and in the execution of voluntary acts, that the spinal marrow fulfils its most obvious functions; since it is the organ intermediary and indispensable for the execution of these acts and determinations, its enormous influence had been long recognized, but it has only been since the anatomical arrangement of its different plans had been made known, that any clear explanation could be obtained of its action, direct, or crossed, on the varied movements of the body. In the two lateral halves, the fasciculi of each side do not cross their fibres, but are simply laid against each other throughout the entire length of the median line; it is only in the bulb, in the anterior cornua pyramidalia, that the intercrossing takes place, and in the anterior pyramids only, the posterior ones ascend to the cerebellum without intercrossing. The phenomena of crossing therefore only obtain in lesions of the anterior pyramids.

CLINICAL LECTURES ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDINER GUTHRIE, Esq., Jun.
October, 23d, 1844.

LECTURE II.

On the Symptoms of the various kinds of Cataract.

WHEN idiopathic cataract is about to take place, the patient usually complains of a little weakness of sight, or, rather, that it becomes indistinct, or confused, and a greater degree of attention is required to fix and distinguish objects accurately. They appear as if seen through a thin mist, or a semi-transparent, turbid fluid, or through a glass

which is dirty or dull. This indistinctness of vision is constant. No change or motion of the head, or rubbing of the eye, improves the sight, whilst the patient remains exposed to the same degree of light; but if the room be darkened, vision is in some cases considerably improved. The patient is frequently seen to place his hand on a line with the eyebrow, or what is termed shading the eye from the light, under which circumstances the pupil is dilated, and objects are seen more distinctly. The improvement takes place only in persons who are suffering from lenticular cataract, and particularly in those in whom the opacity commences in the centre of the lens. The advantage is gradually lost as the pupil contracts, or is exposed to a greater light; in which case he is obliged to bring every object nearer to his eye, whilst it is often more readily seen from one side, than when placed in the axis of vision. An elderly person, with a hard, central, lenticular cataract, sees best in twilight, and when the pupil is most dilated; and, for the same reason, vision is greatly improved by turning the back to the light, when the countenance of a person can often be distinguished, which could not be seen while it was between the patient and the light; on looking at a lighted candle, the flame does not appear as distinct as usual, but seems as if seen through a mist and surrounded by a halo, which, when the disease is not complicated with an affection of the retina, is always white, or clouded white, and not of various colours, especially neither red nor blue, nor intermixed with flashes of light; the white halo becoming broader and more distinct as it is further removed from the eye. These defects increase with greater or less rapidity. The form of objects is lost, and their shadows only can be observed between the eye and the light; and the patient is oftentimes only able to distinguish between light and darkness, except when objects, such as the fingers, are passed before the eye in a strong light, when their shadows can be seen.

When a person is lying on his back, he may be able to see objects in the upper part of the room, at a distance, which he cannot distinguish when sitting up erect, inasmuch as the rays of light cannot then pass under the iris, and through the transparent part of the lens, in the latter posture. In cases in which the disease begins first in one eye, the patient sees distinctly with the other, and does not perceive any of these symptoms, until, from some accidental circumstance, he happens to close the sound eye, and merely discovers that he sees very indistinctly, or that he has even lost the sight of that eye; so that many persons are disposed to consider that the disease has come on suddenly, or in the course of the two or three previous days. Sometimes the patient complains that objects appear irregular, misshapen, rough, straight lines appear crooked, candles or lamps, or other luminous bodies, may appear doubled or trebled, two or three moons may be seen at the same time: and this does not depend on any amaurotic affection, as successful operations have frequently proved, but on the lens becoming more opaque in different directions, as is frequently seen: these opaque parts, diverging from the centre, naturally intercept the rays of light passing to the retina, and reflect from their surfaces the objects seen, so as to distort or multiply them in the manner described. Persons often complain, at an early period, of little spots, or portions of thread or flies, or musæ, floating before the eyes, and which continue until they are nearly blind. These are not, however, essential symptoms of cataract, and may remain after the opaque lens has been removed by operation. Flashes of light of different colour indicate a complication of disease of an unfavourable character, as well as the constant appearance of the colours of the rainbow around the flame of the candle, which, in a pure disease, is of a whitened colour; instead of which primitive appearance, the lamp or light seems sometimes surrounded by burning rings, or circles of several colours.

The external signs of cataract are infinitely better marked, although they invariably follow the internal ones in all cases of idiopathic cataract, whilst they precede them in all cases of cataract

canced by injury of the lens and its capsule. In idiopathic cataract, the indistinctness and dullness of vision is usually observed by the patient some time before any appearance of opacity can be detected in the lens, which renders the diagnosis between cataract, and mild, incipient amaurosis, oftentimes exceedingly difficult. In a short time, a slight and general haziness or muddiness may be discovered, which is of a deeper shade towards the centre, giving to the part behind the pupil an appearance as if seen through an opaque or muddy substance. This gradually increases, until an opacity can be distinctly observed, and which is situated in the centre of the lens in elderly or old persons, in most instances. In others, the opacity begins from the circumference, although the defective state of transparency, at the central part, renders vision indistinct, before it can be clearly seen by the surgeon; hence, the necessity for the application of belladonna, or atropine, in many, indeed, in most cases, before any accurate opinion can be given, whether a cataract has actually begun to form or not. When in elderly persons, suffering from indistinct or confused sight, the pupil is fully dilated, and the edge or circumference of the lens and capsule can be seen, small, white, triangular points are often observed on the capsule, at the part corresponding in position with the extremities of the ciliary processes, from the under part of which they would seem to be continued, and to be of different growths and sizes. With their occurrence and growth, the muddiness of the lens commences; the part beneath them becomes opaque and striated, and here opacities gradually increase, until the whole lens becomes opaque. The opacity, in these cases, is not central, deep, well-marked, and of a grey or amber colour—but of a whitish yellow, having a radiated, mother-o'-pearl appearance. It is said that cataract has formed in one night, after the occurrence of distressing mental circumstances, gout, &c., but I doubt the fact of its actually taking place without previous disease existing, and suspect that in all such cases the complaint had existed previously, in the manner I have described, in which state I have often seen it rapidly developed, and implicating in a very short time, in a day or two in fact, the whole lens. In all these cases, the capsule of the lens is, and must be, affected; but the opacity does not extend to the centre in every instance, and the posterior capsule is certainly not implicated, as the eye remains perfectly clear after the opaque lens has been successfully removed.

The progress of the disease is usually and essentially slow,—many months generally elapse from the first commencement of the complaint until useful vision is destroyed, and as one eye is commonly affected before the other, two, three, or more years sometimes pass away before the patient becomes so blind as to render an operation advisable. In the commencement, and when only one eye is affected, the patient sometimes loses the power of judging accurately of distances; so that he cannot snuff the candle, or take up a pin, or other small substance from the table, and finds difficulty in stepping over a gutter or in crossing the street. Glasses rarely give any assistance in this disease. Sometimes a slightly tinged plane glass will improve the sight when the patient is exposed to a strong light, by dilating the pupil, which in some instances is found to be a little more dilated in a moderate light than in the eye of another person, and the pupillary edge (especially where the disease is a soft cataract) takes on a darker appearance, as if it were surrounded by a narrow black ring, which is its posterior edge covered by the pigmentum nigrum, pushed forward in consequence of the increasing size of the lens.

The appearance and motions of the iris in cataract are of the utmost importance, both as to the nature and treatment of this disease. The iris is usually described as a curtain placed before the retina, possessing muscular or contractile powers, for the purpose of dilating or contracting the pupil, and having its sensibility for stimuli so harmonized with that of the retina, that it contracts or dilates, according to the greater or less degree of intensity with which light is thrown on

that membrane. The greater contraction of the pupil in a very vivid light, its proportionate diminution in partial darkness, together with its general state of immobility and dilatation when the retina is altogether insensible, seem to demonstrate its use, and have given rise to the opinion that the motions of the iris were regulated by the susceptibility of the retina for external impressions, and that the state of the iris, when uninfluenced by the sympathy with the sound eye, was an index of the state of the retina; that a motionless and dilated iris indicated an unsusceptible retina; a moveable and contracted iris a healthy state of that membrane; the intermediate action pointing out the different shades of derangement. If the opinion had been found critically correct, it would have been an invaluable test of the state of the retina, and a certain guide as to the expediency of operating in many complicated cases; but, unfortunately, this is not the case,—for, although the motions of the iris do accord with the susceptibility of the retina, whilst both are in a healthy state, they differ materially when either membrane is diseased. We find, that in many cases of complete amaurosis, the motions of the iris continue on exposure to light as if influenced by it, and independently of any sympathy with the retina; the same thing has been known to occur after injuries of the head which have deprived the sufferers of sight, vision being destroyed, although the motions of the iris were unimpaired. In mydriasis, which is essentially marked by a dilated and nearly immoveable pupil, the retina remains perfectly sound, and the patient recovers his sight, when a false iris is made by causing him to look through a small hole in a black card.

The motions of the iris are influenced in three ways—one by the direct stimulus of light, the patient being quite blind, and two by sympathy or indirect influence; the first with the retina of the same eye when sound,—the second with the iris of the other eye, whether the retina or optic nerve is healthy or otherwise.

The optic nerve is, probably, not a simple, but a compound nerve, possessing both incident and reflex fibres, in addition to those of sensation; the former exerting an influence, perhaps, on the motion of the iris which is more distinctly supplied with nerves from the lenticular ganglion. When the optic nerve is divided in the cranial cavity, the iris, it is said by Mayo and Flourens, loses its contractile powers, although it may be again excited and the pupil made to contract, by irritating the root of the optic nerve still attached to the brain. A man may, however, be blind from a defect in the retina, or in the optic nerve, and utterly incapable of distinguishing light from darkness; yet the pupils will contract and dilate under the proper influence of light, proving that it is not on the optic nerve, as one of sensation, that these changes depend. The division of the optic nerve within the head commits, in all probability, a greater and a different injury on the parts than that which takes place in disease. The part of the brain may not be sound in which perception takes place, whilst that part may be healthy to which other impressions are conveyed. Vision may be lost, yet the iris may be moveable. The cerebrum may be injured, yet the cerebro-spinal column, and particularly the corpora quadrigemina, or upper part, may be sound. An injury to the third nerve paralyzes the iris; it is said that an injury to either of the corpora quadrigemina does the same.

My father had a patient in the Westminster hospital, who died three weeks after the receipt of a blow, which was considered to have caused only a concussion of the brain. Mr. Hancock, then house surgeon, made the post mortem examination. The pupils contracted for several days before her death, separately and conjointly, although the levator muscle of the left eyelid was paralysed, and the eyelids appeared to be nearly closed. An abscess had formed at the base of the skull, implicating and destroying the third nerve of the left side at the point at which it leaves the crus cerebri, which led to the opinion that the mobility of the iris might continue after the motor oculi or third nerve was separated from the brain. The other

muscles of the eye supplied by the third pair were also implicated, and the eye was fixed, and the conjunctiva inflamed. An injury to the fifth nerve may, and does sometimes, deprive a person of sight, but, it does not always, at the same time, affect the motions of the iris.

The susceptibility of the iris for light seems, during health, to be on a par with that of the retina, and in sleep, light is excluded from the retina, and the iris, by the closing of the eyelids, when the pupil is partially dilated; if a strong light be thrown on the eyelids the pupil contracts, the retina becomes sensible of the stimulus, and the person frequently awakes. Under disease, the susceptibility of both may be increased or diminished. The sympathy of susceptibility is, however, infinitely greater between the retina and iris, than between the iris and retina; whether it be from what is termed professionally sympathy, or from parity of disease affecting the origin, or referred to the sentient extremities of both sets of nerves; the healthy state of the iris, *generally*, being a good although not an unerring index of the healthy state of the retina; whilst a diseased state, or loss of function of the iris, by no means indicates, although it may lead to a suspicion of, a diseased state of the retina. My father operated for artificial pupil, on the right eye of a man who had been blind 22 years, no light having been transmitted to the retina, and yet, at the end of that term, it retained its susceptibility for impressions, and the patient could see afterwards to read very well. I have done the same in several instances of less standing.

It is on the integrity of the healthy susceptibility of the iris for light, and not of the retina, that the contraction and dilatation of the pupil depends in cases of cataract; that a patient suffering from incipient cataract sees best towards evening, or in a moderate light, in consequence of the dilatation of the pupil allowing the rays of light to pass on to the retina, through the edge of the lens, which is not so opaque as the centre, and is exposed by the enlargement of the pupil. We endeavour to produce the effect by the application of belladonna or atropine, which causes the pupil to dilate, and allows the transmission of light in the same manner to the retina, which in general remains unaffected by it; for if it were equally under the influence of the application, the patient would not see, although light fell on the retina. I have met with several instances of persons using belladonna for months with evident advantage; but still it is a fact, equally deserving of attention that, in some instances, the belladonna seems, from the first, to paralyse the retina, as well as the iris, the sight being rendered much more indistinct, until its effects have ceased. When given internally, and in large doses, it not only influences the motions of the iris, the ciliary and the optic nerves, rendering vision very indistinct, or even destroying sight, but all the nerves of the face connected with the organ of vision, whence its efficacy in some cases of tic douloureux, as well as in other painful affections of parts around the orbit, and of the body generally, when applied externally in the form of a plaster.

A proper degree of sensibility of the iris generally implies a correspondent state of the retina, and the ready and quick contraction of the pupil on any sudden exposure to light, is a favourable sign, although immobility of the pupil does not deprive us entirely of hope, operations having been followed by restoration of sight under these circumstances. The immobility of the iris may be dependant on the form and state of the lens, and its capsule, although not on its permeability by light. The motions of the iris may be prevented, and it may remain fixed and dilated, or fixed and contracted, in consequence of adhesions formed between it and the capsule of the lens; or it may be fixed and dilated in consequence of pressure from the lens protruded by the parts behind. The diagnosis in these cases is important. In the natural and healthy state of the eye, the space between the posterior part of the iris and the capsule of the lens, is called the posterior chamber of the aqueous humour, and is best seen after freezing the eye in a dead body, when the

layer of aqueous humour is readily demonstrated in a frozen state between these parts. It is into this space the needle is passed, in the operation for dividing, or cutting in pieces, a soft cataract.

When the iris is insensible from deficiency of susceptibility of light, from whatever cause, this space is preserved. The distance between the lens and edge of the pupil is readily perceived, and appears to be more or less natural, according to the state of dilatation. If the immobility of the pupil depend on adhesion between the capsule of the lens and the uvea, or posterior part of the iris, it may be suspected, from the diminution of the natural space between these parts, by the irregular appearance of the edge of the iris, and by that of the capsule of the lens; and it will be proved by forcibly dilating the pupil by atropine or belladonna.

Immobility of the iris, and especially in the contracted state, is generally the consequence of previous inflammation, and implies nothing with relation to the retina, beyond what may be calculated upon as the effect of inflammation. In these cases the iris is irregular, and generally puckered; there is no space between it and the capsule, which adhere to each other, and the capsule is always opaque and white. If the edge of the pupil yields to atropine, which is much stronger than belladonna, it becomes more irregular, and shews the points of attachment in a more marked manner. If the iris be not contracted, or even if it be rather dilated, it always shews the edge of the pupil of a darker colour; and, on the application of the belladonna, it dilates, and becomes irregular at the points of attachment which are the most conspicuous. In cases of cataract of long standing, it is possible that adhesions may be formed between the capsule of the lens and the iris, from the simple increase of the lens causing it to press against the iris, or from slight irritation; but in these cases, the pupillary edge will seldom, or never, preserve its natural colour, although it may remain unaltered in shape, whilst the iris may be very sluggish, or nearly motionless; but the fact of attachment may be readily proved by the application of belladonna; and a surgeon is highly reprehensible who does not dilate the iris by it some time before he operates, even if he be certain there is no attachment, because it is the only way in which he can acquire a full view of the surface of the cataract, and in many cases obtain information as to its nature.

Immobility and dilatation of the iris, when not of the first kind, in which the size or depth of the posterior chamber is obvious, may arise from pressure of the lens behind, without any attachment of the iris. In this case, the cataract is in immediate contact with it, sometimes even appears to protrude it, the black ring round the pupil is well marked, and, on examining the eye from one side, the iris may also appear protuberant; its natural plane surface is lost; when the true state of the case is evident, the application of belladonna will cause a dilatation of the pupil, so that it may not be able to return completely to its former state of contraction from the continued pressure of the lens.

Immobility of the iris is not a sign, in cataract, of paralysis of the retina, especially where there are attachments to the capsule of the lens; because there is a local cause for its remaining immovable; but where the space of the posterior chamber is entire, or the iris does not seem to be dilated by pressure of the lens, it is a most unfavourable symptom, and when combined with a total impossibility of distinguishing the shadows of bodies, or of light from darkness, it nearly amounts to a prohibition of the operation, which ought on no account to be performed, if it be accompanied by pain in the eye, orbit, or forehead, or with flashes of light shooting through the eye, which indicate amaurosis, or approaching disorganization.

When the immobility of the iris only marks its want of sensibility, and the patient can readily distinguish light from darkness, there is good authority for performing an operation; and it is right to attempt it, where the patient has been deprived of that power from inflammation; because it may have occurred in consequence of

adhesions. But if it have suddenly occurred, the pupil remaining of its natural size, or being dilated, there is little or no hope of success, and particularly if both eyes are affected.

In mydriasis, or a dilated state of the pupil in which the retina is intact, the iris is insensible to any degree of light, its natural stimulus, although the pupil momentarily contracts on the application of stimulating substances, as spirits of rosemary, veratria, tobacco in infusion, or by electricity, or by rubbing the eyelids strongly over the eye, which does not occur in amaurosis; neither are both eyes affected in mydriasis as they most frequently are in a greater or less degree in amaurosis. The pupil is clear, but when it is completely dilated, either by disease or by atropine, a slight haziness may be seen, situated apparently deep in the lens or vitreous humour, but which disappears or changes its situation according to the different motions of the eye, and is dependent on the refraction of light, and not upon any opacity of the lens. This is a most important point to attend to, for this hazy or semi-opaque spot has been often mistaken for incipient cataract, which error is obviated by changing the position of the patient, when the spot changes its position also. When the pupil is dilated without any opacity of the lens, objects are commonly seen smaller than natural and very confusedly, except in the shade or in partial darkness.

The third sympathy of the iris, or with the iris of the opposite or other eye, often exists when that with the retina and its susceptibility for light is destroyed;—a state I have seen in very many instances. The iris of the affected eye in such cases is usually a little discoloured, and the pupil, which is black, remains unaffected when light is allowed to fall upon that eye alone, although it is enlarged or diminished, according to the motions of the iris of the opposite eye. When the sound eye is covered, the pupil of the diseased eye dilates to a moderate extent, (a movement which takes place in sound eyes similarly situated, and which should be borne in mind,) and remains in that state and immovable under the full glare of the sun; but if the sound eye is uncovered and exposed to the same degree of light, both pupils are eventually contracted.

In the natural state of the eye, the iris is a perfect plane, neither protruding forwards, nor slanting backwards, and is without folds or plaits. A deviation from this appearance indicates derangement of its structure, or is caused by pressure from behind, either of which influence the mode of operating in cataract. The plane of the iris is preserved by a due degree of pressure being maintained before and behind by the aqueous humour, and in which it moves, displacing it, as the pupil is dilated or contracted. These motions of the iris are performed with such precision, and the balance of pressure is so little disturbed, that no vacillation of the iris is observable by our sight in a sound eye. I have, however, seen eyes, and Captain Kater, F.R.S., celebrated among other things, for his observations on the pendulum, was an example, in which the iris of each was tremulous, although the persons saw very well, and never had had any defect of vision. This state of eye usually indicates what is called a dissolution of, or a thinner state of, the vitreous humor, and in an unsound eye is usually accompanied by a capsular cataract, from within which the lens has been absorbed, or become soft, or fluid, a state which forbids the operation of extraction. In all cases of cataract, moderate pressure should be made on the eye-ball with the finger, when, if the vitreous humor, or its membrane, is thin or watery, the eye will yield more than it ought to do, and the iris will acknowledge the pressure.

Cataracts have been described as of various colours; yellow, grey, brown, black, of a pearl, cheesy, silvery, or milky colour, speckled, striated, barred, &c. Of these, as two great outlines, the grey, pearl-coloured, yellow, and brown, may be considered as indicating a hard cataract: while the white, milky, or striated, rather point out a soft cataract: but the milky colour of a cataract is by no means a test of its solidity; many, perfectly white, and supposed to be soft, having, after extraction, been discovered to be too hard to be readily divided or

cut up; and the pearl-coloured, on the contrary, have been found to be soft. Neither does the colour, after extraction, always correspond with the colour observed before the operation; being sometimes much darker. The size of the cataracts is a better sign of their nature than their colour, it having been found that the smaller the lens, and the darker its colour, the more solid was its substance; except, perhaps, when there appears to have been some defect in organization, or growth, from early life; in which case, a soft, bluish-white cataract, with a striated capsule, will often be observed, when the pupil is fully dilated, to be seated on the vitreous humour, and surrounded by a black transparent ring, the consequence of the deficiency of size of the lens and its capsule. The larger and more protuberant the lens, pressing forwards even into the pupil, and against the iris, the greater is the certainty of its being soft; but, on these points, an experienced operator rarely errs; observation and experience lead to a precision amounting almost to certainty.

J. F.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 32.)

The period of life, at which dysmenorrhœa comes on, varies accordingly. Some patients have it from the first appearance of the menses, such as those in whom the os uteri, or canal of the cervix, is unusually small and contracted, and where the menstrual fluid is either retained, or, at least, secreted faster than the narrow outlet of the uterus will allow it to escape, and where it, therefore, accumulates in the uterus, which is excited to violent contractions for its expulsion.

The dysmenorrhœa connected with ovarian irritation, and accompanied with the exsudations above described, is also occasionally observed from the first appearance of the catamenia; but it is sometimes difficult to distinguish the cause from the effect in these cases. There can be no doubt that when dysmenorrhœa and ovarian derangement are co-existing, and the former is attended with exsudations, it is generally a result of the latter affection; on the other hand, when no exsudations are present, I should be inclined to consider the dysmenorrhœa as the original disease, and the ovarian affection as a result of it. Thus, in the dysmenorrhœa from contracted os uteri, in which I believe that exsudations are never present, we occasionally see severe ovarian irritation, and even disease, which have evidently been brought on by long-continued periodical suffering, and severe disturbance of the menstrual function. On the other hand, where the priority of the ovarian affection is distinctly made out, we shall usually see the dysmenorrhœal attacks attended with exsudations. Dysmenorrhœa, commencing with menstruation, is, however, not so frequently observed as at a later period. In some patients it will not appear until during the convalescence from a severe fever, or other dangerous disorder; in others, the first attack is dated from her marriage, or it does not come on until after she has had a miscarriage, or a confinement.

How far dysmenorrhœa is a source of sterility, must entirely depend on the nature of the cause. Where this is of a mechanical character, or where it arises from ovarian irritation or disease, impregnation can scarcely take place. On the other hand, when it arises from a state of high uterine irritability, without any of the above mentioned causes, as, for instance, after an abortion, or from that state of uterine derangement, connected with a rheumatic-gouty diathesis, and which, for want of a better name, I have ventured to call "uterine gout," or, where it is from some other derangements of the assimilating functions, impregnation may undoubtedly take place, although the chances are that the irritable uterus will not pass through the next menstrual period without expelling its

contents—hence, therefore, the expulsion of an extremely early ovum is generally overlooked, and passes for an unusually severe menstrual period.

I have already alluded to many of the *causes* of dysmenorrhœa; a brief enumeration of them will, therefore, be sufficient. Mechanical hindrance from a closed or contracted state of the os uteri. An irritable, inflamed, or otherwise diseased, condition of the ovaries. Inflammation of the os and cervix uteri. A state of morbid irritability of the uterus, produced by abortions or miscarriages, by menorrhagia, but more especially by that disturbance of the general health which arises from derangement of the assimilating functions, and connected with the rheumatic gouty condition to which I have already alluded, and with more or less derangement of the urinary system, which, in its turn, acts as a source of uterine irritation. Under this head will also come irritation and derangement of the *primæ viæ*.

The *treatment* of dysmenorrhœa, whatever may be its cause, must necessarily be of a two-fold character: viz., that which is employed during the attack, and which must be of a sedative, and, if necessary, of an antiphlogistic character, and that during the intervals, which will be directed to the removal of the cause, and restoration of the general health.

Having thus taken a cursory view of this important subject, I shall pass at once to the illustration of the above remarks by cases, which, I trust, will enter sufficiently into the details, without its being necessary for me to add any further observations beyond those, to which the cases themselves will give rise.

DYSMENORRHŒA FROM CONTRACTED OS AND CERVIX UTERI.

Mrs. H., æt. 22, married nearly 2 years, never pregnant.

June 29th, 1840.—Constant sense of bearing down; much pain in the pelvis; difficulty in retaining and passing water; difficulty, also, in passing fæces, and great pain when they are hard; when solid they are expelled flat.

Slight leucorrhœa; urine occasionally sparing and turbid; occasional sense of fullness and swelling, with heat about the vagina; much pain during sexual intercourse, which is followed by a discharge, apparently of the seminal fluid; occasional darting pains through the pelvis; has slight piles, and occasional feeling of swelling about the anus; arthritic pains about the limbs; much gastric disturbance; bowels irritable. The catamenia first appeared at the age of 17; they have always been sparing, and, since her marriage, attended with severe pain.

Exam. per Vaginam.—Os uteri low down in the pelvis, and nearly, if not quite, closed; the uterus feels larger, heavier, and more solid than natural, but it is not painful.

R Pil. hydrarg. pulv. ipecac. co. aa gr. v. alternis noctibus; hirudines vj. ano.

She left town the next day, and I wrote to her medical attendant, directing him to attend to her general health, and gradually to dilate the os uteri by bougies. She did not return to town until the following spring.

March 28th, 1841.—Mr. M. commenced with the smallest bougie, and introduced it with some difficulty; he gradually used a larger and a larger one, until he arrived at a considerable size, which, however, caused much pain in passing; but, after this, the uterus diminished considerably in size, and the catamenia came at the next period with much greater ease, and the fæces and urine were now passed with less pain; she was much relieved by the leeches. The sensation of throbbing and fullness in the pelvis is greatly diminished; the lancinating pains ceased for some months, as, also, the turbidity of the urine. It is nearly four months ago that the last bougie was passed, since which her former symptoms have returned. The fæces are still flat; complains of a sense of weight when in the upright posture, and when she steps, it produces a jarring feeling in the pelvis. The catamenia have become sparing, and at long intervals, and again preceded by much pain. Appetite pretty good; health evidently better; less arthritic pains of joints; bowels irritable.

Exam. per Vaginam.—Uterus feels larger than natural, but less so than before; although the os uteri is very small, it is quite distinct, and feels pervious.

R Ammon. carb. ℥ij. succi limonum. q. s. ad saturand. sp. ammoniæ arom. tinct. hyoscyami aa ℥ij., aquæ menthæ pip. ad implend. ℥viij. M. Ft. mist. cujus sumat cochl. magn. ij. ter die.

Let the leeches be applied once a fortnight, and the bougies be again used; when the os uteri is sufficiently dilated, a bougie or sponge tent must be passed once a month, about a week before the menstrual period.

April 8th, (by letter).—A full sized bougie passed easily and without pain—a dark coloured thick discharge followed. Three leeches were applied to the anus on her return from London with much relief; the lancinating pains, which had troubled her occasionally, have disappeared since. Complaints of much pain in the hypogastric region, where, she says, there is a swelling, with sense of painful pressure, which she attributes to flatulence.

R Hydrarg. chloridi gr. v., extracti hyoscyami gr. vi. M. Ft. pil. ij. h. s. s. once a fortnight.

R Extr. gentianæ, extr. hyoscyami aa. gr. v. M. Ft. pil. ij. om. nocte sumendæ.

R Auri nitrici dil. tinct. hyoscyami aa. m. xv., syrupi aurant. ℥j. infus. gentianæ co. ℥iss. M. Ft. haust. ter die sumend.

R Pulv. rhæi. potassæ sulph. aa. ℥j. mannæ optim. ℥ij., sp. myrist. ℥ss., aquæ carui ℥iss. M. Ft. haust. primo mane sumendus. Let a sponge tent be passed into the os uteri.

20th (by letter).—The sponge tent could not be introduced.

29th (by letter).—Menstrual period has passed more easily than usual, lasting four days, and with less pain. Since that time she has had pain in the loins and thighs, running down to the feet. Motions are much less flattened than they were, less pain in evacuating the rectum, and less pain, also, in the left groin. Bowels well purged from calomel; has no longer the sensation of a tumour in the left hypogastrium. Pergat.

May 18th.—Has had a short attack of pain and diarrhœa, with loss of appetite. The last application of leeches weakened her a good deal.

R Ferri sulph. gr. ij., extr. hyoscyami, extr. gentianæ aa. gr. iv. M. Ft. pil. ij. om. nocte sumendæ.

During the rest of the year she continued to suffer occasionally at the menstrual periods; the discharge was sparing, and it seemed pretty evident that the thicker portions of it had not passed, but had accumulated in the uterus, which was again distended, producing much difficulty and pain in evacuating the rectum, the contents of which were again passed in a flattened form. The pain and swelling in the left hypogastrium appeared to be connected with the sigmoid flexure of the colon, which was more or less pressed upon by the enlarged uterus.

In April, 1842, she again visited London to be under my care. The os uteri was low in the pelvis, hard, but not painful; the interior somewhat knotty. The body of the uterus just above the cervix is hard, and seemed rather immovable. The speculum passed easily, and I dilated the os uteri considerably without pain; she had latterly been free from lancinating pains; the catamenial periods easier, and the motions less flattened.

The symptoms of this patient, as given in my first report of her, indicate considerable mechanical pressure in the pelvis, accompanied by a good deal of disturbance in the general health from mal-assimilation;—the former is shown by the bearing down and pain in the pelvis, by the difficulty in retaining and also passing water, and especially by the pain on evacuating the rectum, and the flattened state of the fæces when expelled in the solid form: the latter by the dyspeptic symptoms, irritable bowels, pains of the limbs, turbid urine, and also the sense of fullness, heat, &c., about the vagina, coming on in paroxysms. The examination, per vaginam, confirmed this view of the case, by showing that the os uteri was nearly, if not quite, closed, and evidently distended by accumulated menstrual fluid.

As the dysmenorrhœa had not existed, until

after her marriage, it is probable that it was in a great measure owing to the os and cervix uteri partaking of the same arthritic swelling with that of the vagina, to which I have just alluded, so as to diminish the opening to such an extent as to render it nearly impervious. I offer this merely as a supposition, because I have now no means of proving it to have been so in her case, although I am led to this conclusion by seeing these effects produced in other cases, where that condition of the uterus and vagina existed, which I have denominated rheumatic gouty affection of these parts, in connection with a general diathesis of a similar character. "The vagina feels full, swollen, and, as it were, impervious or stuffed up, like the nose in a severe cold; it is exceedingly sensitive to the touch, so much so as to require considerable caution in sitting down, and rendering the motion of a carriage, or sometimes even walking, almost intolerable."*

Her medical attendant in the country seconded my wishes most ably, and succeeded in dilating the os uteri to a certain extent. The effects were striking; the uterus diminished considerably in size; the catamenia at the next period passed with greater ease, and the bladder and rectum were evacuated without pain, the sense of throbbing in the pelvis removed, and her general health improved. Thinking herself well, she ceased to have him pass the bougie, all her former symptoms returned, and when I saw her at her second visit, although the general health was much better, the local affection was so much increased, as regards the distended uterus, that she could not even walk without feeling its weight and pressure in the pelvis.

The application of the bougie was followed by a still more striking result, viz., the discharge of a thick dark-coloured fluid. The remaining portion of the case is not quite so satisfactory; her health, upon the whole, had improved, but the uterus still continued larger, harder, and heavier than natural, and, as far as I could ascertain by letter, was producing inconvenience by pressing on the neighbouring bowels. Towards the period of her visit to London, these various symptoms had all diminished considerably. I then dilated the os uteri myself to a much greater extent than had been done before; it was effected without pain; she returned again into the country, and I have not heard since from her.

Mrs. T., æt. 25, medium size, delicate looking, married 3 years, never pregnant.

March 9, 1842.—Much irritability of bladder; frequent desire to pass water, and occasional difficulty in doing so; frequent painful urging, like strangury; bearing down pain when standing; not much derangement of stomach or bowels, beyond a little irritability of the stomach. Feels pain in the right groin when she straightens herself and stands erect, so that she prefers the sitting posture, leaning a little forward. No leucorrhœa.

Has suffered from dysmenorrhœa since the earliest appearance of the catamenia, but greatly increased its severity, about two years ago, by drinking some soda water during a menstrual period; it produced instant suppression, lasting for 3 weeks. A smart attack of abdominal inflammation (by her description), attended with tympanitis, seems to have followed. She suffered also from pain in the right groin, which has continued more or less since, with severe exacerbations at the menstrual periods, when there is throbbing and lancinating pain at this part; says at these times she feels a swelling here.

Has pain for several days before each menstrual period; during which, the lower part of the abdomen swells with increasing pain, and great sense of distension; shortly before the discharge makes its appearance, she has regular paroxysms of lumbar pain, like that of labour: expects to be unwell on the 13th inst.

Exam. per Vaginam.—Os externum very small; but the vagina seems lax. Cervix uteri hard and very diminutive. I feel the crevice of the os uteri; but can only presume it is pervious by the history of her symptoms.

* On dysmenorrhœa, &c., p. 41.

R. Hydrarg. c. cretâ, pulv. ipecac. co. aa. ʒi, confect. rosæ caninæ q.s.—M. Ft. pil. viii. sumat. ij. om. nocte. Sumat. rhæi et magnes. carb. aa. grs. xv. om. mane.

R. Ung. antimonii potass. tart. ʒi., ejus paululum inguini dextro om. nocte infricand.

March 19.—Has rubbed in the ointment effectually; the eruption, produced by it, was at its height on the 14th. Ovarian symptoms diminished; but there is still irritability of the bladder.

On the 13th, she experienced her first premonitory pains, that the catamenia were at hand, which was the precise day on which she expected; but the pain lasted only two hours. It returned every day afterwards, increasing in severity, with swelling of the abdomen, until last night, when she went to a ball; and, on dancing, the discharge came on. She considers that the catamenia have appeared this time with greater ease.

R. Acid. nitrici dil., tinct. hyoscyami aa. ʒij, syr. rupi aurant. ʒss., infus. gentianæ co. ʒvij.—M. ft. Mist. sumat. cochl. magn. ij ter die. Rep. alia.

23.—Pain has entirely ceased. The eruption from the ointment has healed.

R. Liniment. hydrarg. ʒij., infric. cochl. min. i. inguini dextr. omni nocte.

April 20.—Has passed the menstrual period with less pain; feels in other respects quite well. Shortly before the menses were expected, I directed her to keep up a little irritation in the right groin with the ointment.

April 22.—Passed the speculum with Mr. Protheroe Smith. A little prominence, with a very small orifice, came into view, admitting a bougie with some difficulty; a dilator slightly curved was then passed, and the orifice dilated to one-third of an inch without pain; a little leucorrhœa escaped into the vagina from the os uteri. She was directed to lie quiet for the rest of the day, and live low; towards evening she had a little pain of the back, but was otherwise quite well.

May 4.—In good health.

Exam. per Vaginam.—Os uteri more distinctly open to the touch.

R. Camphoræ extracti lupuli, extr. lactucæ, aa. ʒi—M. Ft. pil. xij, sumat. ij, initio doloris, et rep. p. r. n.

16.—(By letter from the country.)—The pain came on severely, it was much relieved by the pills; the discharge came on this morning in a rush, but is now going on moderately; still a good deal of pain in the back and abdomen.

Aug. 10.—Has just passed a menstrual period with little of the precursory pain, although there was a good deal of pain during the time. Bowels confined.

R. Extr. aloes aquos. ʒij, extr. hyose. ʒiss., Mastiches, grs. xij.—M. Ft. pil. xx, sumat. ij, horâ somni.

In addition to the symptoms of weight and pressure in the pelvis, which existed in the former case, there was evidently a state of ovarian inflammation on the right side, as shewn by the pain in that direction on assuming the erect posture, and the case produced by removing pressure from the part when leaning forwards. To this cause, I partly attribute the irritability of the bladder, and disposition to strangury: a symptom which experience shows to be a very constant attendant on ovarian inflammation especially affecting the anterior portion of the organ. I think that I am the more justified in taking this view, from the circumstance that, in the present instance, the uterus did not continue larger and harder than natural, from the thicker portions of the menstrual fluid being retained, as in the former case, but evidently evacuated itself completely at every period, and could of itself, therefore, scarcely have caused the irritability of the bladder, which formed so prominent a symptom at first.

The history of her menstrual periods, and the examination per vaginam, plainly show the nature of the case. The cervix uteri was so small, and the little transverse line at the extremity of it, which indicated the os uteri, so minute, that I had considerable doubt as to my success in the attempt to dilate it.

The ovarian symptoms were so marked, that although they were in all probability an effect of the continued, and constantly recurring, uterine irrita-

tion at the menstrual periods, I felt it necessary to relieve them before attempting any dilatation of the os and cervix uteri. This I did by means of the tartar emetic ointment, a remedy which I have now used in a considerable number of cases of oophoritis, with a degree of success, which I have not been able to obtain from leeches, and other topical remedies. It was for the purpose of allaying a little irritability of the bowels, which also existed, that I ordered the pills. The pain in the ovarian region was much relieved, and although the bladder continued irritable, this latter affection ultimately subsided.

The report of March 19th, shews distinctly that, although the catamenia did not appear until the 18th instant, the secretion had probably commenced on the 13th, and had gone on accumulating in the cavity of the uterus, with increasing severity of pain, until the os uteri yielded, and the fluid escaped. My patient assured me that in some of her more severe attacks, where the accumulation had gone to a greater extent, she had on more than one occasion been able to feel a hard spherical mass (fundus uteri) behind the symphysis pubis, which was very painful, and which instantly subsided when the catamenia appeared.

As soon as the eruption from the ointment had healed sufficiently, I directed her to use the linimentum hydrargyri to the part, to relieve still further the inflammatory state of the ovary. The succeeding menstrual period was passed with less suffering, and when quite terminated, I deemed it to be a favourable moment for attempting the dilatation, which succeeded very perfectly. The next period was passed still more easily. All her ovarian and vesical symptoms had ceased, and I merely gave her a combination of camphor, lettuce, and hop, which I have found very effectual for the purpose of allaying pain, and producing none of the objectionable effects, which arise from the preparations of opium. I could have wished to have again ascertained the state of the os and cervix uteri, and, if necessary, to have again dilated it, and perhaps to a greater extent, but she had left town for some weeks, and did not think she required further attention.

CASE OF TAPE-WORM.

By THOMAS HODGKIN, M.D.

Read to the Medical Section of the British Association for the Advancement of Science, York, 1844.

(For the Medical Times.)

THE case of tape-worm, which I am about to relate, and which furnished the specimen now produced for the inspection of the members of the Medical Section, derives its claim to notice from the country of the individual, by whom this specimen of *tenia solium* was expelled.

Haila Georgis, a native of Enderta in Tigre, North Abyssinia, was in the service of Dr. Beke, the distinguished Abyssinian traveller, recently arrived from that country, and circumstances, which it is needless here to relate, having led to his accompanying the Doctor to England, I was introduced by that gentleman to Haila Georgis, and informed that he was labouring under the influence of tape-worm, which is so remarkably endemic in a large district of Abyssinia, that few individuals are, long together, exempt from it, although they possess the almost certain means of expelling the parasite, by employing the Kosso, the flowers of which, when reduced to powder, and formed into a paste, with a sufficient quantity of water, are a drastic purgative of the most violent activity, when taken in the dose of about two drachms.

In one part of the country (Yangaro), the Kosso, being employed by the sovereign, is, to his subjects, a prohibited article in the materia medica; but they have recourse to other vegetable medicines having similar drastic properties.

I was much gratified with this opportunity, not only of relieving the patient, but of obtaining a specimen of tape-worm from his country. I prescribed for him about an ounce and a half of oil of turpentine, which he took on the 27th of the 10th month (October), 1843, both on the well-known grounds of its anthelmintic properties in this coun-

try, and from the remarkable success my friend, Dr. Knox, had obtained with it in the treatment of tape-worm in Southern Africa, where also it is a most prevalent endemic.

The turpentine promptly acted, without the assistance of any other purgative, and the mass of tape-worm, here presented, was neither preceded nor followed by any other portion. It is a large and coarse worm, measuring 16 feet 2 inches, after immersion in spirit, and as the small joints near the head have come away, there is reason to believe that it has been effectually dislodged. Its marginal pores evidently distinguish it as the *tenia solium*, which is understood to be the form of tape-worm, prevailing in the neighbourhood of the Cape. It is this circumstance which has led me to think, that this very common case was worthy of notice, since it enables us to extend the geography of this species of parasite, which, as far as observation has hitherto gone, appears to affect the inhabitants of those districts in which the bothrocephalus latus does not occur; whilst, where this latter flat worm is met with, it seems to replace the *tenia solium*.

That there should be such distinct geographical distribution of these parasites, is an interesting fact connected with the natural history of these low animals; but it becomes abundantly more so with reference to man himself, in whose persons they have taken up their abode, seeing that it may even throw some light on the mode in which his dispersion has taken place.

Thus, the bothrocephalus latus, which is the tape-worm of Northern Russia, is also found in some parts of Central Europe, and more particularly in Switzerland, where its presence may be regarded as amongst the records of the invasion of those north-eastern hordes which contributed to the subversion of the Roman Empire.

Again, amongst the natives of Southern Africa, whether of the diminutive Hottentot race, or of the almost gigantic Caffre, we find indications of the stream of population having taken its course from the north-east, and consequently in the direction from Shoa and the sources of the Nile; and the apparently trivial fact of the Abyssinian servant having voided the tapeworm, which he had conveyed in his person from his native country, becomes, in conjunction with the observations of Dr. Knox, an additional evidence in support of the same view.

Whilst the parasites of inferior animals are studied with minute care, it would be worth the attention of medical men, travelling in distant regions, to investigate the parasitical animals of the human subject in the districts through which they pass, as an object, not merely of elminthological, but likewise of ethnological, interest.

Since writing the foregoing, I have received a letter from Dr. Beke, containing several important particulars concerning the "Kosso," which I here transcribe.

"The tree, of the flowers of which you have a sample, is called in the Amharic language *kosso*, and in that of Tigre, *lhäbbe*. In the Gafat language, it is styled *kossish*, and in Gonga, *kosbo*; in the Agau of Waag, *sika*; in that of Agau-mider, *shinchi*; and in Falasha, *sakikana*; whilst in Galla, its name is *bäti*. In the countries further to the south, it has other names, which, however, I have not collected in my vocabularies of the languages of those countries. But it is best known in Abyssinia and Europe by its Amharic designation, *kosso*, under which name (or one nearly resembling it) it is described and figured by Bruce.

"The kosso is found throughout the entire table-land of North-eastern Abyssinia, but appears to require an elevation of upwards of 6,000 (perhaps of 7,000) feet for its growth. Where I found it most luxuriant, was in the vicinity of the source of the river Abai (Bruce's Nile), at an elevation of close upon 9,000 feet. Tigre, the northern portion of Abyssinia, being, on the whole, of lower elevation than the rest of that country, the tree is only found there in a few places; whence, substitutes have to be sought in the seeds of other plants, the *lhäbbë-chôggo* (in Amharic, *michâmiche*), the *sària* (Amharic, *Ankôko*), and the *kächamo*, (in Amharic, the same name);

but the kosso is still the principal medicine, being brought in large quantities from the higher southern provinces, and thus forming a staple article of trade.

"I am not aware of the kosso being interdicted to the inhabitants of any country except Yángaro, or Djandjero (vulgo, Zingero), where, I am informed, the King has the exclusive use of it, his subjects being restricted to that of a certain grass, of which I have no particulars."

"The tape-worm, for which the kosso flowers are a remedy, is known in the languages of Amhara and Tigre, by the same names respectively as the medicine itself, viz.: *kosso* and *hhábbe*. So, too, in the Gafat and Ginga, in which respectively both are called *kóssish* and *kóso*. In the Waag-Agau, likewise, the name *sika* is the same for both; but in the dialect of Agau-mider, the worm is called *turo*, and, in the Falasha, *saka*; whilst, in the Galla, it is *minui*.

"The medicine is taken about every two months, the worm again becoming troublesome after the lapse of that time; and so general is this rule, that many persons make a point of purging themselves in company, regularly, as a certain day of every alternate month comes round.

"Whilst obtaining from my Abyssinian servant, this morning, some of the particulars, now communicated to you, I asked him if he felt the worm, again, yet? "Why, it is only a month, or so, since I took the medicine," replied he.

"The first dose of spirits of turpentine was given him, by your direction, on Oct. 27th, 1843, and the second I administered on the 4th of January, 1844, he having repeatedly asked me for it, during several days previously."

London, 19th Feb. 1844.

Halla Georgis is about 33 years of age.

On the second occasion, the worm was not sought for: but the usual relief followed the operation of the turpentine. About two months later, the symptoms of the presence of the worm returned, and a third dose was given, which brought away the second specimen of tape-worm, which, like the first, is in several portions, unitedly measuring 40 feet 10 inches. Many of the pieces are small and slender, and it seems probable, that they do not all belong to a single worm. The propriety of the specific name may, therefore, be doubted.

RELATION BETWEEN THE DIRECTION OF THE ELECTRIC CURRENT AND THE MUSCULAR CONTRACTIONS THEREBY PRODUCED.

By Drs. A. LONGET & C. MATTEUCCI.

(This memoir, read before the Academy of Sciences, has been revised by the authors expressly for the 'Medical Times'.)

Natural philosophers have hitherto studied the action of the electric current, principally on the lumbar and sciatic nerves of animals; that is to say, on the *sensitivo-motor* nerves (*nerfs mixtes*), from their being composed of two kinds of filaments, those presiding over sensation, and those over motility. This method of experimentation, commenced by Lehot, and continued in by Bellingeri, Nobili, Marianini, and Matteucci, shows that, if a direct current be made to pass through a portion of a nerve of this species (whether adherent or not to the cerebro-spinal axis) from the brain to the nervous extremities, contractions take place in the muscles situated below, whether the circuit be closed or open; and that the same phenomena are produced by an inverse current, that is to say, by one proceeding from the extremities of the nerves towards the encephalon. But the authors, just mentioned, perceived that another period appeared, in which contractions constantly took place: 1° at the commencement of the direct current; 2° on interrupting the inverse current. This is the only general law admitted, at the present time, on the rapport between the muscular contractions and the electric current, when the latter is made to pass through the nerves of animals, recently killed, so as to cause the former to contract. The fundamental discovery of Sir Chas. Bell, on the functions of the spinal marrow, or the

roots of the spinal nerves, led us to examine whether this law, established by experiments on nerves of sensibility and motility, is applicable or not to the portions of the nervous system, whose action is centrifugal, or exclusively motor; that is to say, our researches were at first confined to the anterior spinal nerves and the corresponding part of the medulla. In so doing, we considered it important:—1° to submit the same anterior root to the same current; 2° to employ, at first, so feeble a current, as to produce very little muscular contractions; 3° to take no notice of the first phenomena, which, from the extreme excitability of the nerve, are never very distinct, but to continue employing the same current, until a permanent and constant effect is produced; 4° to choose the lumbar nerves, because they are longer, and because the action of the current on the neighbouring parts is more easily avoided; 5° to stanch the blood, and wipe away the moisture which surrounds the nerve; 6° to isolate the nerve by means of a bit of varnished silk, or something passed under it, so as to raise it gently; 7° to isolate, in an especial manner, the pile, with the greatest care,* which may be ascertained by touching, at different times, the nerve with both poles. If this precaution is not observed, it is impossible to know the direction of the current in the nerve, and the result will, therefore, be equivocal;—8° finally, if, in these experiments, the number of the plates is increased, or if the current is made to pass through a longer portion of the root of the nerves, a slight confusion in the phenomena may appear, for a short time: that is to say, muscular contractions, when the circuit is established, or closed, let the direction of the current be what it may. But the result, which will presently be made known, soon re-appears very distinctly.

The anterior spinal root was submitted to a direct, and an inverse, galvanic current, in four different ways; 1° the anterior and corresponding posterior roots were entire; 2° both were previously divided; 3° the posterior entire, the anterior divided; 4° the inverse of the preceding. In all, contractions of the muscles, animated by the anterior root, manifest themselves, confusedly, at the commencement, and end of each current, let its direction be what it may; but, after a certain lapse of time (somewhat later, if the root is still adherent to the medulla), the result becomes evident and lasting: the contractions then take place only at the commencement of the inverse, and the interruption of the direct, current. This result, in direct opposition with what is observed in mixed nerves (the *sciatica*, for instance, and the *rachidian* nerves immediately behind the vertebral ganglion), induced us to repeat the experiments a great number of times, and on different animals: the effect produced was invariably the same, in the horse, the dog, the rabbit, and the frog. In order, however, to obtain this in the frog, it is indispensable (on account of the length of the roots, and the extreme facility with which the galvanic excitation is propagated beyond the intervertebral ganglion, that is to say, to the rachidian nerves which preside over the motor and sensitive functions) to take certain precautions, which, though simple when once known, were discovered but by repeated experiments. Thus, after separating the medulla spinalis from the brain, opening the vertebral canal, passing small bits of varnished silk under the anterior lumbar root, while still adherent to the medulla spinalis, and dividing all the roots opposite to those on which the experiment is to be performed, one extremity of the pile must be placed in contact with the anterior portion of the spinal marrow, and the other on a part of the anterior root near the medulla. In this case, the result is as evident, as in the dog; the contractions of the lower extremity are observed, only at the commencement of the inverse, or the interruption of the direct, current. But, if the two extremities are placed on the anterior root itself, too near to the intervertebral ganglion, and the excitation is

transmitted to the part of the nerve situated below the ganglion, the inverse phenomena will appear, similar to those obtained with nerves whose action is not as that of the anterior roots, exclusively centrifugal. A fact, worthy of remark, is that, in continuing to submit the divided anterior roots to the galvanic current, in the horse, dog, rabbit, and frog, the muscular contractions, produced by the inverse current at its commencement, persist much longer than those of the same current towards its close.

Let us next consider the influence, exercised by the current, on the white anterior, and lateral, fasciculi of the spinal marrow.

After dividing, transversely, the medulla spinalis, on a level with the last dorsal vertebra, and having incised the dura mater covering its inferior extremity, we cut and separated all the anterior and posterior roots corresponding to the anterior fasciculi, on which we proposed performing an experiment; and, having removed the pia mater, where the extremities of the wires were to be placed, we remarked that the muscular contractions commenced (after a short time, or after the cessation of the reflex action) in the lower limbs of the animal, at the commencement of the inverse, and interruption of the direct, current, just as was observed, when the anterior roots were acted upon. As to the lateral fasciculi, their action is similar to that of the anterior; the only difference being, that the convulsive movements are neither so lasting nor so energetic. The experiments on the anterior fasciculi were frequently performed, not only on dogs, but, likewise, on rabbits, frogs, and on a *coluber natrix*.

If the phenomena, just described, are worthy of the attention of natural philosophers, they are equally so of that of the physiologist; for they will enable him to draw many useful deductions, and serve as a basis for new arguments, in support of the distinction, made between motor and sensitive nerves. A great many authors, principally German, though they admit that the two sets of roots of the spinal nerves preside over different functions, still raise doubts on the fact of the white, anterior,* portion of the medulla spinalis being exclusively motor—doubts, which one of us has already endeavoured to clear up, in the memoir inserted in the *Archives generales de Medecine*.† From the above experiments, all incertitude is removed; since, under the influence of the direct, and inverse, galvanic current, the white, anterior, fasciculi of the spinal marrow act always in a similar manner to the anterior spinal roots: that is to say, are centrifugal; and not as the sciatic, whose action is both centripetal and centrifugal, or sensitivo-motor. Physiology has thus a certain means of distinguishing the nerves, which are conductors of the power, presiding over muscular contractions, and those which transmit, not only this principle, but likewise external impressions, and which have been called *sensitivo-motor nerves*.

But, at a distance from the cerebro-spinal axis, which cannot be fixed, all the sensitivo-motor chords do not possess the two powers in an equal degree; thus, such an one, under a common neurilemma, offers a great many motor, and but few sensitive, filaments; such are, the facialis, hypoglossus, oculo-motorius communis, accessorius Willisii, &c.; whilst other nervous chords are composed, not only of the preceding filaments, but likewise of those which are destined to transmit external impressions from the periphery to the encephalon: such are, almost all the nerves distributed to the superior and inferior extremities.

An important question here presents itself: whether this difference, in the constitution of the nerve, could be revealed to the experimenter, by varying the direction of the galvanic current? Now, as we have already stated, the most contrary results are produced when it is directed,—on the anterior rachidian roots (simply motor), and on

* Inferior in almost all animals.

† *Recherches experimentales sur les propriétés et les fonctions des faisceaux de la moelle épinière, et des racines des nerfs rachidiens; avec un examen historique et critique des expériences faites sur ces organes, depuis Sir Charles Bell, 1841.*

* We made use of a galvanic trough, filled with dilute nitric acid. This battery is the most convenient, because it permits our varying the number of plates during each experiment.

the rachidian nerve (sensitivo-motor) immediately below the inter-vertebral ganglion. This opposition, in the different phenomena, is not so marked in the nerves, in which the motor filaments predominate considerably over those of simple muscular sensibility (facialis, hypoglossus, oculo-motorius communis), but the effect was intermediate to that obtained with the anterior roots and the rachidian nerves, stimulated below the ganglions. It, therefore, appears evident, that the presence of a few sensitive or centripetal filaments in a motor nerve, is sufficient to modify the phenomena, and that, by galvanism, these fibres may be discovered, even when the anatomist has, with his scalpel, failed in so doing. It must, however, not be forgotten, that the facialis, hypoglossus, oculo-motorius communis, spinalis, &c., at their origin, and before receiving any sensitive filaments, present, when the direction of the currents is changed, phenomena similar to those obtained with the anterior roots, and not like those of the sensitivo-motor nerves.

As some German physiologists have advanced, that the grey substance of the medulla spinalis is indispensable for the transmission of feeling, and of the principle of voluntary motion, we consider it our duty to declare, ere we close this memoir, that we constantly found, in the dog, this portion of the medulla spinalis to be sensible, but incapable of producing convulsive movements, when submitted to the influence of the electric current, or irritated mechanically; that its destruction, when as complete as possible, by means of an instrument, did not modify, in the least, the sensibility of the anterior roots. Finally, we may add that, when all reflex action had disappeared in the caudal extremity of the divided medulla (in the dog), a stimulus, applied to the fasciculi, never produced the least muscular contraction, let the direction of the electric current have been what it may. The same effect is produced with the posterior roots, when separated from the spinal marrow; on the contrary, when they are adherent, if the current be inverse or direct, the convulsive movements are produced on closing the circuit, and are evidently owing to the reflex action on the anterior roots, since the division of these causes all contraction to cease instantaneously.

CONCLUSIONS.

1^o. The influence, exercised by the electric current, is very different according as it is applied to motor nerves, whose action is centrifugal, or to sensitivo-motor nerves, at the same time centrifugal and centripetal.

2^o. The former produce muscular contractions only at the commencement of the *inverse*, and the interruption of the *direct*, current; the latter, on the contrary, cause them to appear at the commencement of the *direct*, and the interruption of the *inverse*, current.

3^o. The anterior fasciculi of the medulla spinalis produce, with the direct and inverse currents, phenomena similar to those of nerves simply motor.

4^o. This different and remarkable action of the electric current on the motor, or sensitivo-motor, nerves, may be considered as a certain mode of distinguishing these nerves from each other, and, consequently, may tend to elucidate a question on which the opinions of physiologists still vary: viz., whether sensitivo-motor nerves exist as such from their origin.

Remarks on the non-existence of electric currents in nerves.—Being unable, in our former experiments, to prove, by means of the galvanometer, the existence of electric currents in the encephalon, the medulla spinalis, or the nervous system, of the dog, the rabbit, and the frog, we determined upon performing them anew upon an animal of larger size (the horse), in the hope of placing ourselves under conditions more favourable for this species of researches.

The galvanometer we made use of, in these new experiments, and invented by Runkorff, was extremely delicate; the wire, used as a conductor, formed 2,500 turns, and was furnished at each extremity with a *platina plate*, fixed on an ivory handle and varnished, so as to leave uncovered but about 0.155 of a square inch. The needle oscillated every 70 seconds. Before applying, on the

nervous parts, the platina plates, they were plunged, for a considerable length of time, in spring water, and kept there until all the signs of an electric current, always perceptible on immersion, had completely disappeared.

These precautions taken, and the horse, still alive, being laid on a table, its sciatic nerve, while still adherent to the cerebro-spinal axis, was laid bare, isolated from the neighbouring muscles, by means of a bit of varnished silk, for about 8 to 12 inches, and wiped carefully. This done, and after ascertaining that the needle remained motionless at zero, whether the one platina plate, or the other, was removed or replaced in the water, these latter were put in contact, first with the surface of the *sciatica*, and secondly with the substance itself of this voluminous nerve, the neurilemma having been removed. The distance between the two plates being from 1 to 1½ inch, sometimes the needle remained at zero, and sometimes deviated a few degrees, to return soon to its original position. This interval having been increased suddenly to about 6 inches, the deviation ought to have notably augmented in the same direction, had the electric current been present in the nerves. Nothing of the kind, however, took place; the result, here, was as before: that is to say, the needle deviated, for a moment, the same number of degrees, and then returned to zero, or remained motionless. An important remark may here be made; while these experiments were performing, the posterior limbs of the animal, from pain, were agitated by energetic and repeated contractions, and that, consequently, the extremities of the galvanometer were placed in contact with the *sciatica*, at the time it transmitted a considerable degree of excitation to the muscles of the thighs and legs. Now, though in varying our experiments, we perceived sometimes a sensible deviation in the needle, still this deviation was always identical with that obtained by inserting the extremities of the wire in the nerve itself, and was produced, whether the mode of contact was interverted, whether the nerve was touched with one of the platina plates only, or both, or when these last were plunged in water.

In conclusion, when we consider the extreme sensibility of our galvanometer, the favorable circumstances in which our experiments were performed, and the precautions taken, we think it may be affirmed that no proof exists, confirmatory of the hypothesis which admits the presence of an electric current in the nerves of living animals,—an affirmation to which we were led by former experiments.

ON THE SEAT OR SOURCE OF COMMON CONVULSIONS.

(Supplement to Papers on Reflex Nervous Acts &c. See *Medical Times*, p. 551 vol. 9.)

By T. WILKINSON KING, F.R.C.S.E.

Prevailing views.—*Capillary disorder, connected with other disease, encroaching by crus cerebri, or crus cerebelli, on the pons varolii; or, beginning in this body, is the only (?) cause of convulsions; objections.*

It is a little remarkable, that hitherto there has been no settled opinion in the profession, as to the primary seat of derangement in convulsive affections. Dr. Hall and some others seem to refer the spasms to general disorder of a specific nature in the spinal marrow. Others impute them rather to meningeal or to superficial affections of the cerebrum. I do not know whether any authority might be collected in favour of the views, which, by degrees, and unawares, by the aid of pathology, I have formed for myself, and which I am led to advocate in consequence of hearing different expressions of the uncertainty and discrepancy that prevails in the matter. The substance of what I am about to unfold was pretty well declared in my last paper, but having subsequently thought that a mere statement on so great a point was little likely to meet with favour from any class of physicians—the necessary induction of a suitable array of facts, by the aid of a friend, has been made, and this rather wearisome task of compilation, now, I think, pretty thoroughly done, is not without a clear prospect of other advantages.

Convulsions, which leave the patient as well as ever, even after many attacks, cannot be expected to have any visible permanent local alteration connected with them.* Shall we suppose a sudden blush or transitory injection of the part (such as that in the face, or the coma in epilepsy, indicate), or only a change in the quantity or quality of the nervous endowment. To have a clear understanding of the local source of each convulsive movement would be no small help to the right consideration of particular affections of the brain and spinal marrow, and I am not without expectation of being able to furnish such.

In the first place, I shall proceed to show what I have concluded the pons varolii has to do with convulsions—for, here, all motor tracts converge—and, here, one thrust, as it were, may stir up every muscle of the body.

I assume that no affection of bone, nor, indeed, any meningeal affection, necessarily affects brain or nerve, and I could almost add no tumour. I see that all the affections here named begin and go on to a great extent without nervous symptoms, and that the signs of nerve-disease, when they do supervene, proceed independently, and without any strict relation of duration, degree, or consequences, to the extraneous disorder. I find, moreover, two sets of real nerve disorders, *i. e.*, 1stly, with a palpable cause and a definite site; and, 2ndly, devoid of visible local change; and I cannot doubt but that some of the latter are fairly illustrated by the former. A new and gradual growth deranges no nerve fibre—a strumous tubercle in the thalamus gets large, unsuspected; and consequent affections of the opposite arm come and decline variously, according to the varying incidental changes in the brain, around the tubercle. Such a body, in a renovated constitution, rather wastes, turns to cholesterine, and may be unheeded through a long life. Strumous, cancerous, inflammatory and apoplectic, diseases of the brain are occasionally found to become arrested at every stage of their course, as when wasting or other disorders, elsewhere, come into greater activity.

On the other hand, I think it is, in the main, pretty certain that cysts, tumors, inflammations, softenings, extravasations, whose size or extension may gradually encroach on the pons, induce convulsions before the final coma—a certain state of injection, or nutrition, or of nerve-irritation, preceding total oppression.

With regard to the details of common diseases, and the history of the course and of the effects of treatment, I avow freely that I hold very light all that does not explicitly shew the hourly influence of temperature, and prove, too, that the narrator has had his eyes open to this grand perverting or assisting influence. The surface has about the largest function, and correlative internal agencies, for good or bad! What do we hear of all this? An eminent physician ordered, in rapid phthisis, a little fire-basket into the empty, open, fire-place of a cold room, to increase a purifying draught;—another, advocating warmth in acute inflammations, cuts off the top of the door to diffuse the colder air over the ceiling—(we might ask, how would the experiment succeed with water?):—but I simply wish to shew that even the physics of warm air is not rightly considered, and that its physiological effects are still less rigidly appreciated. I would not offend, but I cannot forbear asking, if it be right to accept of a theory of irritations, and spasms, and sympathies, from those who certainly do not dwell on the possibility that cold may be a cause of convulsions, eruptions, palsy, fevers, discharges, or arrested secretions; and who seem to deny that worms, dentition, irritation, sympathy, and the like, may occasionally be imaginary. The best account I know (which I scarcely dare name), of the causes of convulsions, totally omits all reference to cold. It may seem vexatious, foolish, vainglorious, or what not, but still I hold on to the conviction of years, that the

* Ollivier quotes cases of ancient epilepsy in which strumous tubercles seem to me to have been formed, rather as consequences than precursors, in the pons varolii, pyramids, &c.

clinical history of a dangerous case, when regardless of such things as clothing, of open windows, and other scarcely less glaring influences of the same kind, is a very indifferent substitute for the true account of diseases and of remedies.

Every known disorder of the spinal cord causes lesions of motion (rigidity, spasm, or palsy), and of sense (pain, darting, or numbness), in proportion to its severity, and only in parts below the seat of the disorder; but, if these affections involved the excitor cords of some physiologists, surely we should have universal disturbances.

The convulsions of known spinal diseases are all comparatively limited or insignificant.

To what nervous lesions do we look, for most general palsy, or tremor? As disease approaches the centre of the pons, so general convulsion or fatal paralysis attends. Slow tumors thus indicate the site of the transitory actions which cause convulsions. The same diseases in the cerebrum, cerebellum and spinal marrow, cause no general convulsions. These assertions I hope to make good. If any one should think he can do as much in opposition, I can only wish to see it.

1. *There are various diseases of the cerebrum, which, approaching the pons varolii, produce convulsions, first of the opposite side of the body, and then generally.*

2. *There are various diseases of the cerebellum, which, gradually advancing upon its crura, &c., cause convulsions, first of the opposite side of the body, and then generally.*

3. *There are various diseases of the tuber annulare itself, which, in their course, usually set up universal convulsions.*

4. *There are some exceptions to the above statements, but the consideration of them rather illustrates than refutes the main principles advanced.*

These points are, I think, established, seriatim, in the following four sections:—

Section I.

A woman, aged 77, had violent convulsions of the left arm, which returned every two or three days for ten weeks, with weakness of the arm—then weakness of the leg, and gradually complete hemiplegia, the convulsion then ceasing—speech then lost, but mind entire—death after eleven months without any other symptom. A hard, yellow, cancerous mass, larger than a duck's egg, and composed of many lobes in the substance of the right hemisphere. Rostan (*Ramollissement du Cerveau*).—Abercrombie, p. 437.

A female, æt. 27, had softening in the centre of the right hemisphere, and some injection of the other, anteriorly. Left arm and right cheek violently convulsed; (sense and mind good); then all parts were affected, the arms more than the legs.—Spillan's Andral, p. 139.

A boy, aged 16 months, formerly healthy, was seized with an attack of convulsion. It affected chiefly his right side, which was very strongly convulsed. He had a second attack on the evening of the same day, after which, he had fever, blindness, and loss of the power of deglutition. In this state he continued ten days, when he had another fit, and, after this, he gradually recovered his sight and deglutition. From this time there was a degree of paralysis of the right side, but in other respects he enjoyed good health for four years. He then had epileptic paroxysms, which at first occurred once in two months, but gradually increased in frequency. After a much longer interval than usual, a few weeks before his death, the fits returned after a fright, recurred with great frequency, and were fatal. He was then 12 years of age; his right side had continued weak; and, at the time of his death, the right lower extremity was three inches shorter than the other; his intellect had been weak, so that he never could be taught to read. On the surface of the brain, under the left parietal bone, there was a tumour the size of an egg, situated between the pia mater and the arachnoid; internally, it was of a white and somewhat glutinous appearance, but very firm, and when cut into, some serous fluid was discharged from it; no effusion. Communicated by Dr. Beilby.—Abercrombie, p. 434.

A man, æt. 40, had pain and throbbing in the left side of the head for two months, followed by

convulsions in paroxysms of the right limbs; mind long clear; great softening with pus through the interior of the left hemisphere; a blood-clot, the size of a walnut, in the left thalamus.—Abercrombie, p. 91.

A man, aged 42, severely phthisical, with foetid discharge from ear; all parts suddenly convulsed, right hand through the night; exhausted. Fungoid (?) tumor, size of a small chesnut, outside the left lateral ventricle.—Bright, p. 121.

A female, æt. 16, had acute softening of the hemispheres, superficial, except deep changes of the posterior part of the left brain. There were convulsions—most of the right arm, and least of the left side.—*Lancet*, 1841-2, p. 755.

A man, aged 38, liable to twitchings and epistaxis, &c., after a fall had stupor, &c. Left limbs violently convulsed; great clot between the bone and dura mater on the side of the right hemisphere.—Bright, p. 406.

A man, aged 50, had a chronic solid tumor, four inches long, on right anterior cerebral lobes, and twitchings of left limbs.—Bright, p. 344.

A man, aged 30, had softening of optic thalamus of right side; diffuent state of fornix; tetanic phenomena at first; subsequently, alternations of paralysis and convulsive movements of left side of body.—Spillan's Andral, p. 142.

A man, æt. 47, had cancer, the size of a pullet's egg, in the left corpus striatum, thalamus and hemisphere; hemiplegia of long standing, preceded by pains, occupying the side of the cranium, opposite the paralysis; intellect perfect; suddenly a violent attack of epilepsy, followed by profound coma, in which the patient died.—Spillan's Andral, p. 191.

A young female fell from a height, senseless; severe convulsions; died the sixth day; superficial brain-lesions; bloody softening, the size of a small walnut, beneath the hinder part of the corpus callosum.—Bright, p. 405.

A man, aged 24, severe headache; watchfulness and imbecility of the head; blindness of the left eye, and after a month, of the right; convulsive paroxysms, which continued to recur for six months; they then ceased, and he died of pectoral complaints.

Extensive disease of the lungs; much effusion in the brain; in the substance of the left hemisphere, a tumor larger than an egg, weighing fourteen drachms; it was covered by a fine sac, and internally was white, firm, and uniform, resembling coagulated albumen, but harder. Felix. Platerus, Liber 1, 108.—Abercrombie, p. 431.

A lady, aged 49, of a scrofulous habit; gradual failure of memory, sight, and hearing; inarticulate speech; epileptic paroxysms, at first once in the fortnight, afterwards more frequent; her gait feeble and tottering; died in six months. A year before her death, she had been much stunned by a fall down a stair.

A tumour, the size of a small orange, lay on the pars petrosa of the left temporal bone, inclining to the opposite side, and producing great depression in the substance of the brain; the seventh pair of nerves, and the branches of the fifth pair, were compressed and stretched by the tumour. Internally, it consisted of a soft uniform substance, resembling the cineritious matter of the brain. Communicated by Dr. Hay.—Abercrombie, p. 432.

Section II.

A female, æt. 31, had pain in the occipital region of three months date; hemiplegia of left side established gradually; latterly, convulsive movements of the paralysed limbs; blindness; considerable softening of right lobe of cerebellum.—Spillan's Andral, p. 202.

Osteo-fibrous tumours, of the size of a pullet's egg, on under surface of tentorium cerebelli, to which it closely adheres; convulsive movements at intervals, with hemiplegia of the side opposite that where the tumour was; atrophy of lobe of cerebellum corresponding to the tumour. Death by a cerebral hæmorrhage in a man, æt. 47.—Spillan's Andral, p. 2.

A girl, æt. 7, with incipient phthisis, had fever, head-pain, and disturbances, ten days; then convulsions of the right limbs; fits for four or five days; fatal coma. Summit of right hemisphere softened one inch deep; solid infiltration of the

coverings here; scattered minute tubercles; and, at the junction of the left crus cerebri with the pons, 'an irregular tubercular mass,' of considerable extent, mixed with adventitious membrane.—(Abercrombie, p. 81.)

A female, æt. 19, had a purulent cyst, the size of a pullet's egg, in the centre of the left hemisphere of the cerebellum. There was first pain at the base of the occiput; then paralysis, with contraction of the right limbs; general convulsions; mind long free.—Spillan's Andral, p. 209.

A girl, æt. 4, with necrotic ear; improving; had relapse, and was frequently convulsed.

In the substance of the cerebrum, close to the left ventricle, was a tubercle, the size of a walnut; and in the fore-part of the cerebellum, under the tentorium, was another, softening, and inflamed.—Bright, p. 121.

(To be continued.)

CASE OF NATURAL SOMNAMBULISM AND CATALEPSY, TREATED BY HYPNOTISM;

WITH REMARKS ON THE PHENOMENA PRESENTED DURING THE SPONTANEOUS SOMNAMBULISM, AS WELL AS THAT INDUCED BY VARIOUS ARTIFICIAL PROCESSES.

By JAMES BRAID, M.R.C.S.E.

On the second of August, 1844, I was consulted in the case of Martha Scott, No. 5, Back Glover Street, St. George's Road, Manchester. She was 14 years of age, with dark hair and eyes, of middle stature for a girl of her age, and of ordinary habit of body—being neither plethoric nor the contrary. She had small pox at 2½ years of age, from which her face is slightly pitted. Had never menstruated. Her parents stated that she had enjoyed good health up to the end of December, 1843, when she was attacked with difficulty of speaking and swallowing, with a feeling of fulness about the throat, which was considered to be an attack of quincy, but she recovered without suppuration ensuing. She suffered three weeks from this attack, after which she had been able to resume her work, and had continued to enjoy good health from that period up to the middle of last June, when she had a similar seizure. On this occasion, however, after a few days, it became complicated with attacks of spontaneous somnambulism and catalepsy. She was at first prescribed for by a druggist, but, after having had several fits of somnambulism, she was transferred to the care of a respectable surgeon of this town, who prescribed for her for three weeks, but without any relief. On the contrary, the fits of somnambulism became more and more frequent: from having three fits in a week, they got to one daily, and increased to as many as five or six fits in one day. She had one of these seizures at this surgeon's house, which he mistook for a common hysteric fit. He saw her twice a week, for the first two weeks, and once the third week; but as the attacks were becoming so much more frequent and severe, under the treatment prescribed, she discontinued farther attendance, or perseverance in the use of the medicines which he had prescribed for her.

A week had been tried without the use of any medicine; still there was no improvement; on the contrary, in addition to somnambulism, sleep-talking, and catalepsy, there was now the loss of voice, for a considerable time after awaking—on one occasion she remained quite speechless for ten hours. In consequence of this state of affairs, the parents resolved to give another trial to the powers of medicine, and consulted a respectable druggist in the neighbourhood. After prescribing for her for a few days, and observing no perceptible improvement in the patient, he honestly told them that he did not consider any medicine, he knew of, could benefit such a case, and therefore recommended them to consult me, from knowing that I had devoted attention to the investigation of such a condition of the nervous system.

It appears that, during the period of this affection, they could devise no means of arousing her from her sleep. She seems to have been quite

dead to all impressions on the senses, however severe the inflictions. To test this, and satisfy her relations and those, who, in their profound ignorance of such a condition of the nervous system, can imagine nothing but shamming, imposture, and similar uncharitable allegations, this patient had been subjected to an ordeal sufficient to make humanity shudder:—for, whilst insensible to the pain of such inflictions, at the time of their perpetration, she could not fail to feel, indeed, she did feel most severely, when aroused, from the disorganisation necessarily resulting from such inflictions, as those to which she had been subjected during her sleep. Thus, in order to satisfy the scepticism of some parties, as to the possibility of such a condition being real, she had been subjected to pricking and pinching, had pins and needles and a lancet thrust under her finger nails; and the ends of her fingers had been bruised to such an extent, as to cause suppuration under the nails, without any apparent feeling at the moment of infliction, but with acute suffering from the inflammation and suppuration, which necessarily ensued, after being restored to a state of vigilance and consciousness. The poor victimised girl used to express herself as quite surprised at what could have hurt her fingers. This is one of the many proofs, which might be adduced, of the importance, the great importance, that this condition should be properly understood, whether arising spontaneously in the course of disease, or induced by artificial contrivance.

I have always explained that, whilst I should not hesitate to apply sufficiently severe tests to prove the state of insensibility of patients during the hypnotic sleep, I should never permit those to be applied, which would produce positive and severe lesion of the tissues, as the subjects must, of necessity, suffer from such inflictions, after being aroused, notwithstanding my conviction, that they would experience no pain at the moment of infliction; just as a person, during a fit of intoxication, might not be conscious of suffering a fracture of his leg, or of his arm, but would, nevertheless, feel the pain and inconvenience of it when he became sober. I would beg leave strenuously to urge upon all, that this fact should always be kept in remembrance by those engaged in such investigations. The cause of humanity demands such observance.

It was reported to me by the parents, that this girl's fits would sometimes come on whilst she was working, or walking about,—on one occasion when she was walking in the street. She generally had premonitory symptoms of their approach, so that she could get time to betake herself to a chair, or to the sofa. At other times, her friends would observe their approach, and help her to a seat; but, on one occasion, she was attacked so suddenly, as to fall on the floor. The somnolent fits sometimes lasted not more than six, eight, or ten minutes; at other times, they were protracted for an hour, an hour and a half, or an hour and three quarters, when she would awake spontaneously, for, as already remarked, no means tried had succeeded in awaking her.

For about a week, prior to my attendance, besides others at irregular times of the day, she had had a fit of somnambulism within a few minutes of nine o'clock each evening. It was, therefore, my wish to make my first visit at the usual period of her evening paroxysm, which generally lasted from an hour and a half, to an hour and three quarters, and from which, as already noted, no means had succeeded in arousing her.

It is worthy of remark, that the only proof, the parents could adduce, of either the former or the latter attack having been really attacks of quincy, was the difficulty the patient experienced in speaking, or swallowing. Now, after the case has been so far developed, I think it is highly probable that the patient never had quincy at all, but, rather, that the symptoms, which were attributed to this cause, resulted from spasmodic affection of the muscles of the pharynx and larynx. Thus, during her last seizure, she lost the power of speech, on one occasion, for ten hours after being awake, and the rigid state of the muscles, of the other parts of the trunk and extremities, presented themselves shortly after, during her paroxysms of somnambulism. She also lost the power of speech for eighteen hours, at the end of September, which I was enabled speedily to restore to her by hypno-

tism; and, on this occasion, I know she had no real quincy.

My first visit to this patient was at nine o'clock, p.m., on the second of last August. When I arrived at her father's house, symptoms of an approaching fit had manifested themselves, and, in a few minutes, the eyelids closed partially, and slowly, with the same vibratory motion of the eyelids, as witnessed under the ordinary hypnotic or mesmeric processes. There was, also, a similar condition of the respiration. So soon as she had passed into the sleep, I elevated the limbs, both legs and arms, and all retained the positions in which they were placed, and in a little while became rigid. By a waft of air from the hand, or by blowing on them, the rigid extremities were rendered limper, and fell down; and, by a current of air, they were again excited to rise, and become rigid. I repeated these experiments, again and again, with like results. I then excited the larynx, when she immediately manifested her desire and ability to accompany me, in singing a hymn tune, as also her ability to imitate any language. I now put a pencil into her right hand, and a piece of paper, laid on a book, into her left hand, when she began moving her fingers. I desired her to write the title of the book, when she wrote "The Gospel according to Saint Matthew." As the book was a copy of the New Testament, which had been brought from another room, and had not been opened by any one present, and as not even a single whisper had been given to disclose the name of the book, this would have been deemed a most decided case of clairvoyance, by those who believe in the existence of such a power. For, here, was a case of natural somnambulism, where the patient had read through the board of the book and two leaves, and was quite correct as to the reading and recording. Who can doubt clairvoyance, after this? I, for one, do; and I think it is far more probable, that she knew by feeling that it was the New Testament, and thus wrote what she did, as an act of memory, than that she actually saw the print through the board of the book and two fly leaves. Moreover, in confirmation of this opinion, what was properly the title-page, was on the fly leaf, "The New Testament," and in much larger print than the heading which she gave, from the more advanced page. If my grounds of dissent from a belief in clairvoyance, in cases yet adduced in proof of it, had been generally applied, the enemies of mesmerism would not have had such cause for exultation as they have lately enjoyed. Thus, I maintain, that if the answers are given from true perception, they ought always, or at least generally, to be right; whereas, it is admitted, even by the most sturdy friends of mesmerism and clairvoyance, that even the most clairvoyant are oftener wrong than right. I have, therefore, attributed their successes to acts of memory, shrewd guessing, the quickness of the senses of smell, touch and hearing, heat and cold, enabling them to detect qualities of objects, actions and observations, which they could not discern in the ordinary waking condition. Moreover, the vivid state of their imagination leads them to describe as real, what are mere pigments of fancy, or whatever ideas are suggested to their minds by impressions, received through any of the organs of special sense. It is also probable, that some of them, as was actually proved to be the case with this patient, may have the power of seeing through their eyelids when apparently, but not entirely, closed, and they may have such quickness of sight as to enable them to see, in such a faint light, as could not be adequate for the same performance during the waking condition. All this I can readily believe and admit; but I have neither seen, nor heard, nor read, evidence sufficient to satisfy my mind on the subject, that they can really see, or perceive, through opaque bodies, in the manner alleged. I think it is to be deplored, that an anxiety with some, to prove too much, should lead them to make statements, which raise a prejudice against what is demonstrably true, and of real practical value, both therapeutically and physiologically.

Medico-Chirurgical Society.—The Committee have resolved to enrich their room with busts of all their past presidents.

ON THE FUNCTION OF THE SPLEEN.

To the Editor of the "Medical Times."

SIR,—From time to time, there have been communications from Mr. John Jackson on the use of the spleen, and in the *Medical Times* of last week, is another letter by the same gentleman, in which he has attempted to demonstrate, that the spleen is "precisely the reverse of half a heart." It has puzzled me exceedingly to comprehend his abstrusely-written letter, and, on reaching the conclusion of it, I thought it desirable that the attention of your readers should be directed to a note at page 31, of the 4th Edition of Dr. Billing's "First Principles of Medicine," in which the function of the spleen is more satisfactorily explained, in my opinion, than by any other theory that has been advanced.

At page 31, of the "First Principles," Dr. Billing has clearly proved, that what is called determination is not active but passive, that the heart has no power to direct any blood to one part more than another, although, if in any part there be an unusual relaxation of the vessels, they will receive more than ordinary; and he employs the following very apt illustration: "as, when the water is sent through the main pipe of one of the water-works, it cannot be determined to any house in particular, but whichever house has the largest cistern will receive the most water." Then follows the note:—

"We have an interesting physiological illustration of this principle, in the 'determination' of blood, alternately, to the stomach and spleen. A given quantity of blood is constantly sent through one arterial channel, which branches off to the stomach and spleen: when the stomach is empty and collapsed, its arteries being likewise collapsed, the blood passes into the spongy texture of the spleen, so constituted and situated as to be ready to receive it; on the contrary, when the stomach is distended with food, its elongated arteries admit the blood freely, and consequently the spleen, being then less forcibly injected, collapses and contains less blood. The spleen thus performs the office of a mill-pond, by receiving the surplus of the stream when not required for the mill—the stomach; and, by this contrivance, the quantity of venous blood sent to the liver from the two organs does not fluctuate. I have never found reason to alter this opinion, respecting the use of the spleen, which I advanced in my thesis. Again, we have an illustration from comparative physiology: according as the lungs and thorax become developed in the tadpole, there is an increased development of arteries and capillaries, exactly equivalent to what is called determination; but the increased influx of the blood is merely the result of increased vascular capacity."

There is a simplicity in this explanation, which strongly contrasts with the attempt to prove, that the spleen is "precisely the reverse of half a heart."*

In haste

I am, Sir, your obedient servant,
T. HERBERT BARKER.

Oct. 21st, 1841.

CLAIRVOYANCE.

To the Editor of the "Medical Times."

SIR,—Perhaps the accompanying copy of a letter, in the *Plymouth Herald*, of July 20th last, may not be unamusing to some of your readers. And I beg leave to add, that about twenty years ago, a Mrs. Maxony, the wife of a most expert juggler, performed feats here, so very similar to those said to be done by the child, that *mutato nomine*, I could have easily conceived Maxony, and BERNARDO EAGLE, to be the same individual. Maxony, though communicative on many points, declined

* There is another illustration of this disposition in the spleen, to serve as a reservoir for surplus blood. It is observed by Wardrop, in his *Work on the heart*, that the cutaneous veins become enormously distended in the race horse, when urged to his highest speed. Without this diverticulum, he supposes the velocity of the circulation would prove destructive.—Ed.

explaining how the feats were done, adding, that, to a most powerful memory, was his wife indebted for her certainly very singular performances, which were witnessed by many respectable individuals in Kinross. The feats of Alexis are altogether of so extraordinary a nature, that I doubt not any communication bearing, in any way, on the subject, will not be unacceptable.

In "Smellie's Philosophy of Natural History," there are, if my memory serves me rightly, some curious facts detailed of somnambulists, which strongly resemble the phenomena witnessed under the mesmeric influence.

ROBERT ANNAN, L.R.C.S.E.

Kinross, October 19th, 1844.

"To the Editor of the Plymouth Herald.

"SIR,—Having seen an article in your paper of last week, the writer of which is desirous of proving, that mesmerism is a reality and clairvoyance no humbug, I beg to give you the following statement:—Some two months back, M. Marcillet was exhibiting his pupil in Manchester, and having made it my study to see him, I have now concocted the self-same for my little daughter, nine years of age, which she goes through every night, and I must candidly confess that all she does is a sheer deception from beginning to end, and you will see by the following description that her performance does not vary one item from those of Alexis, the French youth. After she is thoroughly blindfolded, and her back turned to the audience, she will answer every question put to her respecting the colours, materials, and shapes of the dresses of the company; secondly, the precise time by any watch, whether right or wrong; likewise, giving a thorough description of the different metals about the watches; play a game at cards with any gentleman in the company; a number of coins is then borrowed from amongst the audience, and whether foreign or English, the child will give a thorough description of the metals, dates, impressions, the country, and what reign, they were coined in; then, in conclusion, I allow any person in company to whisper in my ear any number from one to one hundred thousand, and the child will immediately report the whisper. There is one thing that I am very sorry she cannot yet accomplish, that is the reading. Owing to my travelling so much, she has not had the opportunity of getting her education, as if I had been resident; she can certainly read very well, but not fluent enough for a public exhibition. The whole of the above, or any part of it, if you think it worthy of your columns, you may insert, and as I am coming to Plymouth, I can assure you there is not one word of what I have stated but is a positive fact.

I am, Sir, your's very respectfully,
BERNARDO EAGLE,
Wizard of the South.

Ashburton, 14th July 1844.

WESTMINSTER MEDICAL SOCIETY.

OCTOBER 19.

Dr. Reid, President, in the Chair.

Poisoning by Lead.—Mr. Snow related the following case. A child, aged five years, ate a piece of white lead, ground in oil, not so large as a marble, on Saturday evening the 4th of May last. He complained of pain in the bowels the three following days, and several doses of purgative medicine were given, but did not operate till Tuesday afternoon. His parents thought it was putty he had eaten, and did not apply for medical advice. The pain increased very much during Tuesday night, and vomiting commenced, and he, Mr. S., was sent for on Wednesday morning, and found the child in great pain, chiefly in the epigastrium, and vomiting constantly a brown liquid streaked with blood; his pulse was 140 and hard, skin hot, face swollen and purple. There were petechiæ, extravasation of blood under the conjunctivæ, and slight bleeding from the nose. The gums were very white and contracted. Leeches were applied to the epigastrium, amongst other measures, but the child died within five hours after the first visit.

The mucous membrane of the stomach was of a dark brown colour through all its extent: except

a little redness of cæcum, the rest of the alimentary canal was healthy. There was effusion of serum tinged with blood, in the pericardium, both pleuræ and the peritoneum. The heart, and liver, and kidneys, were relaxed and flabby. The poison could not be detected in the body or in the matters vomited.

He did not know of another fatal case of acute poisoning by the carbonate of lead. This child seemed to suffer only from lead colic for three days, and the intense gastritis of which he died, seemed only to come on, or, at all events, to become severe, about twelve hours before he died, as it was not till then that vomiting commenced. In the cases he had seen recorded of poisoning by this or the other salts of lead in a large dose, vomiting and other symptoms of violent gastric irritation came on soon after the ingestion of the poison. The difference in this case might arise from the oil, (with which the white lead was incorporated into a tough mass,) retarding its action, and allowing it to produce its effects only by degrees in proportion as it became digested.

PROGRESS OF FRENCH SCIENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Oct. 17, 1844.

On Diseases of the Eye, by Professor Velpeau. *Treatment of Keratitis* (continued).—To close what I have to say on this subject, there remain but two remedies to which I purpose drawing your attention; blisters over the eye, and canterization with the nitrate of silver.

Blister over the Eye.—For the last five or six years, I have but seldom employed this remedy, so that some persons have concluded that I considered it useless, if not injurious. This opinion is, however, erroneous: it was not on that account that I abandoned its use, but because I discovered that the development of keratitis and iritis was effectually put a stop to, when mercury was administered so as to produce salivation. But, employed in the manner I recommend, blisters are not much liked by the patient, and even some practitioners dread their action; this is easily conceived, especially with the former; and, as another means presented itself, which seemed less dangerous, it was naturally preferred; yet, notwithstanding, experience has proved to me, beyond a doubt, that this means may sometimes be useful, and, therefore, ought to be known. The diseases in which it appears to produce the most beneficial results are: keratitis ulcerosa, iritis, and non-purulent phlegmasiæ of the eye; whilst in acute and chronic conjunctivitis, if not injurious, it is at least useless. Some years ago, I published a memoir on this subject, in which I gave several cases illustrative of the rapidity with which the cornea healed, under the influence of this remedy (*v. Journal des Connaissances Medico-Chirurgicales*, vol. II. p. 296, May 1835, and vol. III. p. 60, Aug. 1835, and p. 483, June, 1836), and I continued to use it, until I became convinced of the superiority of calomel. The latter, however, is not without its inconveniences; so much so, that sometimes I almost feared having been too premature in abandoning the blister; its action may, however, as I stated in my last lecture, by proper care and attention, be kept within due bounds. To resume: both present disadvantages; but calomel is more active and efficacious in keratitis, since it arrests the disease, sometimes in the course of twenty-four hours, which cannot be obtained by a blister. The reason why practitioners were so long, ere they could decide as to the relative worth of the two methods, is easily accounted for. So long as the diseases of the eye were comprised under one generic term, divided merely into acute and chronic, it was impossible to ascertain whether such or such a remedy, announced as efficacious, was so in reality; for substances employed in conjunctivitis, and there announced as heroic, failed completely in keratitis and iritis. The natural result of this, was, the absolute impossibility of affirming that any remedial agent was to be relied on in inflammations of the eye. As

soon, therefore, as I began to establish a distinction between these diseases, I found it necessary to try all the remedies recommended, in order to ascertain those that were most efficacious in any given disorder. It was long, before I knew in which the blister was preferable, and the same difficulties presented themselves with the other remedies; thus, as to calomel: I gave it, for a long time, as an alternative, unsuccessfully; so that I began to think that the opinion, professed by English practitioners, was erroneous; but, by chance, salivation having been produced on several patients, and their state being ameliorated, I discovered in what affections, and in what manner, this substance acted; so that, now, nothing is clearer and more certain than its mode of action. The same remarks are applicable to the blister, as it succeeds often when all other remedies fail; thus, a young woman, lately in our wards, was greatly ameliorated under the influence of temporary blisters.

Modus Applicandi.—When you have determined to apply a blister over the eye, two circumstances must be attended to: 1^o the plaster must be made to touch every part of the skin covering the eyelids; 2^o no particle of cantharides must be permitted to enter the eye. To accomplish this, the patient must be requested to close the eye gently, so that, though shut hermetically, still no fold shall exist on the skin; this done, the parts having been previously washed, wiped dry, and finally rubbed with a bit of linen, imbibed with vinegar, the blister, from two to four inches in diameter, must be put on, and light pressure made on it, so as to mould it to the part. The excavation, thus formed, must be filled with lint or cotton, and the whole kept in place by a compress and band. The next day, after removing the blister, the phlyctæna must be opened, and the epidermis removed; the part must be dressed with simple cerate, or fresh butter, and this repeated once a day, for three or four days, after which we must apply an emollient lotion, so long as increased sensibility of the part exists. Should the blister cause too intense an inflammation, an emollient cataplasm may be applied with advantage. The result is, generally, found to be: diminution of the pain in the eye, by its transplantation to the skin, and commencement of resolution. Care must be taken, when the blister is raised, to caution the patient against opening his eye, until the parts are quite healed; and even when this has taken place, it is performed with some difficulty, on account of the stiffness of the lids. In some cases, the cure is complete when the blister has dried up; whilst, in others, a second or third application, and a collyrium, are requisite to attain this end.

As to the danger attendant on this method, and the inconveniences it may give rise to, such as pain and cicatrices, a few words will convince you how groundless they are.—*Danger*; I have never seen the blister, applied in the manner just recommended, produce the least accident; it is true, the disease may continue to develop itself, in spite of the remedy: for instance, in purulent inflammation, and hypopium; but, even here, nothing can be attributed to the blister; as to keratitis, I never remarked anything which could make me regret having employed it in this.—*Pain*; the blister often removes the pain, in less time than one would imagine; thus, when a phlegmon is covered with a blister, the patients experience considerable relief a few hours after. Often, have I ordered, at the bed-side of a person affected with an intense phlegmon, an emollient plaster, which I changed, without his knowledge, for a large blister, and, on my succeeding visit, I was told that the pain has considerably decreased since the plaster was applied.—*Fear of a Cicatrix*: this is not more grounded than the foregoing; I have never seen a patient on whom this took place; in general, after a fortnight, the spot offers a roseate tint, which soon disappears; besides which, it is well known that, when suppuration does not take place, no traces ever remain, because the epidermis alone is removed, and is promptly renewed.

Cauterisations with the Nitrate of Silver.—This method has been highly vaunted, not only by our predecessors, but likewise by contemporaries.

Scarpa recommended it in ulcerations of the cornea; and several methods were invented to attain this end, without, however, removing the difficulties and accidents attendant on the use of caustic. Thus, it is impossible for the patient to keep the eye so steady, as to permit the application of this remedy precisely on the ulcerated spot, without touching the healthy parts around it; and, even when the eye can be fixed, if the cauterisation is not performed very rapidly, the spasmodic movements, produced by the pain, prevent its accomplishment; so that it may be said, that it is a mere chance, when the nitrate touches the ulcer alone; whereas, when it touches the sound parts, it augments, instead of curing, the disease. Considering these difficulties, it may be asked: Is this treatment indispensable? The reply, evidently, is, No! it is not indispensable. And I can, on the contrary, assert, that it is seldom useful, or needed; since, for the last three or four years, I have not employed it more than three or four times, and yet the numerous cases of keratitis I have attended, were not followed by destruction of the eye. The reason is plain; in curing the keratitis, you cure the ulceration; consequently, the most efficacious remedy, in the former, is the best in the latter: now, I have already stated the value of calomel and temporary blisters, combined with other measures, such as local and general bleeding, topical and revulsive remedies, chosen according to the age, and the constitution of the patient, the intensity and the nature of the disease, &c., never forgetting that, when keratitis is very superficial, a weak solution of nitrate of silver may be employed with considerable advantage. It must not, however, be supposed, that, because I do not consider cauterizations with the nitrate of silver absolutely necessary, I think them of no utility; what I mean is, that there are remedies far more advantageous, and which, therefore, ought to be preferred. Before closing this subject, I will add a few reflections on the application of nitrate of silver in cases of spots of the cornea, accompanied by slight inflammation; it having been asserted that these spots, touched from time to time, ultimately disappeared. This method is of easy application; but is it equally useful? I am not convinced that such is the case. Very frequently, the opacity is absorbed after a certain time; now, if the nitrate had been employed, it would have had the honour of the cure, whilst nature was really the agent which effected it. Finally, if it be true, that the cauterization, in acting as a stimulus to the sub-inflammatory state of the membrane, hastens the absorption, on the other hand, it may produce accidents far more serious than the original affection. I, therefore, do not think it absolutely indicated, nor more efficacious than the oxydum zinei, calomelas, oleum jecoris gadi morrhue, tinctura opii, &c.; and, consequently, I reserve it for the treatment of conjunctivitis purulenta, alone.

From the preceding considerations, the treatment of keratitis may be resumed, as follows: local and general bleeding; setons; cauteries; blisters on the forehead, or eyelids; calomel, given so as to produce salivation, which must be kept in due bounds by gargles, containing alum, or by this substance in powder; disuent topical remedies: saturnine collyria, combined with opium, or belladonna; ointments of the same, rubbed in around the orbits; a weak solution of the nitrate of silver, &c.*

On the Utility of Creosote to prevent Purulent Absorption.—The danger attendant upon large ulcerations, is owing chiefly to the absorption of the pus secreted, rather than to the existence of the inflammatory action. Professor Piorry concluded that, if it were possible to prevent the purulent secretion, the accidents might be put a stop to, and experience soon proved the exactitude of the learned Professor's opinion, as may be seen in the following case. A young woman was received at the Pitié, affected with typhoid fever; the stools were so frequent and so fetid that, not-

withstanding the utmost care, gangrenous ulceration took place, and invaded, successively, the skin covering the sacrum, the coccyx, that around the anus, the upper part of the thighs, the labia majora and minora, the clitoris, and a portion of the vagina. The actual cautery being here out of the question, Professor P. prescribed frequent lotions with water; application of compresses, imbibed with a solution of creosote, on the parts, previously covered with powdered einchona and charcoal; tonics internally; nourishing food. In a few days, an evident amelioration had taken place, and the patient, after two months, left the hospital quite well, presenting a cicatrix on the parts affected, but no abnormal adhesions, these having been prevented by means of a catheter introduced into the urethra, and tents passed into the vagina. There is now, in the wards of the same Professor, a case of paraplegia, complicated with extensive ulcerations, in which the same method is employed with considerable advantage. This interesting case shall be given, at length, in one of my future communications.

Vaginitis Granulosa.—MM. Deville and Potier have just published a description of this disease, observed first by Dr. Ricord, and denominated by him, *psorelytria*. It is essentially chronic; affects chiefly pregnant women; is characterized by the presence of red granulations, analogous to those of *metritis granulosa*, but somewhat larger than in the latter disease; not painful; in general, confluent; extending from the nymphæ to the cervix uteri, and accompanied by leucorrhœa.—*Causes*: pregnancy seems to be the principal; fluor albus may, however, be considered as a predisposing cause.—*Symptoms*: are anatomical or functional. *Anatomical*: small, reddish, or bright-red elevations, of which the diameter varies from a quarter of a line to one line in length; semi-spherical; sometimes larger, and presenting a cylindrical form; when numerous, affecting the whole surface of the vagina, but, when few, only its superior and posterior portion; perceptible to the eye, and giving, by the touch, the sensation of a hard, rugous, shagreened surface.—*Functional signs*: morbid secretions, consisting of a liquid, not perfectly viscous, but of the thickness of cream, and of a colour which varies between green and yellow, and capable of communicating blenorhagia; burning pains and itching of the vulva; heat in the vagina; sometimes, vegetations on the external parts of generation. The treatment consists in injections made with a solution of: R. nitrat. argent. gr. j., aquæ puræ ℥j. As to the nature of the disease, it was supposed to be owing to undue development of the follicles, but, as Dr. Giralde has demonstrated, these latter do not exist in the upper part of the canal, and it is not probable that they are so numerous in the lower part as the granulations sometimes observed. Might they not be considered as suppurating surfaces, the vagina having been converted into a species of ulcer, just as a fistula may be converted into a mucous surface? Finally, it may be produced by an irritating injection, as in a case recorded by Dr. Denis. (*Gaz. des Hop.*)

Ophthalmia Purulenta.—The transmission of this disease has been proved by an experiment, performed by Dr. Guersant (*Biblioth. Ophthalm.* 1819), as well as by cases observed by Mr. McKenzie, Professor Blandin, and M. Dequevauviller. The following case, published by M. Dumoulin, may be added to the list:—M. —, ætat 34, entered Dr. Vidal's wards, on the 10th August; had never been affected with gonorrhœa. His wife was engaged as wet-nurse to a child, affected with ophthalmia, which had destroyed one eye, and left a spot on the other. The mother of the baby had fallen a victim to puerperal peritonitis, and though she had been affected with leucorrhœa, her husband had never experienced any bad effect. The nurse and her husband removed the pus, which collected itself in the eyes of the child, without even washing their hands afterwards: a slight conjunctivitis attacked the former, and soon disappeared; the latter, however, was not so fortunate; the disease declared itself on the 1st August beginning with the upper lid of the right eye, and gradually extending to the rest of the organ, and to its fellow. On the 3rd, ten leeches were ap-

plied; no amelioration. On the 7th, all at once, the patient heard a sharp noise in the right eye, followed by the escape of a liquid; and, on the 8th, the same phenomenon took place in the left eye, leaving him completely blind. On examining the eyes, on his entry, on the right side, the cornea was found to be opaque throughout nearly its whole extent; it was perforated at its upper part, and, by the opening, the iris protruded, and was adherent to the edges of the ulceration: the perforation, on the left side, is in the centre of the cornea, which is opaque likewise; chemosis, especially in the right eye: ectropion of both lower lids. The treatment, employed, consisted in cauterization with the nitrate of silver; introduction under the lids, four times per diem, of a few drops of a collyrium of sulphate of zinc; in the intervals, frequent lotions, so as to remove the mucus as secreted, and purgatives. (*Annales de Chirurgie.*)

Academy of Sciences. Sitting of the 14th October.—Baron Ch. Dupin in the chair.—Received: "Electrical Magazine," Oct. 1844—"Report of the 12th Meeting of the British Association for the Advancement of Science," held at Manchester, in June, 1842.

Comminuted Fracture of the Skull; Loss of a Portion of the Cerebral Substance: by Dr. Rouelle, of Gorron.—A labourer, in a quarrel with one of his comrades, was knocked down by a violent blow on the head, and was in the following state, when Dr. R. saw him, several hours after: respiration difficult and noisy; pulse nearly imperceptible; left side paralysed; right arm half-bent, rigid; right leg in constant movement; pupils motionless; mouth not deviated; dysphagia; intellectual faculties in their normal condition. The second day (8th Sept.) after the accident, delirium occurred. 3x. of blood were taken from the arm, and repeated on the 9th, as the delirium continued.—Sept. 10th: The right eye was opened for the first time; thirst; no fever; anorexia: pulse 65.—14th: An incision was made on the bone, in order to facilitate its exfoliation.—21st: A tumour appeared on the right temple; when opened, a considerable quantity of pus escaped.—29th: Another incision was made on the summit of the head, by which pus, mixed with blood, flowed out. Six months after, the patient was quite well, presenting, on the summit of the head, an opening in the skull, capable of admitting the end of the finger.

On a Case of Rhinoplasty: by Professor Sedillot, of Strasburgh.—M. —, ætat 28, was affected, when 10 years old, with serophulous ulcerations, of the nature of lupus, on the cheek, upper lip, and left ala nasi, which, after resisting various remedies, were ultimately cured by means of caustic, but with the loss of the left ala nasi, a small portion of the right, the anterior extremity of the septum, the left cheek, and a portion of the upper lip. To remedy this deformity, Professor S. performed the following operation:—A transverse incision was made, extending from the nose as far back as the centre of the masseter muscle; a second, commencing at the posterior extremity of the first, passed under it to the inferior edge of the ala nasi. The portion of skin, thus obtained, presented an elongated, oval form, and was lined with cellular tissue. After allowing it to bleed for a short time, it was united, by its inferior edge, to the upper part of the cicatrix, which had been pared at its edge, and retained in apposition by means of the twisted suture, which was likewise employed to close the wound of the cheek. The only consecutive accident was, mortification, from about two to three lines in length, extending to the right side of the nose. After the fall of the eschar, the parts were re-united by a suture, and cicatrization was complete on the fifteenth day. The shape of the nose was regular, but the portion was too thick and too long on the left side, and the right ala nasi extended inferiorly a few lines lower than it ought. To remedy this, the parts in excess were removed with the bistoury and the seissors, and the nose was thus perfectly formed; so much so, that, seen in profile, the patient appeared only to have received a wound in the cheek, which had left a linear cicatrix.

On the Difference between the Vaccine Matter of

* Dr. Michon, at the *Hopital Cochin*, has lately succeeded in curing several cases of keratitis, by excising the whole, or half, of the conjunctiva, immediately around the cornea.

1844, and that of 1836: by Dr. Fiard. — This difference, according to the author, is found to be from 3 to 5 days, an opinion deduced from the following facts:—The vaccine, discovered by Jenner, in 1836, that is to say, after a period of 39 years, compared to the fresh matter of 1836, gave the following results: the former passed through its different stages in 12 days, the latter in 17—a difference of 5 days.—That of 1836, after 8 years' existence, dries off in 13 or 14 days, whilst that, recently obtained, lasts 17 days—difference, 3 to 4 days. It may, therefore, be concluded: that vaccine matter, after 5 or 6 years, loses its activity, and needs renewal.

On the Preparation of Asparagine.—Dr. Gaultier de Claubry writes to state, that M. Mori, a distinguished *pharmacien* of Leghorn, has obtained, by Dr. Meniei's process, from the etiolated *viscin sativa*, a notable quantity of pure crystallized asparagine. Dr. Meniei has remarked, that etiolation causes the starch, and some other principles, —sugar, for instance, —to be converted into asparagine.

On Chrome: Memoir read by M. E. Peligot. — When a current of chlorine is made to pass on a mixture of the sesqui-oxide of chrome and charcoal, a chloruret is sublimated in beautiful violet scales; formula $\text{Cr}^2 \text{Cl}^3$ preceded by a compound, sometimes in small, silken crystals, at others, in a colourless mass, of a fibrous texture. It is composed of an equivalent of chrome, and one of chlorine; in general, it is combined with charcoal, oxide of chrome, and the violet sesqui-chloruret, but it may be obtained pure, by causing hydrogen to act on the sesqui-chloruret, at a temperature not very elevated. During the operation, hydrochloric acid is disengaged, and, when terminated, a white, silky, or felty substance is obtained, soluble in water, with development of caloric; solution at first blue, but soon becomes green when exposed to the air, from the rapid absorption of oxygen. Three analyses gave the following result:—

	Theory.		Experiment.		
			1.	2.	3.
Cl. . .	442.6	55.7	58.4	56.7	57.0
Cr. . .	351.8	44.3	39.4	42.7	42.0
	794.4	100.0	97.8	99.4	99.0

The hydrogen employed, after having been made to pass through a solution of protochloruret of tin and potass, and dried by means of concentrated sulphuric acid, must be introduced into a tube containing copper, at a red heat, and afterwards dried, a second time, by means of the chloruret of calcium and sulphuric acid. It is only after these precautions, that it ought to be made to act on the sesqui-chloruret of calcium, or a compound, insoluble in water, will be obtained, which may, as in the experiments of M. Norberg, amount to 7 per cent. The blue solution, to become green, absorbs, per equivalent of proto-chloruret (Cl Cr) or 7.70, about 3xiiss. of oxygen; the formula is, therefore, $\text{Cl}^2 \text{Cr}^3 \text{O}$, and it may be considered as corresponding to a sesqui-oxide of chrome, $\text{Cr}^2 \text{O}^3$. When the sesqui-chloruret of chrome is added to a solution of proto-chloruret in water, totally deprived of air by ebullition, it dissolves rapidly, with considerable disengagement of caloric. The mixture of the two does not give rise to a chemical decomposition, but merely to a different disposition in the molecular arrangement; it furnishes, when evaporated *in vacuo*, small grainy crystals; formula, $\text{Cr}^2 \text{Cl}^3 12 \text{HO}$. With a solution of caustic potass, the proto-chloruret of chrome forms a dark-brown precipitate, which assumes, after a certain time, a reddish tint, and which, in all probability, is an oxide of chrome, intermediate between the protoxide and the sesqui-oxide; formula, $\text{Cr}^3 \text{O}^4 \text{HO}$. The acetate of the protoxide of chrome is obtained by adding, to a solution of the proto-chloruret of chrome, the acetate of soda; the liquid assumes a violet red tint, and deposits small, red crystals, soluble in cold water and alcohol, still more so in hot water, and which absorb oxygen with rapidity; when prepared, it must, therefore, be kept from the contact of the air; formula, $\text{C}^4 \text{H}^4 \text{O}^4 \text{Cr O}$.

On the Density of the Vapour of Acetic Acid, by

M. A. Cahours. — Hitherto, it was supposed that a molecule of acetic acid could produce only three volumes of vapour. This opinion is erroneous, and arose from the fact, that the temperature was not sufficiently elevated: thus, when it is raised to 448° , this substance follows the general rule; that is to say, it forms four volumes of vapour. The author proposes examining whether, near its boiling point, it does not form two volumes only.

On a New Oxido-Chloruret of Mercury, by M. Ch. Rouher, *preparateur de Chimie du Val de Grace*. — This substance is formed by the union of the bin-oxide, with the bi-chloruret, of mercury, during the action of hydrochloric acid on the former; formula, Hg. O. 2Hg. Cl .

On a New Compound, formed by the Bi-chloruret of Mercury, by M. E. Millon. — With the bi-chloruret of potass and the bi-chloruret of mercury, a new compound is produced, composed of one equivalent of each; it is in crystals, of a bright red colour, hard, prismatic; powder of a bright yellow colour; decomposed by heat, and the bi-chloruret of mercury is volatilized. Formula, $2 (\text{Cr. O}_3) \text{KO} + \text{Hg. Cl}$.

On the Oxidation of Organic Substances by Iodic Acid, by the same. — The author, in this memoir, studies:—the oxidation of oxalic, by iodic acid; —the principal characters presented by organic substances with iodic acid;—the enumeration of the chemical phenomena, which, though they originate in a small quantity of matter, act on large masses.

On a New Combination of Sulphur, Chlorine, and Oxygen, by the same. — The analysis of the compound, described in this memoir, and which the author calls *hypo-chloro-sulphurique*, establishes the formula, $\text{S}^2 \text{O}^3 \text{Cl}^2$; which, consequently, differs from that discovered by M. Regnault, $\text{M.A.S.} (\text{So}^2 \text{Cl})$, and the liquid analysed by Mr. H. Rose ($\text{S}^2 \text{O}^5 \text{Cl}$).

On the Action of Chlorine and Iodine on Ammonia, by M. A. Bineau, professor at the Faculty of Sciences, Lyons. From his researches, the author concludes:—1^o that the compound called, at first, *ioduret of azote*, and afterwards *ioduret of amide*, is erroneously named, as it is composed of ammonia, in which two-thirds of the hydrogen is replaced by an equal quantity of iodine; 2^o that there are three equivalents of ammonia, and two of iodine, in the liquid resulting from the absorption of dry ammoniacal gas by iodine; 3^o that the chloruret of azote is formed of one volume of azote with three of chlorine.

Academy of Medicine; Sitting of the 15th October. Dr. Ferrus in the chair. — Among the letters received, the perpetual secretary, Dr. Pariset, stated that there was one from a candidate for the Argenteuil prize, containing a demand which, according to the regulations of the Academy, could not be acceded to. — Professor Velpeau: This may be the opinion of the *Conseil d'Administration*, but, in order that the Academy may judge of the fitness of the measure, it would be as well, were the letter read. — The president said that it raised an exception against a judge, named in the committee for the Argenteuil prize, and the *Conseil* thought that such ought not to be admitted. — Dr. Cornae: In order to be able to form a correct judgment, the committee will, perhaps, be obliged to examine the patients, attended by the different candidates. Now, this might be done in the hospitals, and by hospital surgeons, and yet there are but two in the committee. This is not enough; and, in order to obviate the defect, I propose adding two new members, and choosing them among the hospital surgeons. — Dr. Naequart seconded the motion. — Dr. Begin: The letter, just mentioned, was read in the committee; the different questions therein contained were examined, and it was decided that it should not be acceded to. The committee, therefore, is already constituted, and, in changing it, the Academy would seem to suspect its impartiality. Is such the intention? — Several voices: No, no! — Dr. Villeneuve: I will add, to what has just been stated, that the different memoirs have already been distributed to the various members of the committee; the addition of two new members would annul all that has been done. The proposition ought to have been made sooner. — Dr. Desportes: An important

prize, left by the Marquis of Argenteuil, is about to be awarded by the Academy. What was the intention of the legatee? Evidently, that the competitors should be as numerous as possible. Now, if the committee be formed (as it seems, in the present instance) so as to deter candidates from presenting themselves, it is the duty of the Academy to modify its vote. Two new members may, therefore, here be named, without accusing the committee of partiality; the more so, as such a step would weaken the influence which is dreaded. — Professor Moreau: The proposition of Dr. Cornae, if adopted, would be a bad precedent; inasmuch as a competitor, if he feared the decision of a member of the committee, would be authorized to request his being excluded; I, therefore, vote against any change. — Dr. Begin: I repeat that, in adding two members to the committee, the Academy would throw a slur upon it; and, should the proposition be voted, I here declare that I will retire; consequently, not two, but three, members must be named. — Dr. Cornae: This susceptibility astonishes me, and does not appear justifiable. What is the question? A competitor presents himself for the Argenteuil prize; among the number of his judges, is a colleague who, in a recent publication, stated positively that the methods recommended by this candidate are of no use whatever. Doubtless, no one would deny that the candidate has a right to request that the influence of this judge be modified, by the addition of two new members. — Dr. Lagneau: Although named member of the committee, still I second the proposition, because I think it would be advantageous to name two surgeons of the hospitals, situated in the centre of Paris (the Hotel Dieu and the Charité); those already named being attached to hospitals situated at some distance, such a step would greatly facilitate the duties of the committee. — Dr. Rochoux: Such a decision would be an insult to the committee. — Dr. Cornae: I protest against the word just employed by Dr. Rochoux; my proposition being in no-wise personal. — The proposition was not adopted.

On the Nature of the Corpora Lutea, and the differences of their aspect, according as the expulsion of the ovule is followed, or not, by Conception: by Dr. Raciborski. — 1^o The corpora lutea are produced by an hypertrophy of the granular substance, which lines the internal membrane of the Graafian follicle. The anatomical elements of the two are precisely similar, but the granulations of the corpora lutea are far more numerous, and contain a great many more oily globules, of a yellow colour. — 2^o The transformation of the internal coat of the corpus luteum commences before the rupture of the follicles, but not until the moment they are about to burst, to allow the ovum to escape. — 3^o As soon as the Graafian follicles have burst, the transformation of the internal membrane of the corpus luteum acquires an extraordinary activity in its development. But an important distinction must here be made, according as the ovum has been expelled spontaneously (after each menstrual period, or the epoch of the rut), or after sexual intercourse, followed by conception. In most domestic animals, the sow, sheep, cow, &c., this difference does not exist; in these, the expulsion of the ovum, in every case, is followed by the formation of corpora lutea, under the form of fleshy wrinkled bodies, of a yellowish, or reddish, colour. But, in woman, if the expulsion of the ovum is not followed by conception, the granulations increase in number and size, under the form of a thin, yellowish membrane, adherent to the membrane of the follicle, and, in the cavity it forms, a small clot of blood is to be found. If, on the contrary, conception coincides with the expulsion, the elements composing the granulations increase in size and number, so much so that, in a very short time, they form a voluminous mass, which fills the whole cavity of the follicle; and it is hardly possible to discover the small, whitish, cellulo-fibrous mass, composed of a substance which seems to be the former cicatrix, considerably diminished by the hypertrophy of the internal membrane, and the pressure exercised on it by means of the resistance presented by the internal membrane of the ovary. — 4^o In women,

delivered at the usual period, corpora lutea of this description exist; but it is remarkable, how rapidly they decrease and are atrophied, as soon as the accouchement has taken place. Thus, a corpus luteum which, on the third day after delivery, offers eight lines in diameter, has, on the tenth day, only five lines, and, three months after, hardly one line, and it is then almost colourless.—5° From what precedes, it is very easy to distinguish, in women, when the ovum has been expelled with, or without, being followed by conception.

Discussion on the Venous Pulse.—Dr. Bouvier: In the preceding Sitting, Professor Velpeau stated, that a case of venous pulse had occurred in a medical ward, at the Charité. As I was the physician who visited the patient at the time, I will now add a few explanations. The individual was a young man, ætat 26, affected with an inflammatory state of the whole system; he had been bled three times, copiously; the venous pulse was perceptible in the upper limbs and neck. The cause was, in probability, the contractions of the right side of the heart; it is to be regretted that the brachial artery was not compressed, for, had the pulsations continued after this, evidently the cause could not have been in the arterial system and left side of the heart; as to the fluidity of the blood, it cannot here be admitted. This case was published by Dr. Chassaignac, in the *Journal Hebdomadaire*, 1836.—Dr. Poisseuille considers the venous pulse, in the cases mentioned by Dr. Martin Solon, and those recorded by Dr. Graves and Mr. Ward, to have been produced by the numerous venesections that had been performed. As to the fluidity of the blood, supposed to be the cause, he is of the same opinion, but for reasons different from those announced; thus, it is owing, not to the state of the blood, but because, after copious venesections, the contractions of the heart being weaker, a smaller quantity of blood is thrown into the arteries, and these last, not being full, contract less after each systole of the heart, and consequently the blood is forced into the veins in an interrupted stream, thus giving rise to the venous pulse.—Dr. Martin Solon: Two causes may produce this phenomenon: 1° the increased action of the right side of the heart, with insufficiency of the valves: 2° the persistence through the capillary system of the impulsion given by the left side of the heart. The cases, mentioned in my Memoir, were of the latter kind, and the cause was the fluid state of the blood. It is true, that it may be produced by causing the muscles of the fore-arm to contract; but, as this ceases with the contractions, it cannot become a source of error in the diagnosis.—Professor Piorry: Having studied, in 1826, the various phenomena produced by hæmorrhages, I remarked that, after opening the vein, the blood flowed in a continuous stream; but when about 2 lbs. had been removed, it became red, in appearance arterial, and escaped by jerks, as if the artery itself had been divided. This indicates that the action of the heart has increased, to be followed soon by syncope, and comes to the support of the opinion of Dr. Martin Solon.

On a Case of Encephalocele.—Professor Velpeau, at the request of Professor Berard, related the case of the child (mentioned in my last.) Children are not received at the Charité, unless an adult person enter with them, and it was only after some trouble, that a woman was found who consented to take charge of it. This circumstance was the cause of the baby not being admitted before Thursday; being examined on that day, the tumour was found to be inflamed, painful, so that the least movement caused the child to scream; it seemed to be full of a liquid; the pedicle was somewhat firmer, as if it contained a portion of the cerebral substance; puncture having been made in it, a roseate serosity escaped, and continued to ooze during the day. The child was so feeble, that I hesitated operating; however, if nothing were done, death would inevitably take place, and I determined upon performing it as follows:—A ligature having been placed round the pedicle, in order to prevent the entry of the air, the tumour was removed with the bistoury; for a few minutes after, the child lay as if dead, but revived, and, on the next day, appeared better;

having been removed rather too roughly, convulsions took place, followed by death. The tumour contained about lb. j. of serosity. At the autopsy, a part of the cerebellum was found in the pedicle, protruding through and slightly strangulated by, an opening in the os occipitis; it contained a small quantity of serosity; the right lobe of the cerebrum was twice the size of the left.—Professor Moreau: Was the fluid in the meninges or outside?—Professor Velpeau: It was under the scalp, between it and the dura mater. After some further remarks from Professor Berard, who did not approve of the ligature, and from Professor Blandin, who disapproved of the operation altogether, and thought that, in all probability, the liquid was at first contained in the membranes, and these, having been perforated, permitted its accumulating under the scalp; and a reply from Professor Velpeau; the discussion ceased.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

Cure of Fistulæ by the Injection of Boiling Water.

—Dr. Ruppis saw the injection of boiling water into a fistulous opening used, with complete success, by Professor Rust, in the year 1811, and, having employed the same treatment himself, he submits to the medical profession the following cases:—

Case 1.—K. Christine, æt. 27, unmarried, had suffered for 5 years, from a recto-vaginal fistula. The opening in the vagina was of the size of a bean. A wooden *gorgeret* was introduced for the protection of the rectum, the lower part of the syringe covered with felt, and about an ounce of boiling water injected into the vagina. The patient was now put to bed, and kept on a strict diet, in order to keep the bowels at rest. No pain ensued during the first four days; wind alone passed through the anus; the water, injected into the vagina, came out again through the same opening. The callous fistular margin became less apparent, and pressure, exercised upon it, caused but a slight lancinating pain. After the lapse of four more days, no trace of a fistula could be discovered. The bowels, which had hitherto remained quiet, were now acted on by clysters. The patient married soon after, bore three children, and, for several years after, remained in good health.

Case 2.—A soap-boiler, named B., ætat. 24, of a pale, sallow, cachectic appearance, was affected with fistula of the rectum, as a consequence of neglected piles. The opening was on the right side, near the margin of the anus. On introducing a probe, it penetrated in the direction of the sacrum. The fistula being tortuous, and of old standing, the author considered it a good case for the employment of boiling-water. The point of the syringe (which was about seven inches long), was introduced into the fistulous canal, and half an ounce of boiling water injected. After the first four days, passed in bed, on a strict diet, very few traces of discharge were perceived from the fistula, and the probe penetrated but three inches. Some more hot water was now injected, which caused some pain to the patient (whilst the first injection, consisting of boiling water, produced no pain whatever.) In four more days, the fæces passed without any bad consequence, and the probe could only penetrate one inch. Some boiling water was again injected, more nourishing diet given, and gentle exercise in the room allowed. After the twelfth day of the treatment, not only the fistula was completely cured, but even the patient's whole appearance underwent a favourable change. These cases led the author to institute a comparison, between the effects of boiling water and those of the actual cautery; and he found: 1° that boiling water destroys the part by fusion, as it were; the cautery, by combustion; 2° the cautery consumes all those parts which it touches, whether the hair, the bones, the skin, the flesh &c.; whilst boiling water changes the nature of the parts, softening the nails and flesh, fusing the skin, &c., and causing the lymph to coagulate; and all this,

without the smell of burning so peculiar to the action of the cautery. Therefore, he proposes that, in many cases requiring cauterisation, boiling water should be substituted for other caustics. (*Ruppis in Hufeland's Journal der praktischen Heilkunde*).

Investigations, as regards the length of time, during which Food and Beverages remain within the Stomach.—To obtain correct results, it is necessary to observe the stomach in its normal function, and this has not hitherto been done. The author found that, by percussion, he could trace the contents of the stomach from their entrance into the cardia to their issue from the pylorus. His experiments were partly performed on patients, whose digestive organs were sound, and partly on some of his pupils, who kindly consented to submit to his investigations. The food is shown, by the dull tone of percussion, to move gradually from the left to the right side, without ever retrograding, unless some disturbance intervenes. With beverages that do not coagulate, the dull sound soon diminishes, and gradually disappears. Animal foods remain, in general, a shorter time (sometimes upwards of two hours) in the stomach than vegetable food. In the middle part of the stomach, a dull tone is produced, soon after the ingestion of solid food. Abundant beverages, if taken with the food, make the tone somewhat smoother, and communicate to the finger a feeling of fluctuation. If much drink has been taken with solid substances, the dull tone continues for a longer period. Disturbances of the digestion invariably prolong the dull tone.—(*Professor Nasse in Correspondenzblatt der Rhein.*)

Composition of Normal Pulmonary Mucus.—The author collected the pulmonary mucus discharged by a healthy man, every morning, while fasting. After eight months, the dried sputa amounted to 200 grains. When fresh, the mucus was of a greyish white colour, and showed, under the microscope, a transparent mass, in which numerous layers of epithelium could be distinguished, as well as mucous globules; when dry, it turned brown and became perfectly friable. Its analysis yielded: 1. a substance analogous to urea, insoluble in acetic acid; this is decidedly the hydrate of proléine (Pr. + 3 H O), which Kemp found in biliary mucus, and in which he discovered sulphur, with ten per cent. of ashes. Nasse found only five per cent. of ashes, principally consisting of phosphate of lime; 2. a watery extract, obtained by boiling, which amounted to about one-third of the whole pituitous mass; 3. a half solid, yellowish-white, fat; 4. an alcoholic extract; 5. some albumen; 6. chloride of sodium, and other soluble salts. The two analyses of the dried mucus gave the following results:—

	I.	II.
Fat	6.04	6.49
Watery extract	18.19	18.00
Alcoholic extract and some albumen	55.90	57.87
Chloride of sodium	13.38	12.81
Sulphate of soda	1.66	1.39
Carbonate		
Phosphate		
Phosphate of lime	2.27	2.11
Carbonate of lime	0.55	0.75
Silicic acid, gypsum, carbon.	2.00	0.57
	100.00	100.00

The fresh mucus contained 95.552 per cent. of water. Nasse also investigated the serum of pus, and of blood, and he found:—

	Serum of Pus.	Serum of Blood.
Water	890.00	906.5
Organic constituents	92.58	85.7
Chloride of sodium ..	12.60	4.6
Carbonate of soda ..	2.22	1.4
Phosphate	0.32	0.9
Sulphate	0.18	0.2
Carbonate of lime ..	1.20	0.7
Phosphate	0.90	
	1000.00	1000.0

The results of the above investigations show: 1. That out of 100 parts of solid constituents, 15.1 parts of soluble salts are contained in the mucus, 14.2 in the serum of pus, and 7.6 in the serum of blood. Thus, the matter of suppuration is very

analogous to the pituitous secretion, there being a copious excretion of salts without a great loss of proteine. 2. Out of 100 parts of soluble salts, 89 parts of chloride of sodium are contained in mucus, 82 in the serum of pus, and 64 in the serum of blood. 3. Out of 100 parts of soluble salts, 3 parts of carbonate of soda are found in the mucus, 14 in the serum of pus, and 19 in the serum of blood. Thus, mucus is very far from being a mere transudation of the soluble parts of the blood.—*Dr. Nasse in Journal für praktische Chemie.*

Quinine, as a Remedy in Pulmonary Phthisis.—Dr. Asmus found the use of quinine so efficacious in incipient phthisis, that he asserts its certainty of curing any pulmonary consumption, which has not yet made too rapid a progress, even if hectic fever has already made its appearance. He considers this mode of treatment particularly useful in rapid consumption, and in such cases as happen after parturition, nervous, or other, fevers. No more than a drachm of quinine was necessary to effect a cure.—*Ibid.*

Sabine and Juniper-berries in Gout and Rheumatism.—A countryman had told Dr. Balyn, that he was cured of gout by a tea made from the above herbs. Dr. B., himself suffering severely from lumbar rheumatism, took a beverage, composed of bacc. juniper., herb. sabin. et rad. ealam. aa ʒj., put into a pint of boiling water, and took three cupfuls of it before going to bed. Violent perspiration was produced, and, at the third dose, he felt a darting pain running from the loins through the whole leg, which became insensible, as well as three of the toes. Next morning, he took the fourth cupful, waited till the subsequent perspiration declined, and then rose perfectly recovered. At a subsequent period, the author experienced very great success from the employment of the above remedy, in rheumatism and gout. The addition of calamus, he thinks useful for the improvement of digestion.

New Salt of Zinc.—M. Von Kobell analysed a supersulphate of oxide of zinc, and determined its crystalline form. It had separated itself from a solution of sulphate of copper, containing zinc, with an excess of sulphuric acid, after a part of the base had been precipitated by carbonate of soda. By re-crystallisation, the salt may be obtained pure and colourless. Its formula is: $\text{Zn O } 2\text{SO}_3 + 9 \text{HO}$.—*Dr. Kobell, in Liebig's Annalen der Chemie.*

Use of Chloride of Zinc as an Escharotic.—If, according to Gerhard, chloride of zinc be heated in a spacious retort, till it becomes doughy, and camphor be added gradually, the whole mass becomes inflated, and a yellowish liquid, with a strong smell of camphor, is distilled over. This liquid is a hydruret of carbon. If anise-oil be distilled in the same way, over chloride of zinc, no hydruret of carbon passes over, but a liquid which soon crystallizes, and seems to be identical with anisole. The liquid part is dissolved in sulphuric acid, with a beautiful red colour. Water effects no separation, but an acid remains in solution, the formula of the barytic salt of which, Gerhard fixed, as follows: $10\text{H}, 11 \text{BaO}, \text{SO}_3 + \text{HO}$. The liquid is said to be isomeric with the solid anise-oil ($10\text{H}, 12\text{O}$), and two volumes of vapour.—*Ibid.*

Action of Iodine on Tartar-Emetic.—M. Stein investigated the statement of Preuss, that iodine gave rise to a new, yellow, combination, in a solution of tartar-etic. This yellow compound is obtained:—1° In the manner indicated by Preuss.—2° By adding one part of iodine to two parts of tartar-etic, dissolved in a little water. No change of temperature takes place; the precipitated mass assumes a yellow colour, while the water remains brown, and, if heated, the whole quantity of iodine is completely dissolved.—3° By evaporating chloride of antimony to dryness, with iodide of sodium, or iodide of potassium. This combination is partly decomposed by water. It is wholly dissolved in muriatic acid: the solution contains free iodine. It is decomposed by nitric acid, with the separation of oxide of antimony. The experiments of Stein shew, that the liquid in question contains, very likely, besides iodide of

potassium, the neutral tartar-etic, described by Knapp.—*Ibid.*

Relation of Oxide of Mercury to Chloride of Calcium.—Hochstetter has shown, that a concentrated solution of chloride of calcium is decomposed, when boiled for some time with oxide of mercury, hydrate of lime being separated. If much water be then added, a red precipitate is separated, which is, probably, a chloride of mercury with a treble base; he obtained 95.4 of oxide of mercury, 3.0 of chlorine, and 1.2 of lime.—*Ibid.*

Valerianic Acid, formed in the Preparation of Vinegar.—Döberienner observed, in a vinegar manufactory, in which raw potato-brandy was distilled, an exceedingly strong smell of valerianic acid. This acid is formed, only when the temperature of the fermenting substance is above 36° C. Under this temperature, acetate of amyloxyde is formed, which possesses such an agreeable, fruit-like, smell, that it is much used as a perfume. The above-mentioned combination is readily formed, if empyreumatic oil be dissolved in strong acetic acid, and the solution left to stand for some days.—*Ibid.*

Sulphurico-cinnamonic Acid, and its Combinations.—If, according to C. Herzay, we pour on one part of cinnamonic acid, 8-12 parts of the sulphuric acid of Nordhausen, a solution is obtained (without any appearance of sulphurous acid), which is not rendered darker by the addition of water. The liquid is then to be digested with carbonate of baryta, and the filtered liquid precipitated by sulphuric acid, or decomposed by acetate of lead, and, when precipitated, decomposed by sulphuretted hydrogen. By evaporation, the acid is obtained as an amorphous hygroscopic mass, which crystallises in prisms, from its alcoholic solution. The crystals contain about six atoms of water, which may be removed by the air-pump. The acid is composed of:

Carbon	47,54—47,69
Hydrogen	3,83
Oxygen	13,96
Sulphuric acid . . .	34,67

The sulphurico-cinnamonic acid is decomposed by strong nitric acid, with disengagement of gas, and then no sulphuric acid is found in the liquid. The sulphurico-cinnamonic acid gives precipitates with acetate of lead, nitrate of mercury, and, after some time, with chloride of barium. The combinations with alkalis and earths yield, on being heated, sulphate and sulphite of the alkali, and leave a residue, which disengages sulphuretted hydrogen under the influence of acids. *Cinnamonic-Sulphate of Potash* is found either as a neutral or as a super-salt. The former $\text{C}^{18} \text{H}^{12} \text{O}_2, 2 \text{SO}_3 + 2 \text{KO} + \text{HO}$ does not crystallise, and is obtained by neutralising the acid, or by decomposing the barytic salt by sulphate of potash. If the watery solution be evaporated with muriatic acid, the super-salt crystallises in fine needles. The cinnamonic-sulphuric acid forms, also, a neutral salt, with baryta, containing two atoms of water, as well as a super-salt $\text{C}^{18} \text{H}^{12} \text{O}_2, 2 \text{SO}_3, \text{Ba.O}, \text{H}_2 \text{O} + 2 \text{HO}$, which precipitates in fine needles, if the neutral salt be boiled with very dilute nitric acid. The salt of silver has the following formula: $\text{C}^{18} \text{H}^{12} \text{O}_2, 2 \text{SO}_3 + 2 \text{Ag.O}$.—*Ibid.*

PROGRESS OF ENGLISH, AMERICAN, AND FOREIGN MEDICAL SCIENCE.

(The following are the only articles of interest to our readers in the three last numbers of the *Medical Gazette*.)

THE WHITE OR OPAQUE SERUM OF THE BLOOD.—Dr. Andrew Buchanan has ascertained from a series of experiments which he has performed, that when the serum of the blood presents a white or milky opacity, it is dependent on the process of digestion, as it occurs within a certain time after the ingestion of food, the discoloration increasing for several hours, until it has attained its maximum; after which the serum again becomes clearer, till its limpidity is perfectly restored. When this milkiness continues for several days, although the appetite is gone, and no fresh supply of food taken, it may be regarded as an indication

of disease; it is probable that the digestion in the blood-vessels is no longer going on, as in the healthy state, it being, like all other functions of the body, subject to retardation and derangement from the condition of the organ by which it is performed. The colour of this variety of serum is generally a milk-white; sometimes a cream-yellow, or a yellowish-brown, when the liquid bears a striking resemblance to thin oatmeal gruel. There is sometimes little discoloration, the serum merely losing its limpidity, and changing its hue, so as to resemble a weak syrup made of coarse sugar. Examination, under the microscope, shewed a great number of solid granules mechanically suspended in it. They are less in size than the corpuscles of the blood, generally of irregular shape, but often spherical, and have the appearance of a nucleus in the centre, most probably from the refraction of light. These particles were as abundant in the syrup-like serum as in the more opaque varieties; but they were less regular in shade, and seemed to be themselves translucent. After the serum standing some time, these particles sometimes rise to the surface like cream, a process Dr. Buchanan has aided by saturating the liquid with common salt, which so much augments its specific gravity, that the opaque particles becoming comparatively lighter, rise to the surface either immediately, or soon after. This white matter is insoluble in water, and can be readily separated from the salt, by steeping the filtering paper on which it has been obtained in water, by which the salt will be dissolved. Dr. Buchanan has two samples of it in his possession in the form of a white powder, very closely resembling wheaten flour. It is quite insoluble in ether and alcohol, but soluble in caustic potash. Dr. R. D. Thomson concludes, that it does not contain any fixed oil, and most probably consists of a proteine compound, like albumen and fibrine. Dr. Buchanan, by the addition of yeast to the milky serum of the blood, caused the process of fermentation to take place, and a considerable disengagement of gas, and he thinks it possible, that the starch in food might be converted, by the organs of digestion, into sugar, and be absorbed in that form into the blood. He found that the largest quantity of gas obtained in these experiments, was about equal to that obtained, by means of the same apparatus, from a solution of sugar in water, containing five grains to the ounce. Should further observations confirm the idea of the existence of sugar in the blood as a normal product, it is obvious that a corresponding modification must be made of the prevailing theories respecting diabetes, according to which the production of sugar is regarded as the essential derangement of action in which that disease consists.

THORACIC AND CEREBRAL CONGESTION.—Dr. Mayo has narrated two cases to shew the connection between thoracic and cerebral congestion. In the first case, a cure was effected by cupping between the scapulæ, the use of purgatives, and other treatment; in the second case, which was complicated with delirium tremens, a fatal termination took place; and at the autopsy the lungs were found to be congested, and studded with miliary tubercles. Dr. Mayo complains of the vagueness of some of our medical terms, and by way of mending the matter, instead of describing the post-mortem appearances in English, must needs say, 'the lungs were every where highly engorged, and full of miliary tubercles.' The English language must be miserably deficient, as the doctor could not find a word to express his meaning, without borrowing one from our neighbours on the other side of the channel.

HYDATIDS OF THE LIVER.—Dr. Scott Alison narrates the case of an aged gentleman who had always been ailing and delicate, and had latterly suffered from dyspeptic symptoms, and was supposed, a few years before he came under Dr. Alison's care, to have gall-stones. He also had disease of the heart following acute pneumonia. Last autumn, he suffered several severe paroxysms of pain, commencing in the back, running up to the face, and into the teeth, and rushing down into the arms. The pain was accompanied with hurried respiration, and copious sweating. The attacks would come on instantaneously, and in the

course of an hour or two, would pass entirely away. Dr. Alison, of Edinburgh, regarded the case as one of hypertrophy of the heart, depending on disease of the aortic valves, with the usual complications of obstructed hepatic and cerebral circulation. When the patient placed himself under the care of Dr. Scott Alison, he complained of much constant uneasiness in the abdomen, and of occasional pain over the region of the umbilicus. The liver was much enlarged, and descended much below the false ribs of the right side; it occupied the whole umbilical region, and the edge of the left lobe could be felt extending along to the immediate vicinity of the left ilium. The epigastric region, together with the greater part of the left hypochondrium, was occupied by the enlarged viscus. The surface was even, except at the usual site of the fundus of the gall-bladder; at that point the liver projected, and gave the sensation of a tumour. Pressure did not produce much increase of uneasiness; percussion gave dull sounds, and a marked sensation of fluctuation over the point where the tumour was felt. When the fingers were dipped, as it were, into the liver, the fluctuation was more distinct; it was scarcely perceptible in any other part of the abdomen. The situs of the heart was preternaturally large, extending from the third to the seventh rib, and from the edge of the sternum to a point an inch beyond the left nipples. The motion of the heart was heaving and prolonged; the impulse much augmented; the first and second sounds were rough, but no bellows-sound was heard. The pulse was not small, but hard, and slightly intermittent.—80. The veins of the neck were distended; the external jugulars stood out in relief, and were nearly half an inch in diameter. There was slight dyspnoea, and cough, with mucous expectoration; and, also, morning headache; the bowels were constipated, the stools bilious; urine plentiful, but alkaline, depositing the lithates of ammonia freely. The appetite was indifferent, but food did not cause pain. The treatment was merely palliative, and the patient died about three months after coming under Dr. Alison's care. The lungs were emphysematous, particularly in the upper lobes which were darker than usual, and contained several condensed hardened spots, within which were melanotic tubercles, hard and resistant to the knife. The heart was greatly enlarged, and weighed nearly two pounds. The walls of the left ventricle were much augmented, the cavity was not increased, and was filled with coagulated blood. The mitral and triuspid valves were healthy, but the semilunar valves of the aorta were stiff and almost immovable in consequence of much bony deposit. The margins of the valves were hard and resistant to the touch. The aorta itself was free from disease. The liver was greatly enlarged, and occupied almost all the upper part of the abdomen. The right lobe was of the colour of parchment, hard, and globular; the left lobe presented the usual appearance of liver. The right lobe fluctuated, was tense, and felt greatly distended: its peritoneal covering was thickened and rough, and non-adherent. Upon incising it vast numbers of hydatids, swimming in colourless glairy fluid, escaped, varying in size from a garden pea to a pigeon's egg; some of the larger ones were collapsed. Many hundreds were found, sufficient, with the fluid in which they floated, to fill three pint bottles. After the removal of the hydatids, the right lobe proved to be perfectly hollow, the thickest part of its parietes being not more than one-third of an inch, and the thinnest about half a line; very little of the proper liver structure was to be seen. Dr. Alison, from the general history of his patient, is inclined to believe that these hydatids had been present in the liver for many years, and were, probably, the cause of the dyspeptic and bilious symptoms from which he suffered so long. He refers their production to a general cachectic condition of the system, and assigns the occurrence of the melanotic tubercles in the lungs to the same cause, rather than to a malignant diathesis. He also draws attention to the almost total destruction of the right lobe of the liver, as a remarkable feature in the case, more especially as it did not appear to exercise any

injurious influence from an imperfect depuration of the blood, the performance of which seemed to be effected by the left lobe; and he adds that the biliary secretion was formed in not very deficient quantity, as proved by the colour of the stools, which were sometimes dark, and though sometimes light, never destitute of bile. The paroxysms of pain experienced by the patient, caused the disease to be mistaken for gall stones, none of which, however, were ever passed. The pain seemed, to Dr. Alison, to be more severe than he had remarked it to be in cases of biliary calculi, and decidedly less remitting. Dr. Kerr, in the article on hydatids, published in the Cyclopædia of Medicine, also alludes to the paroxysms of pain attendant on hydatids of the liver, and observes that the irritability of the stomach and vomiting, with jaundice, white stools and bilious urine, all of which attend a case of gall-stones, are not essential to one of hydatids, and may be absent.

OVARIAN DISEASE.—Dr. Jeaffreson thus sums up the results of the operation for the extirpation of ovarian tumours, in seventy-four cases: in thirty-seven cases the tumour was removed, and the patients recovered: in twenty-four the operation was followed by the death of the patient; of these twenty-four fatal cases, the tumour was removed in fourteen, could not be removed on account of adhesions in six, and was found to be other than ovarian tumour in four cases. Thus, again, in seventy-four cases, in which the operation for extraction of ovarian tumour had been undertaken, it has been completed in fifty-one instances, in fourteen of which it has been followed by death, and in thirty-seven by the successful removal of the tumours, and by recovery of the patients: whilst, out of the seventy-four cases selected, it was found impossible to carry out the intentions of the operator in twenty-three; or, in other words, the diagnosis was not sufficiently accurate to enable the surgeon to foresee the impracticability of carrying out his intentions. Of these twenty-three cases, thirteen recovered with life, to remain in *statu quo*; ten died. The cause of failure was, impossibility of removing the tumour, on account of adhesions, in fourteen cases; no tumour was found in three cases; and the tumour proved to be other than ovarian in six instances.

EXCISION OF PART OF THE LOWER JAW.—Dr. Chisholm performed this operation on a man, 68 years of age, the subject of malignant disease of the jaw, occurring subsequent to an operation for cancer of the lip. The case did apparently well; but before the man left the hospital, two of the cervical glands became considerably enlarged, so that, in all probability, the disease will return in some other form, and terminate fatally. On examining the diseased bone after the operation, it was found to be affected with spina ventosa, originating in the cancellated structure of the bone.

ACCIDENTAL UTERINE HÆMORRHAGE.—Dr. Andrews recommends the operation of turning to be had recourse to, in cases of accidental uterine hæmorrhage from partial or complete separation of the placenta, when the loss of blood continues after the membranes have been ruptured.

POISONING BY OXALIC ACID.—Dr. Letheby records a case where a poisonous dose of oxalic acid caused softening and perforation of the stomach. The viscus was very much blanched, except in two or three places, where there were small black spots, as if blood had been effused and acted upon by the poison; and here and there a blood-vessel might be seen ramifying, with its contents similarly blackened. The tissue of the stomach was so softened and disorganised, that it could scarcely be handled without tearing; indeed, at the cardiac end, it was reduced to a pulpy or gelatinous consistence, and had numerous perforations in consequence.—The case is interesting in a medico-legal point of view.

CARBONATE AND OXALATE OF LIME IN THE URINE OF THE HORSE.—In addition to hippuric acid, Dr. Golding Bird has recently detected in the urine of the horse the carbonate of lime in acicular crystals, and also the oxalate of lime in the octahedral form. The oxalate of lime in the

horse, presents a light amber colour, whereas in man the separate crystals are invariably colourless. On pressing them between plates of glass they readily split into smaller and tolerably regular octahedral fragments. Dr. Golding Bird inquires what is the source of this oxalate? Is it, as in man, a result of mal-assimilation of ingesta, or of the effete elements of tissues? Can it be traced alone to rumex acetosa, which abounds in most hay? These are questions of importance, not only from their physiological interest, but from the bearing they may possibly have upon the treatment of oxaluria in the human subject.

HYDROCELE OF THE HERNIAL SAC.—A case of this complication is reported from the London Hospital, in which absorption of the fluid was produced by leeching, cold lotions, and rest in bed. A blister was also applied. The case is erroneously described as cured, the hernia remaining, and requiring a truss.

VARICOCELE.—A case of this disease was much relieved, at the London Hospital, under the care of Mr. Curling, by means of the moemain lever truss.

THE TRANSFORMATION OF CELLS INTO A MUCOUS OR FIBROUS TISSUE.—Mr. Addison says that it appears to him, from his experiments, that the colourless elements, or cells of the blood, spontaneously transform themselves into an elastic fibrous tissue, after their separation from the living structure, or into a plastic transparent mucus (another form of fibrous tissue) when treated with liquor potassæ. He is also of opinion that a similar fibrous tissue is formed by the disintegration of pus-cells, and by treating the saliva with acetic acid. The fibrous tissues, from these sources, appear to have mechanical properties, a physical character and texture, a microscopical, or visible, appearance, and a chemical composition, so closely allied to the fibrous tissues and membranes, formed by the process of nutrition in the living structure, as to leave no reasonable ground for doubting, that the latter results from the transformation, or disintegration of cells. He also considers that tubercles have a relation to abnormal, inactive, or dead colourless blood, or pus-cells, identical with that which mucus, fibrous tissue, and the secretions have to the normal, active, and living cells. Blood-cells form spontaneously a very strong elastic tissue, in the buffy coat; they form a very plastic mucus when treated with a little alkali, which is converted into tubercular matter by a weak acid. Pus-cells have not the power of spontaneous transformation, but they form a characteristic mucous or fibrous tissue, when treated with an alkali, which becomes changed into tubercle on the addition of a weak acid. Tubercles cannot be re-transformed into mucus, nor mucus into pus; but, beginning with the living cells of blood, or pus, some of the products of their transformation may be artificially produced, viz., a fibrous tissue, mucus, and tubercle. All the various forms of cells found, in the healthy and morbid tissues and secretions, appear to Mr. Addison to be colourless blood-cells, in some or other of their stages and transformation; and beyond the colourless cell of the blood, which has active molecules within it, he believes no cell to be formed, otherwise than, perhaps, by the passing of two cells into one, or the division of one cell into two, an event which may occur during their structural transformations.

The Council of the Pharmaceutical Society are about to reduce their subscriptions, for members in London, to one guinea and a half; in the country, to one guinea; to associates, in town and country, half a guinea. In consequence of this alteration, forced on the Society by the alarmingly rapid decrease of its paying members, sundry sums, customarily given, annually, to the Benevolent Fund, and to the four country Pharmaceutical Schools, will be for the future withheld.

We understand that Mr. Honoratus Leigh Thomas has resigned his seat in the Court of Examiners of the College of Surgeons of England. He retires from practice, to take up his residence in Torquay. Mr. Stanley is the gentleman, whom the sagacious in these matters name as the successor.

NOTICES TO CORRESPONDENTS.

A Constant Reader has our thanks. The report which led to the opinion our correspondent thinks too severe, appeared in the Times. The next time the Tower Hamlets' Association meets, we hope to observe resolutions of a more discriminating kind. One or two of them were as faulty as they well could be.

Royal College of Surgeons.—Mr. Edwin Lee has sent us the following protest:—

"To the President and Council of the Royal College of Surgeons.

"GENTLEMEN,—Feeling confident, after the sacrifices which I had made, in my endeavours to promote the science of Medicine and Surgery, that an impartial estimation of my claims would have entitled me to be named among the first of those who were elected Fellows of the College under the New Charter, I cannot but consider the intentional omission of my name from the list which has just appeared, as an affront, attributable either to the exercise of an influence hostile to me individually, or of the unfair partiality in the selection, which, in other instances, has afforded such strong grounds of complaint; and I protest against the injustice which has been done me by so unwarrantable an abuse of delegated power.

"I am, Gentlemen,

"Your most obedient servant,

"EDWIN LEE.

"28, Upper Southwick-street.—16th October, 1844."

A. S.—By the New Bill, the M.R.C.S. may dispense his own medicines.

Aloes sends us the name of a Cheltenham physician, famous for his good deeds, who prescribes gratuitously for anybody, from his own bedside, but writes his prescriptions on note-paper, on which is printed in full the address of Mr. Mangeam, Chemist. Our correspondent thinks the circumstance justifies a suspicion that the worthy physician gets praise and pence for his very profuse and (to his professional brethren) very mischievous charities. We cannot too much condemn any partnership transaction between an M.D. and a Druggist—and, therefore, we cannot but regret a practice which, like that of the Cheltenham physician, offers us grounds for a suspicion of such professional misconduct.

E. J. Y. (Taunton).—The account has been adjusted. A select case, shortly given, and containing a point, would not be unacceptable.

A Constant Reader.—There can be no doubt of the physician's liability. The diploma would in no way affect the matter.

Mr. Leader will find a note at the office.

A Subscriber (Haslemere).—The law, in regard to medicine, knows of no difference between a male or female practitioner. The lady-apothecary, who "bleeds, visits, prescribes, and dispenses her own drugs," has been screened, we suppose by the fellow-feeling which makes both men and women so wondrous kind. A rare subject would be her prosecution by the persons formerly known by the very elegant and worthy designation of "the old hags!"

An Annual Subscriber—Mr. H. T.—A General Practitioner—M. D. P., and other correspondents, who have written to us on the vagaries and distresses of one of our contemporaries, must excuse us. The best guide to wisdom and moderation will be a notice proportionate to his importance, viz.:—silence.

Canadiensis.—The certificate enclosed to us has been received, and is quite satisfactory. The other is not material. Our correspondent has our best acknowledgments.

The printed begging letter, signed "Jordan Roche Lynch," does not require our notice. We do not know the auditor, but believe him to be Mr. Rugg. We agree with our correspondent that the document is very discreditable.

We have before us a vast number of communications, which we must respectfully decline. Among a number we must find room for, in our next, are:—Dr. J. B. Johnston, on the Canadian Leprosy—Dr. Costello on Lithotripsy—Mr. Whitfield on Tight Lacing—Dr. Muspratt on a New Analysis—Chirurgus on Hospital Reports—Mr. Knowles' Pencilling of Dr. Goldsmith—Mr. Toss will on Phthisis.

A Student.—Answers to all his questions would require a column. He will find all he asks, both on the foreign and home institutions, in the Medical Student's Guide, and Almanack.

Theta.—Sir James Clark's work on Consumption is the only one that occurs to us.

H. R.—The pil. aloes cum sapon. of the Edinburgh Pharmacopœia, is composed of powdered Socotrine aloes, and Castile soap, equal parts; beaten up into a mass, with simple syrup.

L.—The subject for the Fothergillian Prize Essay for 1846, is the Pathology and Treatment of Scrofula.

Dr. Corrigan's second Lecture, next week.

THE MEDICAL TIMES.

SATURDAY, OCT. 26, 1844.

There is nothing more graceful than the self-corrections of power.
MONTAIGNE.

THE first period of disaster and calamity to the London College of Surgeons, which commenced this time twelvemonths, with the grant of the Charter, has just closed with the publication of the final list of gratuitous fellowships. There is no truth in experience if that short epoch of foolish blunders and cruel wrongs will not work to the grievous injury, not to say ruin, of that unfortunate institution. Pen hath not yet been made which shall describe, as truth warrants, the evil working of the accursed innovation. That membership—(voluntarily sought in a noble aim for science)—which was studied for so hardly, and paid for so dearly, has been made the medium of social degradation and bitter heart-suffering to thousands of the most useful and gentlemanly of this country's citizens. Under a vile and insulting pretence to do honour to superior surgical merit, the young and inexperienced, with no recommendation but accidental position or influence, have been officially advertised to the world as collegiate and social superiors, and thousands of better and more useful Practitioners badged before the public as collegiate and social inferiors! There was a cruelty, here, equal to the startling injustice—and no cause for either, save the morbid desire of a Benjamin Brodie to try his bran-new skill in a huge legislative vivisection.

The first period of the disastrous epoch has passed, as we have said: the collegiate end of the beginning has gone by: and the calamity of membership—it is the natural sequence of events—is now to be followed by the perils of councillorship. Between the two, if the once-prosperous College survive, it will be because of an intervention that cannot come too soon!

In each district of the 8,000 educated members of the College of Surgeons, a neighbour—in whom nobody has, hitherto, seen any surpassing worth—has been kindly, or arbitrarily, and without cost, selected and declared on metropolitan collegiate authority, a better and safer surgeon than any of his brethren—his former equals. Is it expected that the passed-by will quietly submit to an injury as insulting as it is unneeded, or accept the very attractive alternative offered them, of recommencing their elementary studies, and presenting themselves for acceptance or rejection, with the gift of ten additional guineas, to the very men who have already so unworthily treated them? We tell the Council that if they expect such things, they know nothing of the hostility they have aroused against themselves. It is anything but submission to present circumstances the members dream of; and it would be singular indeed, if eight thousand gentlemen, with such a cause in

their hands, with so much to goad them into action, could not bring some fourteen or fifteen official offenders to terms of reason; or visit them with an exemplary punishment for their insane obstinacy.

When the Charter was first granted, and before its actual effects were made visible, it is quite possible that many of the Council may have assisted in injuring their brethren unintentionally. Not so to-day: and the forbearance we were the first to recommend then, we are the first to advise withdrawn now. The man who, bound to protect me, has lowered my status in society without a reason—and equally without a reason asks ten guineas, and a harrassing, humbling examination, as the price of restoring me to the position he ought never to have deprived me of—has approved himself, not only an enemy, but a treacherous one. To continue his policy is to perpetuate his injustice, and to proclaim every day anew his deadly hostility to me. With such a man friendship ceases: the intercourse of kindness cannot exist with one who causelessly does me wrongs, which pursue me in each turn of my public and private life. One step further: the man whose judgment and good sense has been so much at fault in a matter of such glaring injustice, and obvious impolicy, is not the one in whose hands I could confide my patient's life. Whatever his reputation, there are not wanting those equal to him in scientific worth, who have not committed against me such an offence, or of whose discretion I must entertain such doubts—and these I shall prefer! If from the Council's characteristically secret voting, and those appropriately hole and corner proceedings that shut out the light of day with an anxiety exhibited by no other corporation in the empire, mistakes may arise as to the offending members, they have the full remedy in their own hands. Let them come forward, following the handsome example of Mr. Guthrie, and disclaim, indignantly, all share in an outrage which has so deservedly exasperated the members whose interests they were sworn to maintain. In huge offences like these, it never can be allowed them to wrap up their inanity or importance—as the case may be—in Oriental isolation and reserve: they live, move, and exist, for the good of the Medical Commonwealth, or are false and treacherous to the duties of their position: they owe us just the same account they owe their consciences. In the name of the outraged and deeply injured members of the College, we cry out, then, to each of the Council, "Disclaim, or Amend, or take the consequences!"

But it would be another of their great mistakes if this strangely wrong-headed Council thought that our measures of self-defence must stop here. They have roused throughout all their members a sense of wrong and injury new to medical men, and which will carry them all lengths to set right this ireful aggression. We solemnly believe that we have but this moment to declare ourselves for a General Practitioners' College, to enlist a self-devoted and self-sacrificing confederacy against the Corporation in Lincoln's Inn Fields, which would infallibly sound its death-knell. While it is yet time, then, we earnestly implore the Council to retrace their steps: we tell them, that, at all times important, it is infinitely more so on the eve of a Law, which can be made so vitally to affect their interests and achieve their subjugation. If they are deaf to our entreaties—heedless to the call of good sense and urgent policy—we may find it our duty to take the decisive step we have foreshadowed, and recommend our brethren

a course of policy which will give them assured guarantee against such mad aggressions for the future.

THE ITCH INSTITUTION.

The removal of a small dispensary or infirmary, for the treatment of diseases of the skin, from London Wall, to a house in Bridge Street, Blackfriars, near Apothecaries' Hall, has been the signal for a paper controversy of much interest, as well as for public meetings of the neighbouring residents, to protect themselves from the visitation of, what they not unnaturally designate, the *nuisance* of so ostentatious a charity. The main grounds of objection publicly proffered are, however, not the outrage to feelings from such an establishment being placed under the very nose of decent and sensitive people, who have not only to eat breakfasts, and escape queasy stomachs, but to pay some little care to the cleanliness and purity of the thoughts and images their minds give entertainment to. This would be too poetic and ethereal an objection to attract mercantile sympathies in the city of London, and, therefore, our sober practical friends enlarge on the risk of infection, and the injury to house property, alledging further that the street is altogether unsuited for the formation of such an hospital, and that the house is not adapted, either by its size or conveniences, to afford accommodation to numerous patients, a great number of whom must, consequently, loiter about in its vicinity, to the manifest risk and annoyance of the passers by.

The objectors have been ill supported in their policy. Messrs. Lawrence and Arnott, their medical authorities, have half knocked up their case. While condemning the establishment of the cutaneous infirmary in the locality to which it has been transferred, and attempting to shew that there does not exist a necessity for any such institution, they have, involuntarily, disproved the cause of dread and annoyance from contagion, or infection. If, as they say, patients labouring under diseases of the skin, are received without objection or difficulty, at all the hospitals and dispensaries in London; and if, as we know, the hospitals and infirmaries will not receive them if contagious, the inhabitants of Bridge Street will not be in such personal danger as they anticipate.

But the fact that the Hospitals will *not* receive the contagious forms of cutaneous diseases—while it shows the want of an Institution for them, proves also the extreme impropriety of coolly selecting for that Hospital a small house closely surrounded by respectable residents, and cleansing itself of its atmospheric impurities by vomiting them forth on the numerous passengers, who each moment pass by its side.

The sole reason that could be alleged, by the committee of management of the Institution, in favour of their scheme, was the facility and inexpensiveness of the plan by which they were to obtain water for their baths, the Apothecaries' Company having promised to supply them with a commodity they have long furnished to their licentiates—an abundance of hot water. That promise, however, on the application of the Bridewell committee, has since been withdrawn; and now, with the exception that a certain outlay has been incurred, they have—it appears to us—no valid reason for not gracefully withdrawing the hospital from a neighbourhood, where its threatened establishment has caused so much commotion, and indignant disgust.

Having said this much, we are now bound to remark that the statement put forth by the com-

mittee, in a pamphlet published by them in answer to their opponents, that cutaneous diseases in this country, up to this moment, have been a neglected department in the charities of the metropolis, is unfortunately too true, or was so until a short time since, when a dispensary for their treatment was established in Blenheim Street, to which Dr. Leighton we believe was appointed physician. It is perfectly true that patients labouring under skin diseases, not contagious, are admitted as in or out-patients at our hospitals, but these cases do not occur in sufficient numbers to enable the physicians and surgeons of the Institution, to make them the subjects of clinical remark and instruction, to guide and inform the students who follow them in the wards.

For that purpose to be carried well and duly into effect, a separate institution for diseases of the skin is imperatively required, in the same manner that hospitals and dispensaries are formed for treating the diseases of the eye and ear, of syphilis, fever, small-pox, diseases of women and children, and, though last, not least, for consumption. As much may be said in favour of the cutaneous infirmary, as for any of the charitable institutions to which we have alluded. We are persuaded that a great number of practitioners are innocent of all knowledge how to diagnose between the different maladies to which the skin is liable, and equally ignorant of their treatment when diagnosed. For our own part, we can well remember, that it was long a subject of regret with us during our pupilage, that there was not any public institution in the metropolis where such necessary information could be acquired, and that regret has certainly been shared by every observant and right-thinking practitioner. If, then, the projectors of this infirmary would transfer it to a more eligible site,—to a place where the passers by would not be annoyed by a collection of unsightly diseases, where private property would not be injured, and public traffic not be impeded,—in all probability they would meet with encouragement and support from many of their present opponents, as they certainly would from the members of the medical profession.

We know nothing personally of the Committee, but from public report believe them to be respectable and well-meaning men, and are, therefore, ready to trust that they are willing to make some sacrifice for the public convenience and benefit; at the same time, we take leave to remind them, that the demand which, by one of their organs, they have set up for compensation for expenses incurred since the establishment of the hospital in Bridge Street, cannot fail to suggest a resemblance to certain worthies, who have, ere now, distinguished themselves by hiring a first floor in a respectable quiet street, and then alarming and annoying the neighbourhood by starting an exhibition, or introducing a noisy band of music, the nuisance to be abated when they had received "compensation for expences," &c.!

The Committee, if as wise as they are, no doubt, good—will not hesitate one moment about their true policy. A generous and kindly concession to the voice of public opinion, though accompanied by a small pecuniary loss, would repay them fifty-fold. The want now confessed and well advertised, public sympathy will be secured by so graceful a concession; and if the occasion be properly used, the public and medical profession may owe to those now deservedly abused projectors—another St. Louis—viz., a noble hospital, some short distance from the metropolis, generously supported.

REVIEWS.

An Exposition of the Laws which relate to the Medical Profession in England, &c., with a Brief Appendix, containing an ample Analysis of Sir James Graham's Bill. By J. DAVIES, M.D., Physician to the General Infirmary, Hertford.—Cobb, Hertford.

If the Editor of the *Times* newspaper—and several of our friends who have taken active parts at recent public meetings—had had the aid of this work in forming an opinion of the state and wants of the Profession, some awkward mistakes would have been avoided, and our demand to Parliament for the improvements which the New Bill requires, would be considerably strengthened. Dr. Davies gives a luminous and uniformly-accurate statement of the position of our three divisions of Practitioners, in reference both to the law and to the institutions with which they are connected, and accompanies each step in his exposition by a sound and judicious criticism. Our readers will not be surprised to learn that the deep and intimate conviction of anomalous and mischievous mis-government which has arisen in our author's mind, by his investigations of corporate history, naturally influences him, in his analysis of the New Bill, to look on its creative innovations with no small pleasure. As far as the proposed law goes, it carries with it our author's warm approval. Here are his remarks on the clause restricting Public Medical Appointments to Registered Practitioners:—

It has been asserted in some of the public journals, whether from ignorance, or design, that the law already precludes all but licensed practitioners from public medical and surgical appointments. It is true that no one is legally entitled to practise either privately or publicly as a physician in England (14 and 15 Henry VIII.) without a licence from the London College of Physicians, or from Oxford or Cambridge; and it is equally true that no one has a right (except those who were in practice before 1st August, 1815) to practise as an apothecary without a certificate from the Apothecaries' Company; but there is no Act which renders it illegal for a person to hold any appointment as a surgeon, except to prisons, under 4 George IV., cap. 64. The law with respect to physicians is constantly broken through in the provinces; and so is that respecting apothecaries at many infirmaries and dispensaries. As to surgeons, neither the law nor the practice is as stated. It is admitted that most of the hospitals, infirmaries, dispensaries, &c., require, by their *own rules*, that the surgeons shall be members of a college, but that is not universal: there is no illegality in their appointment, or in their holding their offices, when they are not members of a College of Surgeons. The same remark will apply to the army, navy, ordnance, &c. The regulations respecting the qualifications of medical officers are those of the respective departments: the law does not require that those officers shall be members of a College of Surgeons.

On the effect of the New Bill on Members and Fellows of the College of Surgeons, Dr. Davies thus writes:—

We next come to a most important clause in the Bill (18). "And be it enacted, that every person registered after examination as a physician or surgeon under this Act, shall be admitted as an associate of the Royal College of Physicians, or as a fellow of the Royal College of Surgeons, from which he shall have received his Letters Testimonial as physician or surgeon, or if he shall have received the said Testimonials from the Royal College of Physicians and Surgeons of Glasgow, then as a fellow of the last-mentioned Royal College."

It is evident that the above clause will supersede as much of the charter lately granted to the College of Surgeons as relates to the appointment of fellows. Under the new Bill, every person who now holds, or who shall hereafter obtain, the

Diploma of the college, will become a *fellow* of it as soon as his name shall have been entered on the register of the council. All persons now practising will be placed upon the same footing, under the 28th clause, as those who may hereafter enter the profession under the provisions of the Bill. This fact proves that Sir James Graham has not overlooked the injustice inflicted upon the members of the College of Surgeons by the new charter, which separates into two grades or classes those who have undergone the same education and the same examination.

And we have a liberal recommendation added, that the Members should insist on having the clause unaltered in its passage through Parliament. Dr. Davies agreeing with everybody (but the small majority in Lincoln's Inn Fields) that the Fellowship has been a curse to the College.

We regret we cannot extend our extracts, but we have already afforded our readers grounds for warmly recommending to them this well-written work. It evinces much research and learning, and is pervaded by great good sense, and the spirit of a tolerant and enlightened philosophy.

DR. COSTELLO v. MR. WAKLEY AND HIS INSTRUMENTS.

[Before submitting to our readers Dr. Costello's letter, it may be as well to premise, from the *Lancet* of last week, the remarks of the editor, with such statements of Messrs. Greville Jones and Gay, as were not published in the *MEDICAL TIMES*.]

Note from Mr. John Gay.—(To the Editor of the *Lancet*.)—SIR,—Dr. Costello, "Principal of Wyke House Asylum," and "long the friend and pupil of the illustrious Gall," has, in a recent number of a cotemporary journal, taken the liberty of using my name without my leave, and of announcing me as one of his colleagues. Not being ambitious of that honour, may I be allowed, through the medium of your journal, to state that I am not a colleague of, nor in any way whatever connected with, that gentleman. As Dr. C. has persisted in assuming an official connection with the Royal Free Hospital, in defiance of its contradictory by myself and colleague, which you did us the favour to publish in a late number of the *Lancet*, I will, by your permission, as this opportunity occurs, shew, not only that Dr. C. is not, but that, under existing circumstances, he cannot, become one of the medical officers of that institution. Amongst the rules of the charity are the following:—Rule 50—"That the physicians of the hospital shall be fellows or licentiates of the Royal College of Physicians in London." Rule 51—"That the surgeons of the hospital shall be members of the Royal College of Surgeons in London." I cannot find the name "W. B. Costello" either in the lists of fellows or licentiates of the Royal College of Physicians in London, or in that of the members of the Royal College of Surgeons.

I am, Sir, your obedient servant,

JOHN GAY, F.R.C.S., E.

Surgeon to the Royal Free Hospital, &c.

12, Pavement, Oct. 13, 1844.

*** What is the matter with poor Costello? It would appear that the inmates of a Lunatic Asylum and Alexis "the detected," are somewhat dangerous companions. The letter of the unhappy Stone-grinder on the marvels of Mesmerism, shews that he ought to be treated with kindness and forbearance.—*Ed. Lancet*.

Note from Mr. Greville Jones.—(To the Editor of the *Lancet*.)—SIR,—I have to request the favour of the insertion of the following. I do not ask this favour out of any mere reference to myself or the gentleman from whom I differ; your columns contain matter more important than individual disputes. Mr. Costello has stated publicly, that he performed an operation for stone in the presence of his colleagues, Drs. Weatherhead, Jones, Gay, and Eccles. He makes a few mistakes in his paper. 1 He is not our colleague; we have repudiated the appointment, and he has taken no

steps to establish it. 2. Dr. Weatherhead was not present. 3. I saw no stone, but, after some time, was called, and found some sabulous matter. It was very small in quantity, but might have been the fragments of a very small calculus. There is also some want of precision in his article. He tells us of a man operated upon many times in an hospital in London, without success. Why not tell us which hospital, and who made the attempt? I trouble you with this only to express my regret that a gentleman of Mr. Costello's attainments should lend himself to the system of splitting the profession into exclusive departments. To invent lithotripsy was an arduous task, but now every surgeon knows how to practise it. If an hospital wants a lithotritist, we shall next find the governors of St. Bartholomew's arresting Lawrence's hand, and appointing an oculist to teach him something about the eye; and then, as Guthrie does not quite confine himself to the visual organ, they will want an oculist to the Westminster. Aurists, chiropodists, bonesetters, &c., &c., will be wanted, if once the principle be admitted, that a fully-educated surgeon is incapable of doing all that belongs to therapeutics, as far as the science is established.

I am, sir, your obedient servant,

W. GREVILLE JONES,

Second Surgeon to the Royal Free Hospital, Gray's-inn-lane Road.

Thursday, Oct. 17, 1844.

DR. COSTELLO'S REPLY TO THE EDITOR OF THE *LANCET*, AND HIS THREE INSTRUMENTS.

(To the Editor of the "*Lancet*.")

SIR,—I was silent when I learnt that your pages were lent to an attack on me by Messrs. Gay, Eccles, and Jones. Besides, relying on your readers' good sense and kindly feeling, I felt reluctant to obtrude myself on their attention, to continue a personal squabble of great insignificance. The repetition of the attack, however, in a more unfavorable form, and the editorial support you, much to my surprise, have lent it, have altered the ease, and justify, in fair play and honorable manliness, the claim for a full hearing to my reply. If it be longer than I or you could wish, it is because you have presented me with four assailants to answer in one note.

The question of my connection with the Royal Free Hospital, which these gentlemen so explicitly deny, is thus briefly explained. Dr. Marsden, the founder and director of the Institution, after mature deliberation, entrusted to my charge such of the hospital patients as might be afflicted with stone, appointing two beds especially for lithotripsy cases, the service of which he confided to me, and it is because this *de facto* appointment has not yet had its formal ratification on the minutes of the Hospital, that Messrs. Eccles, Gay, and Jones, in their moderate estimate of the worth of a professional man's repute, have felt themselves justified in dragging me before the public, to get it believed, that I have no connection with the Hospital, and have it inferred, that I have been guilty of all sorts of falsehoods, and dishonorable acts, in allowing it to be supposed that I had.

Mr. Gay, who pursues me with an ardour that might be respectable in a better cause, cannot find my name in the list of physicians of the London College. Yet it is there, and ought to be there, for I underwent an examination, conducted in Latin, by Sir Henry Hallford, Dr. Frampton, Dr. Lamb, and Dr. Hume. Has Mr. Gay's inexplicable, woman-like hate, so blinded him that ordinary print speaks in vain, when it speaks of me? It is not impossible, for it has carried him to an act unparalleled, I would fain believe, in hospital experience. In the presence of a patient, named R. Piekering, Mr. Gay said to G. Waldron, a poor man, labouring under stone, and an inmate of the Hospital,—"So, you are under Mr. Costello; I advise you to put yourself under a respectable man; he is only humbugging you!" When invited by me to confront the two witnesses, Mr. Gay declined, and refused either to justify or contradict their statement, for the truth of which I have their jointly written testimony. Yet I am unconscious of having ever given offence to Mr. Gay, save in the daring act of "taking his name in vain."

I beg his pardon "of taking the liberty of using his name." Though not unwilling to offer him my respectful apologies for the breach of humility involved in my speaking of himself and me in the same breath, he must excuse me, if inferior as is my comparative position to his, I am yet sufficiently pleased with it, after what I have seen of him, to say with the poet—

"I would not, if I could, be Gay,"

With Mr. Greville Jones, nobody, of course, can be offended; but lest his rather odd statement of facts should do a mischief he never intended for it, I transcribe the letter of my friend, Mr. Sherwood, who was present at the operation spoken of. I refer, for confirmation of its contents, to Dr. Weatherhead.

(Letter from Mr. Sherwood.)

MY DEAR DOCTOR,—Having seen a letter from Mr. Greville Jones, making, on a matter of fact, sundry statements, which appear to me (I had almost said) unaccountably mistaken, I beg to offer you, on that performance, a few observations, of which you can make any use you please.

Mr. Greville Jones tells us "he saw no stone, but after some time was called, and found a little sabulous matter." Now, on your crushing the stone, he heard the crash, which was quite unmistakable, and he, and his colleagues, Messrs. Gay and Eccles, simultaneously with me, remarked on the circumstance. On the patient expressing a wish to make water, they were recalled, (for they had now gone to another part of the ward,) and in their presence, fragments of stone were voided: Mr. Jones himself handled them. Indeed, the operation was as successful as it was brilliant and miraculously expeditious, and all remarked, as I did, that the broken stone could be plainly seen at the bottom of the utensil, the water injected before the operation returning, without being tinged by blood, and being, in truth, perfectly limpid. In making this statement, I wish not to impeach Mr. Jones' sincerity. His oblivion of facts owed its origin, I am sure, to accidental influences. I should add, that Dr. Weatherhead was present, though Mr. Jones, from a similar cause, seems to have forgotten that circumstance also. The doctor timed the operation, which took exactly thirty seconds.

I am, Sir, yours faithfully,

WM. SHERWOOD.

13, Calthorpe Street.

Mr. Eccles—I think it is Mr. William Eccles—joins with Messrs. Gay and Jones in startling me with the gratifying assurance of their very decided superiority over me. I am sincerely pleased to hear of their scientific and social consequence, and join the public warmly in their congratulations, that if a Dupuytren and an Astley Cooper are no more, we have a Messrs. Eccles, Jones, and Gay. Flattered by the friendship, and I may proudly say, love and respect of some of the first surgeons and physicians of France,—honoured, in a great surgical work (the delay in whose completion is not mine) with the literary co-operation of a Cooper, a Brodie, a Travers, a Monroe, a Charles Bell, a Dieffenbach, a Chelius, and so many other distinguished surgeons of England and Germany, my regret is certainly not equal to my surprise to find that these three gentlemen feel it safe and decorous to assume over me, before the profession, a consequence so marked—so "withering"—so superciliously supreme!

But it remained for you, Mr. Wakley, to raise my astonishment to its climax. Your magisterial zeal, at an inquest in the Hospital, shown in hounding on these three instruments to personal and public persecution of one who never breathed an ill-natured whisper against them; your editorial remarks, publicly imputing insanity to a medical man, who depends for the support of himself and family on the confidence of his patients, and your philosophical application of the ingenious nickname of "stone-grinder" to a surgeon, because he had no small share in diffusing lithotripsy in France, and introducing it in England,—these, Sir, are not the things I should have expected from any medical man, still less from any medical journalist, and least of all, from a medical journalist who, like yourself, labours under no trivial obligations to me. Your assault on my

peace of mind and public character, I can honestly affirm, was wholly unprovoked. But the catalogue of ingratitude, which already numbers (among so many others) the names of a devoted, but deserted and broken-hearted, Thomas King, a McChristie, and a Hennis Green, could not be complete without that of a Costello! When I saved you from the eternal disgrace of writing down, or trying to write down, Sir Charles Bell, by gratuitously replacing the sketch intended for that purpose with the biography, written at great pains, which appeared in the *Lancet*, how little did I think, that without doing you, or any living man, a shade of injury, you would, a few years after, hold me up to ridicule as a stone-grinder, and publicly slander me before my brethren as a madman! But passing by, I will not say the honour, but the every-day morality of these character-assassinations, permit me to inform you, that you could not have chosen a less fortunate subject for aggression than myself. My life has not been so tarred with infamy that every floating feather of guilt and suspicion fixes and adheres to it as its natural seat. Charges rebound from my character with much the same force as they cling to yours.

Your sneer at the record of my public interview with Alexis, as published by me in the *MEDICAL TIMES*, is characteristic of one who, to my personal knowledge, knows less of medicine than any other man hanging on the profession. The narrative of the performances of that youth was history conscientiously given; the failures were detailed with the same minuteness as the apparent successes. I was, in truth, a sceptic, as I still partially remain, but a sceptic, neither unenquiring, nor unfair. To you, of course, it would have been more pleasing homage to have blindly let your notions of personal infallibility outweigh the convictions of some of the best minds of the age, and withhold me from the labours of investigation. But the time is gone by when you can safely nurse such extravagant expectations. The reign you once had, has made way for another far more liberal—far more generous—far more enlightened.

I am, Sir, your obedient servant,
W. B. COSTELLO.

23rd October, 10, Golden Square.

STATE OF PROFESSIONAL FEELING.

At a numerous and highly respectable meeting of the Medical Profession, held at the Public Dispensary, Devonport, on Thursday, the 3d Oct., C. Tripe, Esq., in the Chair, it was moved by T. Crossing, Esq., and seconded by G. Dansey, Esq.:

"That this meeting hails with satisfaction the disposition of the Legislature to amend the present anomalous state of the medical profession, as shown by the introduction of Sir James Graham's Bill, entitled 'A Bill for the Better Regulation of Medical Practice throughout the United Kingdom;' and whilst they are ready to admit, that the said Bill contains much that is calculated to improve the condition of the profession, they cannot refrain from deprecating certain of its enactments."

Moved by P. W. Swain, Esq., and seconded by J. Little, Esq.:

"That this Bill having proposed to make a high rate of professional education necessary for all registered practitioners, this meeting feels it would be a great injustice to withhold from such practitioners protection against the competition of uneducated individuals, in the removal of all existing restrictions, as contemplated in the said Bill."

Moved by J. May, Esq., and seconded by R. Watson, Esq.:

"That this meeting fully approves of the principle of forming a Council of Health and Medical Education to provide an efficient and uniform standard of qualification for practitioners generally; and to afford assistance to Government, and the country at large, in all questions referring to the sanitary conditions of the community—duties which this meeting are of opinion would be best performed by the intelligent, highly educated, and unbiased members of the profession; they, therefore, view the constitution of the Council, as proposed in the Bill, to be highly objectionable."

Moved by J. Little, Esq., and seconded by J. May, Esq.:

"That this meeting feeling deeply sensible of the benefits which have resulted from the able administration of the Apothecaries' Act, begs to record its most grateful thanks to the worshipful society, for the manner in which they have raised, mainly by the operation of the restrictive clauses of their act, the education of general practitioners of medicine to its present high standard."

A general meeting of the medical profession of the town and neighbourhood of Bradford, (York-

shire,) was held on Tuesday, October 1st, to take into consideration the proposed bill of Sir James Graham. Thomas Beaumont, Esq., in the chair.

The meeting was addressed by the chairman, and several of the leading members of the profession in the town; and it seemed to be the general feeling that the thanks of the profession are due to Sir James Graham for the trouble and interest he has taken in its behalf, and that the proposed bill as a whole should be thankfully received as a boon. The registration clauses were highly approved of, and it was considered that if the bill passed into a law, it would certainly have the effect of raising the respectability of the profession. Several gentlemen spoke strongly in favor of the abolition of the Apothecaries' Company as an examining body; considering it highly derogatory to the profession that a trading company of druggists should have the power of obliging gentlemen, who intend to practice medicine and surgery, to come before them for examination previous to obtaining a license.

While the principle of the bill was thus far approved of, a hope was expressed by the meeting that some additional clause would be introduced, to put a check upon quackery.

Resolutions to this effect were unanimously agreed to, and a Committee was appointed to communicate with the Members for the borough, and to watch over the progress of the bill.—*From the Prov. Med. and Sur. Jour.*

BIBLIOGRAPHICAL RECORD.

FROM OCTOBER 5TH TO THE 26TH.

Sobernheim (J. F.) *Elements des Allgemeinen Physiologie*, 8vo. 1 Thlr. 50 gr.—Hoffbauer, (J. H.) *Die Psychischen Krankheiten und die damit veranlaßten Zustände in Bezug auf die Rechtspflege*, 8vo. 1½ Thlr.—Delafield (O.) *Die Blutkrankheit der Schafe und die derselben ähnlichen Krankheiten*, 8vo. 22½ Lgr.—Skrive (G. Von) *Leitschrift für Phrenologie*, 8vo.—Damerow, Flemming, and Roller (Drs.) *Allgemeine Zeitschrift für Psychiatrie und Psychisch gerichtliche Medicin*, 8vo. 4 Rthlr.—Wuth (C. C.) *Beiträge zur Medicin, Chirurgie, und Ophthalmologie*, 8vo. 20 Sgr.—Driscuroth (C.) *Die Augenkrankheiten*—Schultz (C. H.) *Lehrbuch der Allgemeinen Krankheitslehre*, gr. 8vo. 2 Thlr. 25 Sgr.—Klencke (H.) *Ueber die Contagiosität der Eingeweidewürmer, Nach Versuchen und über das Physiologische und Pathologische Leben der Mikroskopischen Zellen nach Empyrischen Thatsachen*, gr. 8vo. 1 5-6th Rthlr.—Frankenberg (S.) *Annalen der Gesamt Medicin des In, und Auslandes*, redigert und herausgegeben—Horing (G.) *Ueber den Sitz und die Natur des grauen Staars*, gr. 8vo. 20 Sgr.—Grant-ham (J.) *Facts and Observations in Medicine and Surgery*, 8vo. 7s. 6d. cloth—Carpenter's (W. B.) *Human Physiology*, 2nd edition, 8vo. 20s. cloth—Phrenology, the Hand-Book of, 3rd edition, 8vo. 1s. sewed—Bennett's (J. H.) *Treatise on Inflammation, as a Process of Anormal Nutrition*, 8vo. 2s. 6d. sewed—Guy's Hospital Reports, No. 4—Fownes (G.) *A Manual of Elementary Chemistry, Theoretical and Practical*, 8vo.—Simpson's (J. Y.) *Memoir on the Sex of the Child, as a Cause of Difficulty and Danger in Human Parturition*, 8vo.—Peacock (T. B.) *An Account of some Experiments illustrative of the Mode of Formation of Dissecting Aneurisms*, 8vo.—Steggall's (J.) *First Lines for Chemists and Druggists preparing for Examination at the Pharmaceutical Society*, 18mo. 3s. 6d. cloth—Creation, Vestiges of the, Natural History of, 8vo. 7s. 6d. cloth—Thomson's (J. M.D.) *Annals of Medicine*, No. 1, Sir James Graham's Bill Repudiated, 8vo. 2s. sewed—Botany of the Voyage of H. M. S. Sulphur, No. 6, plates, and letterpress, 4to. 10s. sewed—Cooper's (B. B.) *Lectures on Osteology, including the Ligaments which connect the Bones of the Human Skeleton*, 8vo. 8s. cloth—Epps' (J.) *Domestic Homoeopathy, or Rules for the Domestic Treatment of the Maladies of Infants, Children and Adults, and for the Conduct and Treatment during Pregnancy, Confinement, and Suckling*, 4th edition, 4s. 6d. cloth—Moreau (F. J.) *A Practical Treatise on Midwifery, exhibiting the present advanced state of the Science*, translated by T. F. Betton, M.D., and edited by P. B. Goddard, A.M., M.D., 80 plates, numerous illustrations, 4to. Phil. plain £3. 3s., colored £5. 5s.—Zoology of the Voyage of H. M. S. Sulphur, No. 7, Mollusca, part 2, by R. B. Hinds. Esq. royal 4to. 10s. sewed, plates—Medicine, New York Journal of, 8vo.—Surgeons, List of the Fellows and Members of the Royal College of, 8vo. 1s.—Mülder (G. J.) *Versuch einer Allgemeinen physiologischen Chemie*, 4to. 8s. 6d.—Sigaud (J. E. X.) *Du Climat et des Maladies du Bresil, ou Statistique Medicale, de cet Empire*, gr. 8vo. 9f.—Davies (J.) *An Exposition of the Laws which relate to the Medical Profession in England, with an Analysis of Sir James Graham's Bill*, 8vo. 2s.—Elements of Sacred Truth for the Young. By John Abercrombie, M.D., 1s. 6d.—Travels in the Track of the Ten Thousand Greeks. By W. F. Ainsworth, F.G.S., F.R.G.S., 7s. 6d.—Annual Register; or, a View of the History and Politics of the year 1843, 16s.—The Report of the Agriculture of Norfolk, by Richard N. Bacon, 10s. 6d. cloth—Sir Joseph Banks and the Royal Society, a Popular Biography, with an Historical Introduction and Sequel, 2s.—Black's Picturesque Guide to the Lakes, including the Geology of the District, by John Phillips, F.R.S.G.L. 5s.—Nina, by Frederika Bremer, translated from the Swedish by E. A. Friedlander, 2s.—Genealogical and Heraldic Dictionary of the Landed Gentry of Great Bri-

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Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	395	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases.....	226	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	85	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	133	152	157
Diseases of the Lungs, and of the other Organs of Respiration	246	312	286
Diseases of the Heart, and Blood-vessels	35	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	66	66	69
Diseases of the Kidneys, &c... Childbirth, Diseases of the Uterus, &c.	8	6	5
Rheumatism, Diseases of the Bones, Joints, &c.	11	11	10
Diseases of the Skin, Cellular Tissues, &c.	4	6	6
Old Age	3	1	1
Violence, Privation, Cold, and Intemperance!	63	74	71
	13	26	26

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SUMMARY.

Nov. 2.

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CLINICAL LECTURES ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDINER GUTHRIE, Esq., Junr.

October, 30th, 1841.

LECTURE III.

On the Symptoms and Diagnosis of Cataract.

I mentioned that muscæ volitantes, by which is understood a variety of appearances moving before the eye, are often accompaniments or precursors of cataract; they frequently give the first alarm, although they are not in themselves important, or essentially connected with cataract. They, sometimes, assume the form of small threads or filaments, which appear to float in the air; or of a fly or flies, which the patient endeavours to brush or drive from before the eye, until he finds he cannot accomplish it, and that it is a defect in the eye itself. These objects sometimes look like zig-zag lines or spots of greater or less dimensions, and are more or less opaque. They are, occasionally, globular, or in small webs, or luminous spots surrounded by a halo, always moving but never fixed as regards the sensations of the patient. They are most readily seen on raising the eye quickly from the ground towards the sky, when they appear to ascend as long as the eye is in motion, and to descend on its becoming steadily fixed, as if they had been disturbed from, and were returning to, their original situation below the axis of vision. Of the different kinds of muscæ volitantes, the filamentous particles, turning and twisting in every direction, are the most common; two or three of which are generally more observed than the rest, although accompanied by an infinity of others less distinguishable, intermingled with small globules, which fall like a fine mist when the eye has been gently raised and fixed on a white wall, or on the sky on a clear day. The filamentous particles being apparently the lightest descend the first, assuming the appearance of twisted semi-transparent tubes, or worms spotted in different places.

In the evening, or by candle light, these spots are scarcely to be observed; they are not very perceptible in a room which is rather dark; are but imperfectly seen when looking at the flame of a candle; and but feebly marked when the eyes are raised to the sky with the lids shut, on a fine clear day. They appear much more brilliant on a clear bright day when the lids are half closed; they are also very distinct on a misty day, or when attention is paid to them in light reflected from water or snow. These spots always appear to sink below the axis of vision by their own weight, when the eye is turned upwards; and the opinion that they do so obtains great support from their falling and collecting, as it were, into a focus in the axis of vision, when this part is made the most dependant by bending the head forward and looking on a white sandy soil, in which way the patient can readily examine them; or by lying down in the open air and looking at the sky, with the head and eyes turned back, they will be found to ascend and lodge themselves in what is the upper, but in

CASE OF NATURAL SOMNAMBULISM AND CATAPLEPSY TREATED BY HYPNOTISM; with Remarks on the Phenomena presented during the Spontaneous Somnambulism, as well as that induced by various Artificial Processes, by JAMES BRAID, Esq., M.R.C.S.E. 95

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that position the most dependant, part of the eye.

If a filament, which appears to be the tenth of a line in diameter, and an inch long, is examined by placing before the eye a sheet of paper, on which a strong light is thrown, it will be magnified to two lines in diameter, and a foot in length. If examined against a white wall, 20 or 30 feet distant, it seems, to a certain extent, to be magnified in proportion to the distance from the object against which it is inspected. It is not every one who is able to make these observations, and few can cause the appearance of the spots at pleasure, until they have been long accustomed to their casual production.

In some very rare cases, these spots increase, forming a mist, which becomes less and less moveable, and may be, at last, followed by opacity of the lens. In others these spots may be seen for several years, apparently semi-transparent, whilst a portion only of the lens becomes opaque, either in its posterior half or in parts; and the integrity of the aqueous humor in these cases has been demonstrated by puncturing the cornea and evacuating that fluid without any amelioration of these symptoms.

The principal diagnostic mark of these appearances is their apparent mobility, which distinguishes them in a very decided manner from the fixed spots, of which patients frequently complain at the same time, and which appear to depend on a different affection of the retina. Muscæ volitantes are seldom entirely removed, or beyond a certain point, and when the patient is assured of their not proceeding further, appear to be lost sight of, and to give no inconvenience unless when attention is directed to them. They are very rarely followed by cataract, and it is a great consolation to the patient to be assured that they are not dangerous.

When these spots are accompanied, or are about to be followed, by amaurosis, or general defect, or loss of vision, one or other of these spots, which appeared to be movable, becomes fixed, or one that was fixed, increases in size, and in density, so that it actually impedes vision, and goes on increasing until it obscures it altogether, the patient seeing gradually less around the dark central spot until he becomes blind.

The retina, in ordinary cases, retains a perfect sensibility for objects, and receives their impressions very distinctly, the muscæ not being in that respect inconvenient, nor obscuring vision in a manner similar to that which results from amaurosis or incipient cataract. When the muscæ are dependant upon functional derangement they frequently increase, and again diminish in number, and in such cases they are not always even permanent, but then they are manifestly dependant upon debility.

These phantoms have been attributed to an insensibility of some fibres of the optic nerve by Willis; to a varicose state of the vessels of the retina by Piteairn; to some defect in the aqueous humour, by La Hire and Le Roi; to inspissated portions of the lacrymal secretions adhering to the cornea in their passage over the eye, by Morgagni; and to some small portion of the humor Morgagni having acquired an increase of density, weight, and refractile power, by Demours. Mr. Maekenzie contends

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that muscæ volitantes cannot be formed by any opaque spots anterior to the retina; that such spots might produce an obscurity of vision by intercepting a certain number of rays of light exactly as specks on the cornea, deposition in the pupil, or incipient cataract do; but that no object within the eye can be brought to a focus on the retina or produce any other impression than a degree of dimness, far different from the defined character of muscæ. He is, therefore, of opinion that muscæ volitantes arise from a varicose state of the vessels of the retina or choroid coat. It may be, however, that they are caused by certain parts of the retina having become insensible to light, which may arise from various causes. In cases of fulness of blood in young and middle aged persons, about to end in inflammation of the brain or its membranes, and which more often occurs in children, objects of this kind are suddenly seen to float before the eyes, combined with other spectral illusious of a more definite character, and which are so obviously dependant on functional derangement of the brain as to demonstrate the cause. This complaint is almost immediately removed by bloodletting, followed by purgatives, rest, and a proper diet.

The true muscæ rarely occur as a consequence of congestion within the head, although this state may greatly add to the inconvenience resulting from them, and should be removed by bloodletting, either general or local. They occur frequently towards the end of pregnancy in weakly women, and during the period of lactation when too long continued by delicate females, and disappear under an invigorating treatment. the depressing cause being removed. They occur from the over use of the eyes, the abuse of spirituous liquors, &c., and very often, without any obvious cause, in middle-aged and elderly persons, who take little exercise and live well. In these cases, a well regulated diet, purgatives, and exercise, will do much; but they occur much more frequently in weakly persons leading sedentary lives, and over-working their eyes and themselves. In such cases, the excitatory causes being removed, or as much avoided as possible, gentle purgatives, and mild mercurials, followed by change of air, and tonics of various descriptions, answer best, although a cure is rarely effected. Among the tonics, the preparations of iron are, perhaps, the best; and amongst bitters, the East Indian charayita answers remarkably well; one to two drachms of the wood of the stem of the plant being infused in half a pint of boiling water, for daily use.

The only external remedies of service are occasional hot fomentations, alternating with stimulating embrocations applied to the forehead and temples, such as equal parts of the sp. rorismarini, and camphor, or combined with the liq. ammoniacæ, and the sp. æther. sulphurici, than which nothing of the kind more effectually relieves uneasy sensations about the eye dependant on irregular actions of particular parts.

Diagnosis between incipient and confirmed Amaurosis and Cataract.

Incipient constitutional amaurosis is usually preceded, or accompanied, by some of the symptoms experienced in muscæ volitantes, the spots

being however fixed, of a darker colour and permanent, whilst a general indistinctness of vision takes place, and increases, neither of which signs are so well marked in cataract. When the confusion, or indistinctness, is not always present, it increases, or sometimes diminishes. After a long continued application of the eye, light is sometimes found suddenly to fail for a short time, and the patient describes himself to have lost a part of the sight, so as to be only able to distinguish a portion, or a half, of an object, which states of derangement are, for the most part, accompanied by more or less pain in the forehead, temple, or eye. There can be little doubt of the retina, in these cases, being the part implicated, and more particularly if these defects have come on suddenly. If they should have increased so as to deprive the patient of his accustomed power of sight under ordinary circumstances, whilst no opacity can be perceived, the disease will be sufficiently marked. Vision, in incipient amaurosis, is not improved by the use of spectacles, or by the application of belladonna, which rather increases the defect, and the sufferer usually sees better under an increase of light, for instance, at noon-day, when the rays of light are brighter, or if he reads by candle-light, he throws a strong light upon the book, and even then brings it nearer to the eye. Incipient amaurosis is sometimes, however, accompanied by increase of sensibility of the external parts, and then a strong light distresses the patient, who can only see when it is carefully moderated. The flame of a bright lamp thus seen, is usually, more or less coloured or variegated, blue, yellow, or red, like the rays observable in a rainbow, or more broken and confused, whilst in incipient cataract, the flame of the lamp seems to be surrounded only by a whiter mist of milder light, and which appears to make objects larger than they really are. Flashes of light, or white and brilliant circles, or luminous spots, are equally indicative of amaurosis, more particularly if seen when the eye is closed during the night, and the patients, in whom these symptoms occur, usually suffer from headache and pain, especially in the forehead and over the eye, or from giddiness, symptoms which are not common accompaniments of incipient cataract.

In the very early stages of amaurosis, the external signs of derangement are scarcely observable, although, after a time, the different motions of the eye may not be perfectly executed, or some little awkwardness may be observed in them, or some vacancy in the general aspect of the eyes themselves. The cornea, in incipient amaurosis, is not altered from its natural state, although, at a later period of disease, it evidently loses somewhat of its perfect transparency and clearness: the iris is, from the first, sluggish in its movements, or the pupil may have even begun to be dilated, and, as the disease advances, it becomes more dilated, and the motions of the pupil are very limited, even if the pupil should not be fixed. In incipient cataract, the pupil is contracted and expanded under the influence or obstruction of light, as readily as in health. If belladonna be applied, its complete dilatation is rapidly effected; but this is much more slowly accomplished in incipient amaurosis, and the effect of belladonna remains for a much greater length of time, except in that form of amaurosis in which the actions of the iris are unaffected, although vision may be extinct. The cloudiness which may be observed in some long-continued cases of amaurosis, is always distant from the iris, and is, for the most part, dependant on a change in the vitreous humour, which allows the bottom of the eye to be seen through it, of a pale horn colour, giving to the whole somewhat of the same hue; and if in any way there is a real cloudy appearance, it will, on being examined sideways, assume a concave form. If an opaque spot should be observed in the lens, in such cases of amaurosis, it will be found to change its place as the positions of the eye and head are altered, being dependant on refraction of light, and not on any permanent opacity.

The catoptrical test, recommended by Sanson, and insisted upon by Mr. Mackenzie, is valuable in distinguishing incipient amaurosis from incipient cataract. The pupil, having been fully

dilated by atropine or belladonna, the patient should be seated with his back towards a moderate day-light; the surgeon standing before, and a little above him, with a lighted candle in his hand, burning with a bright, but not flickering or blazing, flame.

If such a lighted candle be moved at the distance of a few inches, say six or eight, before a healthy eye, three reflected images will be seen; two erect, and one inverted; the first erect one is from the surface of the cornea, the second from the anterior surface of the lens, and the third, or inverted one, from its posterior part, being also more sharp and defined than the erect one, which is reflected from its anterior surface, is much smaller, and seems placed before it. It requires care and habit to distinguish the inverted one immediately, and it follows the motions of the candle, being seen to the left when the candle is moved to the right, and *vice versa*.

In amaurosis, the three images can always be distinctly perceived. In incipient cataract, the inverted image is early obliterated, or rather its appearance is nearly prevented, and cannot at last be seen; and the deep erect one, which also becomes very early indistinct, declines at last into a mere general reflection, difficult of observation, but which is of no consequence, as the disease is otherwise distinctly marked.

Diagnosis between Glaucoma and Cataract.

Glaucoma is essentially an alteration of the component parts of the vitreous humour, with derangement of the structure of the hyaloid membrane, the retina and choroid coat: the vessels of the choroid coat are always in a varicose state, and the lens, which is not at first implicated, at last assumes a yellowish-green opaque colour, from which characters the disease is termed *glaucoma*: it is frequently mistaken for cataract by those who are unacquainted with these complaints. The opacity of the lens is often first perceived, constituting really a cataract; but it is the alteration of structure of the surrounding parts, amounting, sometimes, almost to disorganization, which constitutes the essential disease, renders any operation useless, and which, if it should be performed, causes great subsequent distress to the patient. It is, therefore, of importance, that an accurate distinction should be made between these two complaints.

This disease sometimes begins by inflammation of the choroid coat, and, perhaps, of the retina in an acute form; and in the course of eight and forty hours the distinctive signs of glaucoma are so well and characteristically marked, that an experienced surgeon is aware of the unhappy fate, which, in all probability, awaits his patient. I have three cases of this kind under my care at this moment. I did not see them until it was too late to render them the benefit I could have desired, and I am not sure I could have been of any real utility, unless I had seen them within the first six or eight hours after the commencement of the complaint. This will occupy our particular attention at a future period. In the more ordinary or chronic state of the disease, the eye has a general unhealthy appearance, arising from the cornea having lost some portion of its brilliancy, although it is in no part opaque. The sclerotica does not preserve its natural appearance, being, more or less, of a blueish or yellowish colour; whilst several tortuous dark red vessels may be observed, which penetrate the sclerotica at a distance not exceeding an eighth of an inch from the cornea; and when they are numerous they give rise to the appearance of a narrow white ring or circle situated between them and the cornea. They are varicose and enlarged vessels of the choroid coat, coming from within the eye, and extending themselves outwardly on the surface of the sclerotica. These darkened blueish tortuous vessels are characteristic or pathognomonic signs of the disease, and under whatever circumstances they appear, forbid an operation for cataract. The ball of the eye, if examined by the touch, will be found rather firmer or harder than natural. Another character is to be observed in the iris, the pupil of which is invariably dilated in an irregular manner, and is perfectly fixed or immoveable.

The disease cannot be mistaken, and no person suffering from these symptoms can distinguish light from darkness, whether the lens be opaque or not; its opacity may be said to be a mere consequence of the disease, not a distinguishing character of it, and its removal can do no good, whilst it may do much harm by giving rise to pain and inflammation, which at this period do not exist. When the disease is a consequence of the acute inflammation I have alluded to, the patient has been rendered blind under great pain in the first instance, and does not suffer much pain after the acute inflammation has subsided, for it is a fact, no less remarkable than true, that in whatever manner this disease may form, and it is more observable in cases that are slow in their progress, that the pain is coeval with the continuance of sight, and ceases when vision is extinguished, although it should continue for months—a consolation, however small it may be, for the unfortunate sufferer. The iris, in these cases, is very rarely attacked by inflammation, neither are its vessels varicose; it seems merely to partake of the withering influence of the disease without being its particular seat; if, naturally, of a blue colour, it becomes grey, if, formerly of a hazel, or dark colour, it changes to a dirty brown. It becomes thinner in its structure, and sometimes disappears, or forms merely an irregular ring around the opaque lens, to which even some remains of its pupillary edge may be attached. In cases which are slow in their progress, with respect to the opacity of the lens, the gradual change behind and in the part may be observed; the usual brilliant black seems dull, and deeply concave, enabling the distance to the posterior part of the eye to be more correctly estimated, so that the thickness of the lens, anterior to it, may be accounted for. The concave appearance becomes more of a yellowish colour, and the vitreous humor more turbid, and as the disease advances, the space between it and the lens becomes less, until at last it partakes, more or less, of that opacity which causes it, in these cases, to be mistaken for cataract. In some instances, this opacity never exceeds the yellowish-green colour of the posterior parts, and in others, but more rarely, the opacity of the lens is so free from any glaucomatous tint, and possesses so perfectly the character of a striated opaque lens, that if the appearance of it alone were to guide the judgment of the surgeon, the disease would be pronounced to be "cataract." The external characters I have described ought always to prevent such an error, but even if they should be mistaken, the internal symptoms, which accompanied the formation of the disease, are so well marked, that they ought to prevent it. The patient cannot distinguish between light and darkness; he knows not night from day, and the loss took place under the ordinary symptoms of amaurosis, with flashes of light of various colours in the eye; and, above all, the progress of the disease was marked by pain of a severe, and often excruciating, nature, affecting not only the eye periodically, but the eyebrow, the forehead, and the side of the head, until sight was lost.

The catoptrical experiments recommended by Sanson and Mackenzie, with a lighted candle, already referred to, appear to me to be useless in the diagnosis of glaucoma, whether with or without disease of the lens, as the complaint is essentially indicated by the other and more plainly discernible symptoms which when once known, cannot be mistaken.

The Causes of Cataract.—Idiopathic or Constitutional.

The causes of cataract are enveloped in considerable obscurity which is not likely to be dissipated until the nature and formation of the lens shall be better understood. Among the occasional causes of constitutional cataract, age seems to be the most prominent, few except infants being affected by it, before 40 years of age, although many suffer at a later period of life; yet as very many persons live to extreme old age, free from cataract, there must be some more immediate causes superadded than those which can be presumed to depend on defective circulation or deficient nutrition. It is supposed by Beer, that it may be a low insidious inflammation or action affecting the lens and its capsule, and he lays great stress on the misuse of

the eye, such as the continual employment of it on minute objects, &c. but I am disposed to consider that all such causes tend to give rise to amaurosis rather than to cataract. When the capsule of the lens suffers from common inflammation, it is never a pure disease of that part alone, and does not give rise to what may be called an idiopathie, but to a spurious or complicated case, in which an opacity of the capsule and lens form parts of the complaint, although, perhaps, they are not the most important obstacle to vision.

Syphilitic, gouty, or other unhealthy inflammations are capable of giving rise to similar cataracts, formed precisely in the same, but in a more marked or decided manner. The capsule is inflamed; vessels may be distinguished on its surface when the eye is examined with a lens having a short focus; the patient being so placed with respect to the light, that the parts within the pupil can be well illuminated, and not shaded by the glass, or head of the examiner; and as the sensibility to light is usually diminished, the patient commonly bears this examination in a strong light and with a dilated pupil, without much inconvenience. The capsule soon becomes turbid and at last opaque, and is often covered with a deposition of lymph, so as to render it perfectly white or grey, or even of a brown colour. In many instances all these appearances may be completely removed, and the part restored to its natural and diaphanous state, shewing that the lens had not been affected. If the lens should, however, have been implicated, then the opacity is permanent, and the lens often adheres to the capsule, which is a very unusual circumstance in true cataract. If the inflammation should have been less violent, although more permanent, the capsule remains partly or entirely opaque, yet the lens continues transparent, as has often been proved by operation; a circumstance which I believe never occurs in the true capsular cataract of adults, the lens always partaking of the disease. When the inflammation is less permanent, although perhaps equally violent, an opaque spot, or mark, of greater or less extent, will often remain during life on the capsule without the slightest change; a circumstance equally inapplicable to true capsular opacity. In the *cataracta choroidea* of Richter, the posterior part of the iris often adheres so completely to the capsule of the lens, that a space as large only as the size of a small pin's head, remains transparent in the centre, yet continues so for life, which none will say it is probable it would do, or even for one year, if the opacity of the rest of the capsule had arisen from that inflammation or cause which usually gives rise to cataract.

The common or specific inflammations of the iris, or ciliary processes, which are active in their nature, and quickly cause a deposition of lymph or fibrine, are the most readily arrested, and their effects removed under proper treatment, so that the capsule may be restored to its original transparency; whilst those which are slow in their progress, and deposit a small quantity of fibrine, such as the arthritic, or gouty inflammations, are very difficult of cure, and usually leave some defect. If the disease be neglected, it terminates in adhesion of the iris, with a pupil nearly closed, with capsular and sometimes lenticular cataract. It may even end in a disorganization which leaves no hope of relief from an operation.

Congenital cataracts are usually dependent on defective formation, as will be hereafter explained. It is said that they occur as a consequence of a rupture of the capsule, during the severe spasms by which the eyes are affected, in the convulsions to which children are liable; but no reliance can be placed on this opinion, nor on that which supposes that these cataracts are not always congenital, but occur immediately after birth, from the effect of too strong a light falling directly on the eyes of the infant.

Traumatic cataracts, as they are termed, or those which arise from injuries, are of frequent occurrence, and always take place when the injury or blow causes a rupture of the capsule, or the wound penetrates its substance. When the blow is so severe as to dislocate the lens, it falls

forward into the anterior chamber of the aqueous humour, and shortly becomes opaque, from exposure to the aqueous humour, or from its loss of vitality. I have seen some few cases, in which the lens has remained transparent in the aqueous humour for several days, in one as long as a month. If the capsule is only punctured, the lens then becomes more slowly opaque and white, although it remains *in situ*, and if the rupture or puncture be of considerable size, the lens may be gradually removed under the influence of the aqueous humour, and the patient restored to a fair degree of sight; although it seldom happens that the capsule is absorbed in a similar manner, some portions of it usually remaining to impede vision, until removed by operation. If the wound in the capsule should be small, or even close up, the lens may or may not be entirely removed; but the capsule will assume an irregular, thick, white appearance, through which the shadows only of objects can be perceived. J. F.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Before speaking of the *tænia*, I may mention the *trichocephalus dispar*, which is remarkable for the disproportion of the head to the rest of the body. The short end was supposed, at one time, to be the tail; hence, it was called *trichuris*. It is now ascertained, however, to be the head. It is not supposed to originate any peculiar symptoms, but is found in many cases where patients have disease of the abdomen. It is much longer than the common *ascaris*, more slender than the *ascaris lumbricoides*, and quite different to, and much smaller in size than, the *tape-worm*. Now, let us take up the *tape-worm*, the *tænia solium* and the *tænia lata*. The *tænia solium* consists of a jointed body, terminating in a small head, furnished with four suckers. The length varies, but some are recorded as of extraordinary dimensions. Pliny describes one as 300 cubits long, and a German writer records one that measured 300 feet. There are many accounts of these worms, more curious than authenticated. It is related that a man partially voided a *tape-worm* in the privy, and that its head stuck there, he walking into the house with the other part attached to his body, and thus reaching all over the garden. It is perfectly credible, however, that one may reach from the pylorus to the anus, extending along the whole length of the intestinal canal, and, under such circumstances, the *tænia* has been known to put its head out of the anus, and then draw it back again. The largest real specimen, contained in any museum, is one shown at Vienna, which measures 24 feet. There is a variety of *tænia* not common in this country—the *tænia lata*: it is broader and jointed, and is also called the *bothriocephalus*, or broad *tape-worm*. It is met with in Switzerland, Russia, Poland, and France, but very rarely in this country. The symptoms that attend the presence of *tænia*, are supposed to be: colicky pains in the abdomen, and an aching sensation, felt especially towards the flanks; itching at the anus, as in the case of *ascarides*; picking of the nose; and a feeling of gnawing and uneasiness, which is removed after eating; the appetite is deranged, as in other cases of worms. The symptoms, which are associated with *tænia*, have no peculiar characters;—dilatation of the pupil, imperfect vision, a sort of giddiness, lassitude, various forms of catalepsy, and palpitation, have been associated with these worms. Such cases are not very common. Worms appear to be promoted by a feeble state of the digestive organs, and of the whole frame; unwholesome food seems to be a promoting cause, and also excess of vegetable food. The natives of India, who feed exclusively on rice, appear to be much infested with worms. Damp and unhealthy localities promote them. This is the case in Holland and Switzerland; young age and scrofulous habits appear to be

favourable to them; but they also occur among adults. They are bred by ova, which are deposited in various parts of the system; but where they come from, is a mystery. Some of them are found in the lower animals. There is a remarkable fact about them: they are killed by some diseases affecting the human body: typhoid fevers are very apt to prove fatal to worms. Some have considered fevers to be created by them. The habitual use of stimulating liquors is unfavourable to them. This is one reason why they are more common in women than in men. Sometimes, there is an hereditary disposition to the occurrence of them in families.

The treatment of worms, generally, consists in attempts to dislodge them by purgatives. This indication is to be followed in all cases, in the first instance, even where worms are only suspected, or where the different symptoms that I have mentioned occur; because, in fact, if worms are not there, there is a sort of disorder of the intestinal canal, which will be benefitted by purgatives. Therefore, where these symptoms exist, it is useful to give calomel and jalap, or calomel and colocynth, which tend to work them off. Simple purgatives are useful to dislodge the round worms, but worms of the other kinds take such strong hold, that they require to be killed before they can be dislodged. Nothing does this so effectually as oil of turpentine. This is the great vermifuge or worm poison. It should be given in doses of two drachms, followed by castor oil. In the case of *ascarides*, injections are more suitable. These attempts sometimes bring away merely individual joints, but the cure is not effected until the head is dislodged. The joints are propagated indefinitely, and, therefore, it is necessary to remove the head and all the joints. The head may be digested or decomposed, but that cannot always be indicated. The dose requires to be repeated until the whole seems to have come away. Under these circumstances, should the turpentine produce irritation of the rectum and the urinary organs, instead of being given daily, it should be administered every other day. Strong doses irritate the urinary organs much less than small doses. In the treatment of *ascarides*, it is requisite to repeat the dose again and again, because these worms nestle in such numbers that gentle applications of turpentine will not reach them. It is necessary, sometimes, even to scoop them out with a small wooden spoon or scoop. Turpentine injections for the rectum should be moderate in quantity. In the intervals, it is sufficient to give mild aperients and diluents, to carry off the effect of any irritation produced by the influence of these strong remedies. In weakly subjects, it is proper to give tonics: iron, in some of its forms,—the carbonate, tartrate or sulphate of iron. There is frequently a great quantity of mucus discharged from the intestines, in connection with worms,—and, in this case, it is found to be of great advantage to give a compound of tincture of benzoin with the iron. Another remedy, too, very powerful in the case of worms, is pomegranate bark, given three times a day, in doses of half a drachm; or else in the form of a decoction of half an ounce of bark to one pint of water, and of this two ounces should be given every half hour, until six doses are taken. This acts, not as a purgative, but as a peculiar poison to the worm. It is not a poison to the human frame, nor does it produce any remarkable disturbance. After the exhibition of these six doses, a good dose of castor oil should be given to sweep away the worms. Where these insects show a great tendency to reproduction, we should adopt measures to obviate this. The diet should be simple, with a proper proportion of animal food, avoiding crude vegetables, and taking a sufficient quantity of salt. With the animal kingdom—horses particularly,—salt is a very good remedy, and is itself used as a vermifuge.

We now come to diseases of the *peritonæum*.

The peritoneal membrane, or sac, is a serous membrane, lining to a great extent the abdominal viscera, as well as the walls of the abdomen. We shall, first, consider the inflammation of this membrane. What we have said, with regard to inflammation of the pleura, will serve as a

sort of history of inflammation of the peritonæum; it is accompanied by the effusion of serum and lymph, and this, becoming organised, may lead to adhesion, in different parts, of the surfaces of this membrane. There are three things, here, proper to notice; for example, when any of the chief viscera of the abdomen, particularly the intestines, become intensely inflamed, the peritonæum can scarcely escape. It becomes, therefore, involved at the corresponding part, more especially so, perhaps, than in inflammations which take place in the pulmonary structure. In the slighter cases, the tenderness is confined to a part which we must consider as the point of the inflammation. In deep-seated inflammation, the functions of the viscus, in connection with the part, are apt to be deranged. The peritonæum is apt to be affected in cases of disease of the uterus, and in those of the liver, and the function of this latter organ is especially liable to be affected by it. Sometimes, when the disease arises from chill, there is general tenderness and soreness over the surface of the abdomen, and, after peritonitis has existed for some time in the abdomen, it will fix itself on one side,—the left or the right side. This will come under the head of partial peritonitis. There are many cases in which the inflammation is partial and not general.

The symptoms of peritonitis are, in the first place, rigors, general uneasiness, lassitude, and the pulse frequent and small. These symptoms are followed by heat of skin, headache, pulse hard, wiry, and more frequent; and then we have more or less pain in the abdomen, coming on with general heat, particularly of the abdomen, and tenderness on pressure. Sometimes, the pain is trifling at first, and fever comes on afterwards; and the pain may exhibit considerable variations in this respect. Sometimes, it is a sharp pricking pain, referred to some spot in particular, about the umbilicus, or in the hypochondriac or the iliac regions, being increased at times, apparently from the passing of the contents of the intestines. The fæces, in passing, bring the peritonæum into a state of tension, which produces pain. This pain will vary very much at different times. The symptom, most constantly met with, is tenderness of the abdomen. That is present whether there is pain or not, as a general rule. Owing to this extreme tenderness, the patient lies on his back, with the knees drawn up to relax the muscles, and to prevent the tightening of the abdomen,—not daring to stir or move from side to side, for fear of increasing the pain by any action of the muscles on the tender parts. Any movement of the muscles increases the pain, and such efforts as are induced, in making water or going to stool, often increase it greatly. Cough, or even breathing, will increase it, especially if the breathing be at all impeded. The tenderness, although a very constant symptom, varies much in degree. Sometimes it is extreme, and the patient cannot bear the weight of the bed-clothes. At other times, the patient, while in a quiet state, can bear great pressure, especially if equally performed, but he cannot tolerate the pressure, even of the point of the finger, when made during a full inspiration, where, in addition to the force used on the abdomen, there is a pressure given by the descent of the diaphragm. Another mode, by which the sensibility of the peritonæum may be tested, is by lateral pressure. This often affects the contents of the abdomen more evidently, displacing the viscera, and putting them more on the stretch. As the disease advances, we meet with some of the usual products of inflammation: serum is thrown out, and fluctuation will be perceptible in some parts. This, sometimes, occurs in a manner very difficult to be distinguished. It may not be perceptible at all in the anterior part of the abdomen, while the patient is lying down, but it is then to be sought for in the flanks. It scarcely can be called fluctuation in these cases. The amount of liquid is not sufficient to produce this; there is, however, a dulness on percussion in these regions. The anterior part of the abdomen is, at the same time, tympanitic; whether you strike hard or gently, the sound elicited is tympanitic. Thus, if there be any liquid in the

flank, you will, by striking the finger on it, get a very dull sound; whereas, by percussing the abdomen, you get a tympanitic sound. This is a valuable means of detecting a very slight amount of liquid in the abdomen. Sometimes, the countenance will display uneasiness and anxiety; with great depression of spirits, there is a troublesome sensation of nausea, but unaccompanied by vomiting. This occurs where the inflammation is chiefly in the upper part of the abdomen, near to the stomach, but is not always present. There is thirst, and the bowels are generally confined, but not obstinately so, as in intense enteritis. The tongue usually exhibits a white fur, or presents a pinkish appearance, apparently arising from the redness of the tongue beneath this white coat. The urine is high coloured, and scanty. The symptoms, generally connected with peritonitis, although inflammatory in the first instance, are soon accompanied by prostration; the pulse is rapid and small, the heat in the abdomen continuous, and the tongue generally dry. As the disease goes on, symptoms of collapse occur, being attended with syncope, and other signs of sinking. Sometimes, if the fever increases, the patient becomes delirious, and the symptoms are aggravated more particularly at night. In the advanced stage of the disease, the abdomen becomes tense and tympanitic. Sometimes, gastric irritation may occur with vomiting. The pupils are contracted, the countenance is expressive of extreme prostration and anxiety, cold sweats ensue, and death may occur at a period, varying from two days, as in cases of extreme severity, to two weeks or more. Sometimes, peritonitis may go on for 20 days before the fatal result. That happens in the chronic form. Attacks of acute peritonitis are brought on by suppression of the various discharges from the bowels, the kidneys, and the uterus, &c.; also, by extensive inflammation from wounds, either of the abdominal walls, or of the viscera. Ulceration, or perforation, of the intestines, or surgical operations, as for hernia, and so forth, will produce it. Excessive distention, too, becomes a cause, as in the case of ascites or tumours. Blows on the abdomen may also be enumerated. Puerperal peritonitis, in women, is a species of erysipelatous inflammation. In this case, the fever is more of a typhoid character. There are some points to be noticed in the symptoms of peritonitis, arising from perforations. I think I have already sketched out the manner in which the patient is affected in cases of perforation: violent pain in the abdomen, generally accompanied by sickness and vomiting, and the pain so acute as to bend the patient double; the pulse is very frequent and thready, and the countenance becomes extremely anxious and oppressed. We all know the peculiar aspect of the countenance—the heavy look, in congestive fevers: and when the patient has been all of a sudden seized with violent, cutting, pains in the abdomen, how the character of the countenance is changed from this pallid, heavy, look. The eyes, half closed, become open and staring, straining anxiously for relief; the breath becomes hurried, and, altogether, an expression of extreme distress and agony is produced. These are the general characters of perforation of the peritonæum. With respect to the morbid anatomy of peritonitis, in violent cases, more or less liquid is generally effused, containing portions of lymph in shreds and patches; sometimes, the lymph is spread over the whole surface, and, at other times, it exhibits itself in mere points; the latter is more usual in the chronic form. The redness is not very distinct; there are striated patches of redness, as in inflammation of the serous membranes generally, sometimes punctiform, more particularly in the chronic state.

The diagnosis of peritonitis is to be established: in the first place, from colic, by the continuance of the pain and the tenderness of the abdomen, as well as the presence of fever, and heat of the surface. The heat and presence of the tenderness, in peritonitis, are the most constant signs. From enteritis, we distinguish it, by the absence of functional derangement of any one organ in particular, and by the non-existence of constipation. There is no violent vomiting, as indicative of gastritis; no dysentery, as in inflammation of the

lower intestine; none of the symptoms indicating disease of the liver or of the kidneys, and so forth. It is a general inflammation, and the symptoms are those of a general disturbance of the system. In a few instances, hysteria seems to resemble peritonitis in a remarkable degree; the latter is to be distinguished, chiefly, by the permanent heat, pain and tenderness, which are fixed in one part, not moving from spot to spot; and, likewise, by the absence of hysterical symptoms. In hysterical affections, you find the pain more diffused than in peritonitis. You must remember, also, there may be peritonitis in hysterical subjects, in a slight form. Sometimes, the products of the disease will give additional indications. The presence of serum in the abdomen, together with pain, is a strong confirmation of the existence of peritoneal inflammation; likewise, it is known by the cracking sound of the abdomen, caused by the motions of the liver and of the intestines, when covered with lymph; Drs. Bright and Beattie speak of this sign. The descent of the diaphragm, by pushing down the liver, will cause this cracking sound.

The prognosis of peritonitis is very serious: it is a very dangerous disease, when it occupies a large extent of the peritonæum; and we must be guided in our judgment, not only by the local tenderness, but, also, by the constitutional state, and the character of the pains. It is a disease that can scarcely be combated, unless taken early. The prognosis is favourable, in proportion as the patient can bear the treatment.

The treatment is to be chiefly antiphlogistic.—In the early stage, free blood-letting should be employed, if the pulse is hard, until syncope is induced. After this, the local inflammation, that remains, must be reduced by free leeching, followed by large poultices, and these may be kept warm by being covered with oiled-silk. Fomentations are very useful, but sometimes they are very troublesome to the patient. Calomel and opium should be given, every two or three hours, until the gums are affected. At a very early stage, it is better to give one dose of some mild aperient: calomel with opium, or blue pill, followed by a dose of castor-oil. The quantity of opium may be increased, if the pain is severe. Where the pulse is feeble from the beginning, as is sometimes the case in puerperal, or erysipelatous, peritonitis, blood-letting should be avoided. It would destroy the patient, to draw blood at the very outset. In these cases, opium seems to be the chief remedy. The great object is, to keep the parts as quiet as possible. In case of peritonitis, connected with perforation, the disease is generally fatal; but if the peristaltic action can be kept quite quiet, until adhesion takes place, and the effusion of lymph can be stopped, the patient may do well. Dr. Stokes gives the case of a patient who recovered under such circumstances. It is of the greatest consequence, after peritonitis has been removed, to keep the bowels in a gently open state, and especially to avoid motion too soon. The patient should not get up in bed too quickly, as the exertion of the muscles of the trunk does violence to the recently-inflamed parts, and may re-produce the inflammation. The patient should be kept in bed, in a horizontal posture, for some time after the removal of the symptoms. Chronic peritonitis may proceed from the acute disease, or it may begin insidiously. The symptoms of the chronic disease are: continued frequency of the pulse; fever, of a subdued character, with which more or less pain and uneasiness in the abdomen are combined. A pricking pain, acute in some parts, is felt from time to time, with a degree of tenderness and soreness. When the disease begins in the chronic form, it is much more insidious; it may steal on gradually without appearing to exist, and the first sign is an enlargement of the abdomen, with liquid effusion. There is, sometimes, vomiting and purging, or there may be constipation, attended with symptoms of dyspepsia. The pain and uneasiness in the abdomen are not so soon developed in the chronic form, but there is rather an inability to bear anything tight on the abdomen.—As the disease goes on, the abdomen becomes enlarged, not only by the effusions I have mentioned, but by

serous congestions. This takes place whilst other parts become emaciated. The limbs become smaller, while the belly gets larger. There may be constipation, or there may be the opposite state; and the fæces themselves are generally disordered in character, being either too light or too dark. The tongue, in this disease, is usually covered with a fur of a purplish-brown colour, sometimes glazed and red; the lips cracked, and the skin pale, sallow, and wrinkled. On examining the abdomen, you will never fail to find some physical signs of disease. The walls of the abdomen are loose, but the viscera may be felt underneath, in a hard and knotty state, and in irregular masses: some parts being more resisting than natural. Generally speaking, there is some tenderness in particular parts, and the sound on percussion is very irregular, some parts being tympanitic, and others having a degree of dullness. If there is liquid effusion, it may be difficult to distinguish it from pure ascites or dropsy, which we shall have hereafter to consider. But, the liquid effusion, accompanying peritonitis, is usually attended by some irregularity in the swelling, a great amount of tenderness in the abdomen, and the absence of the signs and causes of ascites. There is, usually, no disease of the liver, with the effusion arising from peritonitis: no disease of the heart; yet there is progressive emaciation; there is fever; and, at last, anasarca may occur, and the patient become generally dropsical. This is not an uncommon result of peritonitis. The nutritive functions become deranged, with the altered state of the viscera of the abdomen.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

IV.

After the anterior pyramids, the most interesting organs of the bulb, are the corpora olivaria; they are more developed in man than in any animal. They are small in the mammals and disappear in the other classes. In man, therefore, they have a special purpose, corresponding to some of the faculties peculiar to him. Duges thinks, from their having a central nucleus of grey substance, that they govern the voice, the expression of ideas to which the hearing had given form, in the centres of the cerebellum, which he regards as the special organs of hearing. The resemblance of these two modes of expression, especially in man, supports this conjecture, and explains the ready repetition of sounds heard, and is further countenanced by the anatomical fact that the nerves of the larynx, of the tongue, and pharynx, arise from the fasciculi of the olivaria, as well as the facial. It is probable, therefore, that the alterations of the olivaria exercise great influence on the production of dumbness, stuttering, and all the modifications of voice and speech. This is a consideration on which we should reflect seriously, in the surgical treatment of those diseases, before resorting, in many cases at least, to the section of muscles, which are but secondary agents.

Sir C. Bell thinks that they govern respiration, from the pneumogastric nerve arising from them; the nerve arises not from the olivaria, but from the sulcus that divides it from the fasciculi of the cerebellum.

From some experiments of Magendie (that perhaps require repetition) it would seem that the lesion of the lateral fasciculi of the bulb gave rise in an animal to a peculiar phenomenon, that of rolling round on itself, as in the act of going to sleep. It would be desirable in this experiment to

ascertain the state of the vocal organs, or to see if vocalization was still possible.

The bulb is the most vital point of the nervous system. To account for this pre-eminence, we have only to remember the principal nerves to which it gives origin; 1^o the hypoglossal, or motory nerve of the tongue, the organ of pronunciation; the ninth pair of the antients and twelfth of the moderns; 2^o the spinal accessory, the pneumo-gastric, and glosso-pharyngeal, forming together the eighth pair; the eleventh, tenth, and ninth, of the moderns. Their different points of origin account for their functions, which are at once motory, sensitive, and organic, as shewn in the influence they exercise on deglutition, elocution, respiration, and digestion; 3^o the auditory nerve, forming with the facial, the seventh pair; 4^o the facial or sixth pair, a nerve of respiration according to Bell, but peculiarly a nerve of expression; 5^o the external oculo-motor, and the common motor of the eye; 6^o the trigeminal, or fifth pair. The first portion is motory, and is distributed to the temporal and buccinator muscles; the second sensitive, and imparts to the eyes, nostrils, and face, tactile sensibility, and to the tongue a part of its aptitude for tasting.

The exquisite sensibility of the bulb had been long since shewn by Legallois; any lesion near its neck produces instant death. In a word, it is in this very limited spot of the cerebro-spinal axis, that the seat of life seems to be placed in man, as in the superior animals.

V.

The annular protuberance (pons Varolii) forms a ring round the prolongation of the bulb; it is highly fibrous in its structure and very large in man. The fibres are arranged transversely and longitudinally; the former constitute the crura or peduncles of the cerebellum; the latter those of the cerebrum; the former sensitive; the latter motory, and giving origin in their course to nerves of movement, viz.: the hypoglossal, the external oculo-motor, the common oculo-motor, and the muscular portion of the fifth pair.

In its general functions, the protuberance is destined as a means of union between the great nervous centres—a great commissure between the encephalon and cerebellum, as the corpus callosum is between the two cerebral hemispheres. The special function of the commissures is to complete the unity of the intellectual operations, as well as that of sight, hearing &c.

This unity of action, this want of equilibrium, and harmony, prevails also in the motory functions of these parts. Thus if we divide one of the peduncles of the cerebellum, the animal turns rapidly round, and the rapidity of this motion is in proportion to the nearness of the section of the peduncle to its communication with the pons Varolii. This movement of rotation ceases as soon as the peduncle of the opposite side is divided at the same level. In speaking of this experiment, Magendie observes: "it would seem that two motory forces exist in the encephalon, that balance each other by passing through the circle, formed by the pons Varolii, and the cerebellum. This balance once overthrown, these forces act singly, according to the direction of the fibres they represent."

Every important lesion of a lobe of the cerebellum, optic tract, corpus striatum, or of the brain, produces paralysis of the opposite side; lesions of the protuberance, or of the corpus callosum, alone, are productive of general effects, especially when they occur on the median line.

In the interior of the protuberance, is found the black substance, the use of which is unknown. It is perfectly insensible, while, on the other hand, the sensibility of the surface is great.

VI.

Just above the annular protuberance, are the tubercula quadrigemina. They are small in man, and in the mammals generally. In fish they are equal, in their size, the cerebral lobes, and have a ventricle. The tubercula bear a constant relation to the perfection of the sight, and the size of the optic nerve, to which they give origin. They are now properly designated as the optic lobes. Magendie has observed, that their lesion

caused the animal to turn round in the same way as a lesion of the corpora olivaria. It would thus appear, that there exists between these organs an anatomical relation, quite in agreement with the physiological function of locomotion; to produce the effect, however, the section must penetrate somewhat deeply, as the surface is only sensitive. It is easy to conceive, how blindness results from a lesion of the optic lobes, and why the loss of sight is manifested on the side opposite to that of the wound. Desmoulins has observed, in the pigeon, the atrophy of these lobes, and of the optic nerve itself, to follow the loss of the eye.

VII.

It is only in the mammals, that the cerebellum begins to shew, in addition to its central lobes, two lateral ones, and then only do the annular protuberance, and olivary bodies, make their appearance, their presence indicating a fresh complication of the functions. From the connexion of the cerebellum with the spinal marrow, through the posterior pyramids, it is manifestly destined for sensibility. It may also be considered as serving gustation, and hearing, by its connexion with the glosso-pharyngeal, and the fifth pair, and with the auditory nerve itself. It may also be regarded as assisting in the functions of pulmonary respiration and gastric digestion, through its near connexion with the origin of the pneumogastric nerve. The cerebellum, thus connected with the phenomena of respiration, digestion, gustation, facial touch and hearing, concurs as an instinctive agent in the acts relative to the support of life, nutrition, the appetites, and respiration. As regards generation, its influence is not direct, as Gall had imagined; the exciting faculty of the organs of generation resides in the superior part of the spinal marrow.

Considered as an organ of movement, the cerebellum exerts an influence on motility, which, though very remarkable in itself, has been variously explained by experimenters. Rolando thinks that this organ is an electro-motor, entirely destined for muscular action, which may be completely destroyed by its ablation. Flourens thinks that it merely regulates the movements, and that its lesions, or ablation, only affect their regularity and force. Magendie found, when the cerebellum was removed, that the animal could only move backwards, and, hence, that the motory power forwards depended upon it. Experiments prove that the cerebellum is a sensitive, as well as a motory, organ, and that it exercises a powerful action on locomotion.

But besides these general functions, it fulfils other special ones of great importance. Throughout the entire animal scale, there exists a constant ratio of development between the lateral lobes of the cerebellum, and the auditory nerve; and Treviranus thinks that these lobes are specially destined for the elaboration of the sensation of hearing. The middle lobe has, doubtless, also its peculiar functions; it bears, in development, a relation to that of the trigeminal, or fifth pair. Duges is of opinion, on the authority of comparative physiology, that all instinctive industries are referable to this lobe. Thus, the beaver, and other rodents, so remarkable for their industrial habits, have this lobe largely developed; the convolutions of the cerebellum are large; but there are none in the cerebrum. The same observation applies to birds that build nests, and that imitate the voice; this curious fact merits verification.

That the lateral lobes of the cerebellum should be appropriated to hearing, and to certain intellectual phenomena connected with this sense, is a natural coincidence, particularly in the human species; but this operation of the intelligence must be limited, and requires to be perfected in the brain. Accordingly, the cerebellum, compared with reference to its size to the brain, is small, in proportion as the intelligence prevails over the instinct in the animal. The cerebellum belongs more to the instinct than to the acts of the intellect, properly so called. Tiedemann observed, that the convolutions of the cerebellum were developed before those of the brain; and this is perfectly in accordance with the development of the faculties in the infant. Idiots often

present an enormous development of the cerebellum, while the brain itself is evidently atrophied. Gall may be quite right in attributing, to this development, their propensity to onanism, without in any way invalidating the action of the cervical region of the spinal marrow, in the production of this phenomenon.* In these instances, we also find fresh proof of the auditive properties of the cerebellum; nothing, in fact, being more common, than to find in imbeciles a very decided taste for music and singing, to such a degree as, frequently, to excite astonishment.

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D.,

Surgeon-Lithotritist to the Royal Free Hospital.

Calculous cases, however simple they may be in reference to the operation by crushing, may present considerable variety as regards the circumstances under which they occur, and the symptoms. more or less intense, to which the presence of the stone gives rise. In some instances, the individual sensibility is totally unexcited, and the utmost the patient suffers may be described as mere uneasiness, or, at the most, a sense of heat or scalding; in others, the sensibility is exalted from causes apparently slight, and the symptoms run high. This is particularly remarkable, when the stone, being small, and favoured by the conformation of the neck of the bladder, is constantly engaging itself in the orifice. All the surrounding parts, under such circumstances, are kept in a state of fret and erethism, which simulate, to a certain extent, the symptoms of cystitis.

Some time since, I was called to see a gentleman, of the name of Harrop, residing at the Paddington canal. He was of thin, nervous, constitution, and upwards of 60. He had been in the habit of passing red sand for several years, and attributed this circumstance to sedentary, counting-house, occupations. He seemed in very great distress, and had been suffering severely for several days. He complained of dreadful pain in the neck of the bladder, urethra, and loins. The urine was scanty, high-coloured, and deposited a greenish mucus. His calls to void it were almost incessant, and, from this cause, the symptoms were becoming more and more exasperated. Though excessively weary, he could have no sleep; he had fever, thirst, loss of appetite, dry tongue, and hot skin. This state of suffering and excitement having already lasted three days, the necessity of relief was urgent. He had had occasional attacks of this kind before, but none that lasted so long. On introducing a catheter, I found a small calculus lodged in the prostate. This showed the nature of the case. I passed in a small lithotrite, and after dislodging and returning the calculus into the bladder, there seized it, and, after crushing, extracted the greatest portion of it in the instrument. I had him placed in a warm bath, and, when returned to bed, 12 leeches were applied over the perineum. He was ordered a dose of castor oil, and, after its operation, he had the copaiba and potass mixture. He was feverish during the night, and, towards morning, perspired

* M. Pinel, in speaking of the functions of the superior portion of the bulb, supposes, that the excitatory power, affecting the generative organs, belongs to it. He does not mean, however, to imply, that Gall was wrong in attributing to the cerebellum the chief agency, or a participation, at least, in the exercise of this function. Gall's original ideas were antecedent to the experiments of modern physiologists; and, setting apart the superabundant confirmation they have received from the observations of phrenologists and pathologists, our author himself gives the strongest reason for the admission of Gall's ideas, when he says that, in the human being, the cerebellum acquires, not only new portions, but a maximum of development. In fact, it is only in the human being, that the season of love is unlimited; the disposition to reproduction is constant in this species only, and this is quite in accordance with the development of the cerebellum.—TRANSLATOR

profusely. The urine continued, for a day or two, high coloured, and the pulse was at 110, with hot skin, and dry tongue. Another dose of castor oil was ordered, and the further treatment consisted in aqua acetatis ammoniæ, diluents, the warm hip-bath, and occasional effervescing draughts. On the fourth day, the fever had entirely fallen, after which, his convalescence was rapid.

In the following case, the patient had suffered a longer time from the same re-union of circumstances. This patient was a young man, employed in a foundry in Northampton. He was pale, thin, and apparently a prey to great suffering; he still laboured at his trade, with interruptions, only, when the attacks of the stone were severe. He was in the habit of being exposed to high temperatures at the foundry, and had had chills and rigors pretty frequently. The existence of the stone had been ascertained, eleven months previously. He was first presented to me in the board room of the Northampton Infirmary, on an occasion when I delivered a lecture on the subject of lithotritry, and performed the operation on three other patients, before a large assembly of the governors of that admirable institution, and of the medical practitioners convened, by invitation, from the surrounding districts. This young man was the third in turn to place himself on the operating table. The preliminary steps of the operation having been gone through, a small instrument was introduced; the stone was felt, and no sooner felt than laid hold of, and crushed. The faces of both the blades of the instrument, employed, being hollowed out, when closed they formed a box, which was completely filled with the debris of this small stone. The whole manœuvre did not occupy more than half a minute. Some merriment was excited by one of the gentlemen present asking the patient his name, to which he replied "Jack Robinson," when it was remarked that the old association of the name, and the celerity of the operation just performed, went well together.

These small calculi, which obey every egressive current of the urine, but which are, however, too large to pass through the urethra, are productive of great distress, by the chafing they produce, by forced and frequent contact with its internal orifice; and the phenomena are the same in the other sex, notwithstanding the more favourable anatomical disposition of the parts for the expulsion of a foreign body. The following will serve as an example.

A young lady, of the age of seventeen, was taken home from school, suffering from what was termed weakness in the urinary organs. To the want of power to retain the water, pain was soon added in voiding it; and she suffered so much at night, as often to be wholly deprived of sleep, and to prevent another young lady, her cousin, whose chamber she shared, from sleeping also. This was soon made known to an elderly female relation, who immediately communicated with the family surgeon, Mr. Huntly, of Staines, on the subject. After some difficulty, on the part of the patient, an examination was permitted, in which he experienced, on withdrawing the sound, a prolonged gritty feel. He requested my attendance in the case. The young person was dismayed to hear, that she could not be cured without the extraction of a foreign body, and she anxiously entreated, although her general health had been sensibly affected by the continual irritation she was enduring, to be allowed to decline an operation. Her relations, however, insisted on her assenting, assuring her that the pain would be trifling. But, as it turned out, that she dreaded the pain less than a second exposure, we were obliged to conduct the steps of the operation without the assistance of sight. This was but a trivial addition to the difficulty of the manœuvre. A rough, soft, concretion was discovered, and, being crushed, was, in part, withdrawn in the instrument, and the remaining fragments were quickly expelled. This put an end to all her symptoms of pain and weakness, and she rapidly recovered her health.

In some instances, where the parts are naturally very sensitive, the irritation of a very small calculus may be so great, that the sphincter of the bladder, and the muscles surrounding the urethra

at this part, and more anteriorly, are spasmodically excited, so as to close the passage upon the stone, which had begun its progress outwards from the bladder. Such instances are not uncommon. In many cases, the small calculus, or gravel, continues to advance, at each successive expulsion of the water; and the patient, after a night or a day of anguish, is relieved by the final ejection of the cause of his torment, which he hears rattling against the side of the chamber-pot.

While lately in Spain, I was sent for to see a gentleman of the name of Machado, an extensive merchant, who was suffering severely. He was making water frequently, and in jets. The urine was scanty, high coloured, and ropy. There was a feeling of constant uneasiness at the neck of the bladder, which for a few moments was heightened to agony, at each effort to void his water; the pulse was frequent, the countenance flushed, and he now and then perspired profusely. He was subject to passing gravel, and shewed me some, of the size of millet seed, which he had voided. After a hot bath, he had an opiate suppository at bed time, in spite of which he continued to be disturbed, though not so frequently. In the morning, on introducing a catheter, I felt a small, rough, calculus in the urethra, close to the neck of the bladder. By urging a stream of tepid water through the catheter, I had no difficulty in flooding it back into the bladder. In this situation, a small lithotrite was employed to reduce it, and the greater portion of it was voided before we left the patient. The distressing symptoms, to which he had been a prey for several days, ceased at once. I recommended him to alter his mode of life, which had been very sedentary, and to use horse exercise. He was also directed to make use of the water of Añcos, in which the people of the south of Spain have great faith, as a preventive to the formation of gravel.

The following case illustrates the same point, and which, as it is remarkable in some other respects, I shall here narrate. In the year 1830, Sir Astley Cooper kindly asked my assistance for a gentleman for whom he had a great regard, and whom he had known many years. The existence of a stone in the bladder was doubtful, although the symptoms were by no means equivocal. Several of our best surgeons had failed to detect the stone. Sir Astley, however, felt confident that he had touched it, when he had made his second examination. I was requested to meet him at the patient's house, Mr. J. Byrn, of Lancaster place. This gentleman, already advanced in years, had led a most active life in connection with the ballet department of the opera. He was as active as ever, but for stings, and pain, in the urinary organs, which, till within a period of some months only, he had never felt before. He was deeply disheartened, as he expressed it, "that he should, in his retirement, and in his old age, be attacked by a foe, of which, whilst engaged in the hum and turmoil of life, he had never dreamt." The injection of tepid water into the bladder, which was then a novel practice, to aid in detecting the stone, at once removed any difficulty that might have been previously encountered, in regard to the existence of the foreign body; it was felt distinctly, and at once, in the distended bladder. The facility of detecting a stone in the bladder, and of ascertaining the condition of that viscus, generally, is now fully established as a point of practice, for which also we are indebted to lithotritry. There was no other difficulty in the case. The instrument employed, was Civiale's three branch. On developing it in the bladder, the small stone was readily engaged within the grasp of the branches. When the whole was securely fixed, I was much surprised by the difficulty I experienced, in making an impression on the stone. The perforator was set in motion, but seemed to make little or no progress through the substance of the foreign body, which resisted with all the firmness of marble. At length, the surface was penetrated, and the action of the drill became more rapid. The same difficulty was experienced at each fresh attack of the surface. Three sittings sufficed for breaking up and reducing the stone, the fragments of which were quickly voided. The cheering spirit, and ready wit, of our great surgeon were frequently displayed

on these occasions, in playful encounters with his old friend Byrn. The following, perhaps, if not worth preserving on its own account, will serve to shew what Cooper was, in a happy vein. "Well friend B. we are neither of us chickens, I think—How old are you?" "Yesterday, Sir Astley, I was seventy.—To-day, I feel as if I was but five and twenty." "Ah, indeed, well this is grinding young and no mistake." In nothing was this great man more remarkable, than in the buoyancy of manner which distinguished him, on the great occasions when his skill was called into play. Serious he was, undoubtedly, and impressed with the importance of duty he was about to perform, but his bearing cheered and supported the sufferer in the extremity of trial. In the midst of anguish, and terror, he could revive confidence and hope, by a look, or word. He took a warm interest in my early efforts to diffuse the benefits of lithotomy, and I trust I may be allowed, in this fleeting record, to express my gratitude and admiration of one who, at the head of the profession, was at once its ornament, and the herald and promotor of its most enduring triumphs.

ON THE DURATION OF THAT PART OF HUMAN LIFE CONNECTED WITH MENSTRUATION, WITH GENERAL REMARKS ON THAT IMPORTANT FUNCTION.

By CHAS. CLAY, M.D., Manchester.

THAT portion of life, governed by the function of menstruation, is of immense importance, in whatever light it is considered, abounding, as it does, with anatomical and physiological problems, few of which have been satisfactorily solved, and the many remaining, affording scope to great variety of opinion and controversy. Independently of the strictly medical view of this question, it is of considerable consequence, as connected with the general enquiries upon climate, population, &c., and, from thence, necessarily attaches itself to a variety of other considerations. It may fairly be presumed, that its utility is quite equal to the extent of its application; I may, therefore, be excused for taking up this subject, as one of the debatable questions connected with the subject of midwifery, and forming the first of a second series, which it is my intention to complete in the present volume of the MEDICAL TIMES, to the editor of which, I take this opportunity of returning my thanks, for the space he has at all times afforded my numerous papers on practical subjects.

It is a generally received, and a long established, opinion among the best—indeed, I may say, almost all medical—authorities, particularly those who have paid attention to the diseases and functions of the female system, that climate and occupation, but particularly the former, have a powerful influence in retarding or promoting the natural function of menstruation; in consequence of which, this function presents different characteristics, under different circumstances of climate and locality;—in other words, this function is observed at very early ages in hot climates—at later ages in temperate latitudes—and at still later periods in the northern, consequently, the colder regions of the globe. This general opinion, which has existed for centuries, is not the conclusion of a few authorities only, nor yet the particular doctrine of any particular school; but it is the general opinion of the profession throughout the civilized world, of anatomists, physiologists, and obstetricians, supported by the evidence of observing travellers, by the laws of nations, and the habits and customs of mankind in different localities, in the same and different climates. Thousands of enquiries have been made—and where the question has been one of average, the result has never varied—confirming the general opinion (that is, with one or two exceptions only); that climate is the chief agent in promoting or retarding the appearance of the menstrual function.

Notwithstanding, it is evident there are many cases which, if taken separately, or in small numbers together, tend to prove that constitution has some share of influence upon this function;—yet I

believe the evidence is still wanting, to prove constitution the chief agent, in opposition to the prevailing opinion on climate. Advocates are not wanting (though few), who maintain it a question of constitution, rather than climate; their arguments, however, are not very conclusive, and their illustrations far too limited, to be advanced as reasons for disbelieving all previous statements; general conclusions should not be drawn hastily, on so few materials. Some time ago, Mr. Robertson, in the *Edinburgh Medical and Surgical Journal*, published a paper which had been read at the British Association for the Advancement of Science, defending the position of constitution against that of climate, maintaining that "the latter had but little to do with the matter;" his observations were founded on some facts procured from the island of Jamaica (I believe, about twenty-six cases, the parties being negroes), which Mr. Robertson endeavours to contrast with the generally expressed opinions in this and other European states. To these statements, there exist, in my opinion, some fatal objections. First: the cases for illustration were not procured from professional sources; therefore, they are of little or no value as medical information, and not to be relied upon, in a physiological question, requiring close and extensive, as well as skilful, observation. Secondly: not tens, twenties, nor yet hundreds, of cases, are sufficient to counterbalance the experience of centuries. Thirdly: not one locality, but many, in the same and different climates, must be carefully examined, and well supported by numbers, before such opinions can be held for even the shadow of a fixed law of a natural function.

Mr. Robertson argues: "if climate were the great guiding principle of menstruation, it would be seen in the over-heated manufactories, in which thousands are employed;" on the contrary, he believes he proves, that menstruation commences as late in, as out of, those establishments. This position is equally unfortunate with his former statements; it is notorious, that, in manufacturing establishments, particularly for cotton, where there is a very high temperature, precocious developments abound, not only of organic function, but in the mind and habits of body, and this is more particularly observable in the female. It is true, many females so employed are often late in the appearance of menstruation; but that does not in the least invalidate the argument, for great numbers of factory girls are the victims of uterine obstructions. Chlorotic affections are amongst the most common appearances, or affections, which medical men see, and these prove, that their systems are, evidently, sufficiently matured for menstruation, which would undoubtedly take place, but for the morbid obstruction. Nor can it surprise any one, on the slightest reflection, that chlorotic affections should be so numerous; the many circumstances, to which their employment is necessarily connected, produce an early disposition to menstruate, and likewise form causes of obstruction. It is not reasonable, therefore, to class these females (who are very numerous) with those who are naturally late in maturing for this function, as morbid action alone prevents it.

Respecting the causes of these morbid conditions, I have to direct attention to the many atmospheric changes to which they are daily exposed, and frequently in the same day, passing from highly heated rooms within, to a cold atmosphere without; from dry confined air, to, perhaps, being drenched with rain and cold winds; poorly fed—poorly clothed—poorly housed—they have but little rest—and but a very short time allowed for meals;—can it be wondered that such are the victims of disease? Thus, they are found in reference to the subject before us in extremes, either subject to menorrhagia, or extensive leucorrhœal discharges, from excessive constitutional debility, or, on the contrary, sinking from the repeated consequences of uterine obstructions; and all these at very early ages, whilst the stamp of precocious development sits on every juvenile countenance, is exhibited in every action, and is equally apparent in their conversation. If the early menstruators, and those matured for the function, but interfered with by morbid action, be selected from the female

factory workers, to which must be added those of adult, and those in the decline of life, there will be none left, upon whom to found an argument of late menstruation. If Mr. Robertson had examined more minutely the cases of cessation of the menstrual function, in the manufacturing establishments, he would have found extensive proofs of the influence of over-heated places on those employed in such factories; he would also have found no trifling effect on the duration of life, another proof of the effects of high temperature. If the same degree of heat, as in the manufacturing establishments, were continued on the female system, after they had quitted such places, and their homes, and other circumstances, were more comfortable; all the influences of a hot climate would be apparent, without the mischiefs to which they are at present exposed;—early menstruation, &c., would be common, and uterine obstructions more rare. Again, a good constitution is by no means indicative of early menstruation; frequently the contrary; those who have had every opportunity, as to air, proper exercise, generous diet, and sufficient clothing, are generally speaking late to menstruate; this is very pointedly the case with farmer's female servants, who have strong plethoric systems. After all, it is scarcely possible to advance any argument not liable to some exceptions; I have seen frequent cases of menstruation from the 9th to the 11th year, among factory workers; I have also attended a full time delivery, under the 13th year. On the contrary, I have known cases of birth in the 50th, 51st, and one in the 52nd year, but these are rare cases after all, and have little to do with the averages which must be looked to in such matters. In a subsequent paper, in the same medical journal, Mr. Robertson again takes up this question, in reference to the Islands of Greece, in consequence of the appearance of an admirable work from the pen of Mr. Strong, entitled "Greece as a kingdom." Mr. Strong, it may be well to state, was Consul at Athens to the Kings of Bavaria and Hanover; the work was dedicated to the King of Greece. The writer was not in a position to make partial statements; if he had been, his patrons, and those interested in questions affecting the character of their nation, would have exposed his fallacies without loss of time; indeed, it is improbable that he would have made statements at variance with truth, and dedicated them to the head of the realm; it must also be supposed, that Mr. Strong's position, in society, gave him every facility for obtaining the best information, from the best sources; yet Mr. Robertson endeavours to shew that Mr. Strong had totally misrepresented the case of Greece, and that his statements are unworthy of credit. The information procured by Mr. Robertson, to refute that given by Mr. Strong, is from missionaries entirely unacquainted with medical information, assisted indirectly by two Greeks, and one resident Jew physician; and certainly the information, conveyed under their names, is far from valuable, and forms but a poor set off to the evidence of the Athenian Consul. I shall first point out the particulars in Mr. Strong's work, to which Mr. Robertson alludes, and afterwards shew the contrasting evidence procured by Mr. Robertson.

(To be continued.)

CASE OF NATURAL SOMNAMBULISM AND CATALEPSY, TREATED BY HYPNOTISM;

WITH REMARKS ON THE PHENOMENA PRESENTED DURING THE SPONTANEOUS SOMNAMBULISM, AS WELL AS THAT INDUCED BY VARIOUS ARTIFICIAL PROCESSES.

By JAMES BRAID, M.R.C.S.E.

(Continued from page 78.)

But to return to my patient. I now excited various mental manifestations, some muscularly, others by auricular suggestion, proving that she was affected by the same treatment as those who are thrown into the sleep by artificial means—whether these have been the mesmeric, or hypnotic, processes. And, finally, I aroused her out of the

sleep, by the same means, and with equal facility to that I usually experience with hypnotic patients. This seemed very much to surprise the parents, and others present; because, hitherto, they never could awake her, by any contrivance, however severe and cruel the processes resorted to. She remembered nothing of what had happened, during the sleep from which I had aroused her.

I now hypnotized her, by a steady gaze at my lancet case; when the same phenomena, as above detailed, were manifested: and, what greatly surprised those present, was her manifestation of double-consciousness; for she now remembered what she had done during her spontaneous fit of somnambulism. After awaking her, as before, she remembered nothing of what had passed during either of the sleeps.

I now mesmerised her, by thumbing and staring; then, after arousing her, put her to sleep again by pointing, then again by staring only; and, finally, by a pass; and, in one and all, as was borne testimony to by Sir T. W. Bart., an eminent and most successful mesmerist, who had accompanied me, the phenomena were, as far as we could perceive, precisely the same, however the sleep was induced.

On Saturday the 3rd. August, she was brought to my house, by appointment, nearly an hour before the period of her usual evening attack. She was accompanied by her father, uncle, and Mr. Glasin. I purposely kept out of the room, so that my presence might neither interfere with the induction of the sleep, nor, on that account, with the phenomena which might be afterwards developed by the processes I should resort to. I must not omit to state, that she had a fit of the natural sleep-waking after I left last night, when those present had succeeded in exciting various mental manifestations and physical actions, by adopting similar means to those which they had seen me use. She had had no fit to day, however, before she came to my house. Whilst I was absent, and otherwise engaged, and not even thinking of this patient at all, and even before I supposed the usual period for her evening attack had arrived, the bell of the room, where she was, rang, and the servant was desired to intimate to me that she had just then fallen asleep. I found it was within a few minutes of her usual evening paroxysm. None but the three friends who accompanied her were present, and they stated that she had gone off in the ordinary way. I now requested several scientific friends to accompany me into the room, to witness my experiments in testing her. Owing to the length of time which had elapsed, from her entering into the sleep, the limbs were not rendered cataleptiform so promptly as on the preceding night, but, after elevating them several times, they retained whatever position was given to them, and obeyed the currents of air from myself or others; she indicated hearing or not hearing others, as well as myself, precisely as I predicted. Thus, if I said, now you will find she does not hear you, however loud you speak, such person could elicit no answer, under such circumstances; but if I said immediately after, she will hear you now (and this without me doing any thing beyond uttering that prediction), she would instantly reply to him. The same was the case, in respect to depressing or elevating the limbs by wafting or otherwise, or following them as if magnetically drawn. If I said she will, or she will not, do this or that, in reference to any one present, so certainly she either did, or did not, do so. This was clearly a vivid imagination, acting on extreme docility, leading her instinctively, as it were, to obey my predictions or suggestions. As to magnetic influence, in the common acceptance of the term by the mesmerists, I could have none, for this was during a paroxysm of natural somnambulism.

She also manifested that attachment to me, which the mesmerists allege as a proof of some occult power, of a principle, or relationship, which is established between the mesmeriser and the mesmerisee, in virtue of his special operations. Here, however, it was manifested in the strongest manner towards me, although I had nothing more to do with her falling asleep, than any one else in the room. I told them they would witness such a power, which was fully verified, as she followed me merrily and perseveringly wherever I went; and into whatever room I went, she followed, and

either walked or ran, according as I did, so as to keep near to me. Again, if I said she would follow such and such a person, she instantly did so; the mere idea suggested by the predication acting as a command, which the extreme docility of the hypnotic condition induces them readily to obey.

I observed one remarkable circumstance in the movements of this patient, different from that of hypnotic patients. I know, from repeated experiments to test the fact, that hypnotic patients direct themselves, generally, in their movements, by exalted feeling and hearing, resistance, heat and cold, and smell, and, consequently, all their movements are characterised by a peculiar gliding and cautious procedure. This patient, on the contrary, seemed to move with the same freedom of step and confidence, as a person in full possession of ordinary vision. This led me to suspect, that she really saw and directed her movements by the use of her eyes; in fact, seeing through the partially closed eyelids, notwithstanding they might, to a careless observer, appear quite closed. I believed that this might be quite possible, without her having any intention to impose on others, and that she might not remember it when awake. I considered that one of the most important points, to be determined in this case, was, whether or not she had the use of her eyes during the sleep. Without saying a single word to any one of my suspicions or intentions, I therefore bound a handkerchief round her head, so as effectually to prevent ordinary vision with the eyes. I then said to those present, you will see she must follow me wherever I go. I then set off, moving round the same room as before. She followed me; but mark the difference. Formerly, she never ran against either table, chair, or any person present; but, now, she bumped against the corners of the table at the first turn round the room, and then became restive, and would make no farther attempt for some time. At length, by playing the organ, she was induced to turn round and walk up to the instrument, but this she did with the cautious, gliding, movement of my other patients. On removing the handkerchief, she was soon as active in her movements as ever.

After arousing the patient from this paroxysm of natural somnambulism, I hypnotized her, and my first object was, to determine whether or not she could see with her eyes, during the sleep induced by artificial means, which was clearly the case during her natural sleep-waking. With this view, I set her to beat a boy, whom she chased round another room, beating him apparently with great pleasure, and without coming in contact with the furniture. The lad, at last, became so alarmed as to induce him to make his escape, and ran, full speed, down into the kitchen, where she chased him at equal speed, turning correctly every corner, and avoiding contact with every object in her way. I now brought her up stairs, and had her blindfolded, as before; and excited her to the same propensity of beating the boy. She set off, and chased him round the room, but with much more caution than before the handkerchief had been put over her eyes. Still, however, in spite of her caution, she ran against both chairs and table, and then became restive, and would not move till the bandage was removed.

It is, thus, quite obvious that this patient had the use of her eyes, and directed herself in that way, whether she fell into the sleep spontaneously, or by artificial contrivance. I made several other trials with this patient, all of which tended to confirm this conclusion. It thus shows an interesting variety, and may assist in accounting for some of those actions, which would otherwise be more difficult of explanation.

During the spontaneous attack, I put a pencil into her hand, when she wrote her name and address, and age; also the month in which she was born. I also requested her to write the name of the book, over which the paper was laid, on which she was then writing. After a little deliberation, she wrote "Phenological," which some present alleged to have been an attempt at "Physiology," as the book over which she was writing was "Willis' Translation of Wagner's Physiology." They imagined that she had seen the word faintly THROUGH THE PAPER, that word being the largest. My own opinion is, that it was entirely an act of memory, and an attempt at the word "phreno-

logical," as she had had an opportunity of seeing a copy of the "Phrenological Journal," as well as "Wagner's Physiology," both of which were lying on the table of the room, where she was for some time alone, before she fell asleep. This, therefore, appears to me to be the most natural solution of the apparent marvel; for, it is quite certain that such patients carry into the sleep, and are able to make available whilst in that condition, knowledge acquired during the waking condition.

Suffice it to say, that various mental manifestations were excited on this occasion, as well as the night before, during the spontaneous sleep, and also after she had been aroused from it, and put into the sleep by the hypnotic and mesmeric processes; and the impression, left on the minds of all present, was, that the phenomena were as nearly as possible the same, in whatever mode the sleep had been induced.

(To be continued.)

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSWILL, Esq., Surgeon, Leicester.
(Continued from page 56.)

In offering these remarks, I must be understood as confining myself to the appearances presented in the country of which the individual is a native, urging that removal from the locality, producing such appearance, will not immediately entail an alteration to the complexion of the adopted country; since hereditary tendency exercises an influence, which will only yield to years of opposing action.

The children of the blackest negro parents are born white. In this condition they continue for about a month, when they vary to a pale yellow; at a later period they become brown, and it is only subsequently, after the lapse of considerable time, that the skin assumes a glossy black appearance.

These colours—white, yellow, brown, and black—I apprehend, must, therefore, be regarded as the primary colours of the human race, making up, by their admixture with the red-blood, seen through the transparent epidermis, which covers the Negro as well as the European, all the variety of complexion which the world presents to us.

Lastly, it is probable that these, apparently, primary colours may be reduced to one, namely black; and I shall endeavour to prove, that this hue is produced by carbon, deposited in the network beneath the cuticle, brought about by the action of climate, and that the yellow and brown must be considered as depositions of carbon, but in less quantities, and modified by the condition of the liver at that period of life, as hereafter to be described.

This opinion, I think, is proved by the fact of these colours running one into the other, in the negro child, under the continued influence of climate acting upon the functions of the decarbonising organs.

The white skin of the negro, during the first month of its existence, as well as that of European natives, arises from the minute quantity of carbon, deposited in this tissue, allowing the blood to appear more readily through its texture.

Now, whilst climate acts as the exciting cause of the production of the various complexions of the human race, the relative activity of the organs of respiration, the liver and the skin, must be regarded as the proximate cause: they being influenced by the condition of climate. This remark, "influenced by the condition of climate," I must be understood to apply generally, and not individually.

The same explanation, which illustrates extremes, will likewise serve to explain the numerous shades of complexion. I shall, therefore, confine myself, as nearly as possible, to the most striking peculiarities.

In the foetus, the organ engaged in throwing off the carbon from the body is the liver, which is remarkably large, and which, after birth, when the lungs and skin, &c., come into play, lessens considerably in size. The child of the negro is born white, because, as yet, its skin has performed

no function; it has never come into contact with the atmosphere: at birth, however, the lungs and the skin become active, and assist in that function, which, in utero, had been performed by the liver alone. No sudden changes can be immediately brought about, in a perfect condition; a great amount of the functions of the liver having ceased, and that viscous itself having rapidly lessened in bulk, a temporary jaundice occurs as a result: giving rise to the yellow colour, observable in the second month of its existence; this occurrence is not, however, confined to the children of blacks, the infants of European parents frequently presenting the same phenomenon, resulting from the same cause; and the only reason, why the occurrence is less general in these latter, is, because the lungs are almost entirely engaged in parting with that carbon which, in the black, is excreted in so much greater proportion by the skin.

It must be remembered, that the relative activity of the skin and lungs, in the function of excreting carbon from the body, is very different in different climates; for, whilst the cold of one, driving the blood from the surface to the interior, compels the lungs to increased diligence to oxygenate the blood, thus rendering the skin defective in its amount of function and unstained by carbonaceous deposit; the heat of other regions brings the circulation to the surface, so that the skin, which had been in the first position comparatively passive, has a high amount of function to perform: namely, to decarbonise, by the action of the atmosphere from *without*, a great amount of the blood which is brought to the surface. In the comparatively inactive state of the lungs, in these climates, the liver participates; thus, whilst the excretion of carbon by the lungs, and active secretion of bile by the liver, in cold countries, and the almost wholly inactive state of the skin, by reason of the little circulation through its vessels, tend to the production of a transparent white, under such circumstances, in the integument; on the other hand, in hot latitudes, an opposite condition of all the decarbonising organs occurs, the liver becoming passive and the lungs equally so, but the skin eminently active; and, since an increased circulation, through any organ, invariably causes an increased activity of its functions, the skin can not be regarded as an exception to this rule; for, whilst a more abundant, superficial, circulation gives rise to the occurrence of a copious perspiration, which, by its evaporation, cools the surface, it also increases the secretion of colouring matter, which, being deposited in the net-work beneath the cuticle, becomes more or less modified, in its colour, by the proportionate quantity in which it is produced, and the action upon it of the oxygen contained in the air.

Whatever the complexion of the race, or whatever the complexion of the individual, it will be found that it is made up of that metamorphosis of colour, which is seen during the early life of the negro child; and that white, yellow, brown, and black, with the admixture of the red of the blood, will account for every variety of shade. Furthermore, that such complexions are invariably the result of the relative activity of the decarbonising organs, eminently the effect of climate, although, in many individuals, a result of hereditary organic conformation.

It may be urged, in opposition to this theory of complexion, that as we advance to the extreme north, where the cold is most intense, the colour of the inhabitants again approaches to blackness; this fact, although at first appearing as an argument opposed to the explanation given, is in reality an instance in support of its truth.

These people, in order to support animal heat, are compelled to eat enormous quantities of food, and drink large quantities of fluid, containing from 60 to 80 per cent. of carbon: as the greater amount of this is consumed in the body, and given out in the shape of carbonic acid, the lungs are unable wholly to accomplish this object; hence, the skin is induced to take on almost the same amount of activity in these cold latitudes, by reason of the immense quantity of carbon which must be parted with in the shape of carbonic acid, as it is in hot countries, by external heat drawing the function to the surface.

That the skin does, in such cases, eliminate much of the carbon taken into the body, is proved by the constant greasy condition of the bodies of the inhabitants, and the oily nature of the furs of animals, and the plumage of birds* in these latitudes.

To be continued.

DESCRIPTION AND ANALYSIS OF THE COMPOUND RESULTING FROM THE UNION OF DRY CHLORIDE OF CYANOGEN AND AMMONIACAL GASES.

By Dr. SHERIDAN MUSPRATT, Giessen.

For the "Medical Times."

I passed chlorine gas through hydrocyanic acid,† and distilled, conducting the chloride of cyanogen, formed, through two tubes, filled with chloride of calcium, into a dry flask (immersed in water), into which was also passing ammonia, dried over sticks of potash. During the operation, a great elevation of temperature ensued, and, after the lapse of half an hour, a beautiful, yellowish-red, crystalline deposit took place, upon the sides of the recipient. This substance was completely soluble in hot water; when adulterated with absolute alcohol, it lost its reddish colour, which was owing to some undecomposed prussic acid, and became waxy-white.

Analysis of the Compound.

·3212 grm. substance, burned with chromate of lead, gave ·1570 grm. carbonic acid, and ·1778 grm. water.

·2408 grm. substance, burned with caustic lime, and residue dissolved in nitric acid, gave ·3559 grm. chloride of silver=·0878 grm. chlorine.

Composition in per Cents.

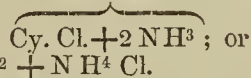
	Theory.		Found.
2 Equiv. Carbon	150·00	12·520	.. 13·499
6 Equiv. Hydrogen ..	75·00	6·250	.. 6·188
1 Equiv. Chlorine . . .	442·60	36·894	.. 36·464
3 Eqv. Nitrogen (loss)	532·20	44·356	.. 43·849
	1199·80	100·000	100·000

The subjoined are the three formulæ, deduced from the above results:—

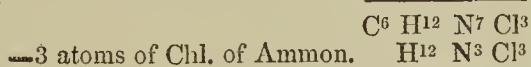
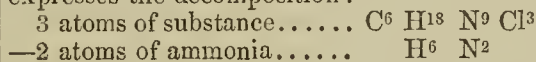
Empirical Formula.



Rational Formula.



When the substance is strongly heated, it fuses to a red liquid, liberating ammonia and chloride of ammonium, whilst a fine, yellowish, scaly-looking substance (slowly dissolved by potash) remains—probably mellon. If so, the following equation expresses the decomposition:—



Gives $\text{C}^6 \text{N}^4 = \text{mellon}.$

The compounds of chloride of cyanogen, with ammonia, are very numerous, but I suppose the difficulty of preparing them has deterred chemists from further investigating this interesting class of salts.

ON THE CANADA LEPROSY.

To the Editor of the "Medical Times."

SIR,—In the MEDICAL TIMES, for the 25th of May last, you express a wish that some of your Canadian Subscribers will communicate with you, on the subject of the new malady, which has appeared in the district of Tracadie, province of New Brunswick, on this continent. In case no one else

* A familiar instance of the effect of a highly carbonaceous food, upon the colour of birds, is exemplified by feeding the common bullfinch, for a lengthened period, on rape seed. Under the influence of this diet, the scarlet plumage on the breast will be observed gradually to turn brown, and, by its further continuance, ultimately to change to a dirty black.

† The operator must exercise great care in this process, on account of the deleterious effects produced by chloride of cyanogen, when inhaled.

has written to you about the matter, I will state a few particulars.—The Government of New Brunswick appointed a commission of medical men, in March last, to visit Tracadie and the adjoining districts, and to investigate the nature of the malignant disease, reported to prevail therein.—Dr. Skene, assistant surgeon of the 52nd. Regt. stationed at Fredericton, N. B., one of the commissioners, has made a report on the disease, addressed to Sir J. Macgregor, Director General of the Army Medical Department; from which it appears, that the complaint is unquestionably tubercular leprosy, or the Elephantiasis of the Greeks; that the symptoms of all the cases which existed at the time, nineteen in number, corresponded with those of the *lepra tuberculosa* of Bateman, Simpson, Copland and others. The symptoms observed were: dusky red or livid tubercles, of various sizes, on the face, ears, and extremities; thickened or rugous state of the skin; diminution of its sensibility; falling off of the hair of the eyebrows, eyelids and beard; voice husky, nasal, or entirely lost; ozæna; ulcerations of the surface; breath intolerably foetid; little or no pain; the nose, lips and ears, generally enlarged and pendulous; the skin shining as if smeared with oil; the palate and fauces covered with tubercles; ulcerations and blotches on various parts of the body; appetite usually unimpaired; and the disease hitherto invariably fatal, at the end of a few years. Dr. Skene considers the disease identical with the tubercular leprosy, which prevailed in Europe in the middle ages, and more recently in Iceland, the Farroe Islands, Shetland, Madeira, the Crimea, Africa, Ceylon, and the East and West Indies. The new locality of this disease forms a part of the province of New Brunswick, and is chiefly confined to the east side of the land, lying between the bay of Chaleur and the estuary of the Miramichi river, and more particularly to the settlements on the Neguac and Tracadie rivers:—From the statements of the oldest inhabitants, the first case occurred about the year 1817, in the person of a woman named Ursale Landrè; she died of the disease in 1829; her husband took the disease three or four years before her death, and sank under it in 1831. From these cases, the disease would appear to have gradually extended itself, and although, ten or eleven years ago, only two cases existed, the commissioners found, independently of twelve deaths from the leprosy, nineteen confirmed cases and some highly suspicious ones.—The disease appears to be transmitted by hereditary taint and by contagion, which latter is by no means active, as all those brought into direct contact with the disease, and all those immediately connected with the sources of the malady, do not necessarily become affected by it. So that, it is not at all likely that the disease, which is at present local or endemic, will ever become epidemic. As to the causes of the present leprosy, in New Brunswick, it is attributed by some to filth, indigence, exposure to extreme temperatures, scanty and unwholesome diet, particularly of fish, salted while in a state of decomposition. The commissioners recommended to the Government of New Brunswick, the erection of a lazaretto, strict seclusion of the lepers in this establishment, and legislative sanction for the removal of persons affected into it.

I have the honor, to be, Sir,

Your most obedient Servant,

JAMES B. JOHNSTON, M.D.

Sherbrooke, Canada East, August 17, 1844.

ON THE ADVANTAGES AND DISADVANTAGES OF HOSPITAL REPORTS.

(To the Editor of the "Medical Times.")

SIR,—Having in my former letter spoken somewhat in disparagement of Guy's Hospital Reports, permit me now, in justice to the Editors, to say a few words on the improved appearance of the present number, at least of the medical portion of it. Judging from the present number, the medical editors seem more amenable to reason, and more willing to correct their errors, than their surgical brethren; they have sent forth their reports in a much more complete and useful shape, than it has

hitherto been my lot to see them; instead of a confused heap of things, we now have the cases analysed and classified, according to the nature of the disease, and the seat of the lesions; we have them in divisions, and subdivisions, in tables that say much for the perseverance and energy of Dr. Birkett, by whom they are compiled. We also have 17 cases of fever by Mr. Brereton, not huddled promiscuously together, as formerly, but arranged with some excellent remarks on the points of treatment, which, if not calculated to convince in every instance, are at least likely to afford subjects for serious and useful consideration. The surgical editors, on the other hand, not so sensitive to our truly piteous complaints, are, as you would expect, from the rougher nature of their professional pursuits, made of sterner stuff, and regard our lamentations much in the same light, as they do the cries of their patients, as part and parcel of a right constitution of things, and necessary to our own improvement. If we will but submit to the pain of reading their reports, we cannot fail to derive much benefit. Public opinion they seem to think very unimportant, and calculated to give much unnecessary trouble; they cannot see, why, as editors, they should not be allowed to perform their duties in the shortest possible space of time, and with the least possible inconvenience to themselves. We have, therefore, reports of injuries of the abdomen of every shade, from the simple contusion to the more severe laceration, and from the torn intestine to the half mutilated abdomen, without any sort of classification or word of encouragement to peruse them, and, notwithstanding the remarks in the *Medical Review*, we have still the favorite expression, at present peculiar to Guy's, of the "pulse were," meeting us in every page. I confess, I am at a loss to understand the reason of such utter want of care; their editorial labours of the present month do not seem to have been excessive, for there is only one surgical paper on 'Iritis,' besides these reports; possibly they may think that the public are not injured, and that, though they publish, the public are not bound to read, but I must beg to remind them, that, in accepting offices of such trust and responsibility, they have given a pledge to Guy's, to perform them to the best of their ability, and that the profession have a right to demand better at their hands, who are placed in public positions of such advantage—or otherwise, to use the same language as old Oliver did to the Commons, "Begone and give place to honest men."

Having given just so much of friendly caution to my surgical brethren, let me once more return to the more grateful consideration of Dr. Birkett's tables; they are two half-yearly reports for 1843 and designed for statistical tables only, being convinced, as he says, that it is only "from very large and accurate collections of reports, that deductions can be made, without endangering science by premature generalization;" with this I perfectly agree; it is a good undertaking, conducted in the right spirit, and one, which, if faithfully carried out, is likely to place, beyond a doubt, the value of any particular plan of treatment, or the success of any operation. This is what I laboured to establish in my former letter, and, at the same time, to shew the necessity of publishing such reports through all years, and not through any particular month or year, only favourable to the operator; we must not have a hundred, or fifty, or only ten, or twelve cases omitted, for they may materially alter the per-centage of deaths, by any one disease; the results of all must be published, or we necessarily remain in much uncertainty; at the same time it must be acknowledged that, in a large hospital like Guy's, the difficulties must be great in the way of obtaining the reports of all cases, yet, by judicious management, I think we might at least obtain the results. Dr. Birkett gives us the results, and the per-centage of deaths, in 1,493 cases; at the same time that he tells us, that 3,755 cases were admitted into the hospital during the year, and thus 2,262 are left without notice. I am willing to allow him, and to believe, that these are not selected cases; at least, not designedly so. The inclination of the reporters, however, it must be admitted, would lead them to omit many cases of contusions, dyspepsias, or simple fractures, un-

noticed. Many cases of acute diseases, too, might be hurried off before the reporters have been made aware of their admittance into the hospital, or, perhaps, fresh symptoms may have made their appearance before the reporters have seen them, and that for this cause they may have been left disregarded. Dr. Birkett, however, endeavours to prove to the contrary, by shewing that the per-centage of deaths, of those admitted, is as nearly as possible the same, and even rather lower, than of those reported. It must, however, make a great difference, whether the per-centage of deaths is made up in the admissions, by pneumonia or phthisis; fever, or albuminuria; by the operation of lithotomy, or by cancer; by operations for aneurism, or by trephining: in a word, by curable or incurable diseases; by operations where success is probable, or by those where the risk is imminent. Certain it is, that, in looking over these tables, we find reported only fifty-four cases of pleurisy and pneumonia, a small proportion in 3,755 cases admitted; the deaths, too, are one in four, a rather high average; there are, too, but few cases of phthisis, and the deaths are not much more considerable than in those of pneumonia; the deaths, in 110 cases of fever, are only eight, which, on the other hand, is a small average; there being, as we are told, among these, one case of supposed yellow fever, and one complicated with elephantiasis, besides others of great severity. If we turn to the surgical reports, we find the deaths in lithotomy amounting to two in five, differing greatly from the statistics of Mr. Cooper, published in the last number, where they are only one in ten. The deaths, by trephining, are three in four, and we have three operations of hernia, with three deaths; we are, therefore, compelled to doubt, and hope for the Institution's sake, that these results do not accurately represent the statistics of the hospital, but rather that many successful cases of pneumonia may have been left unreported, and that some operations for lithotomy and hernia have been left to proclaim their own merits, in the gratitude of those relieved. I make these remarks, not so much with a desire of finding fault, as of showing that Dr. B.'s reasoning is not quite correct, and that, though he has done much, still more remains to be accomplished. At the same time, however, that I acknowledge his services, and express my thanks for so useful and praiseworthy an undertaking, I must make one more remark concerning the surgical tables; they do not appear to be so elaborately worked out as the medical, and a few more observations might justly have been expected, as to whether the sac was opened in the operations for hernia, whether the compound fractures were saved without operation, whether the 24 tumors that were removed were malignant, and what proportion were scirrhous breasts, and in what sort of cases the operation of trephining, apparently so fatal, was performed. I would not have classed a compound dislocation of the ankle among simple fractures, nor have placed a simple fracture of the skull among the injuries of the organs of locomotion.

Allow me, in conclusion, to thank you for the ready insertion of my former letter, and for the judicious remarks which accompanied it; and, at the same time, to record my humble testimony to the value of Dr. Rigby's reports;—if all reports had been such as those, my letter would never have been written; my object not being so much to restrict the publication of reports, as to see them recorded in a more useful form. I wished to urge three points: 1stly, that reports, if published collectively, for statistical purposes, should be classified, as in Dr. B.'s tables; 2ndly, if published individually, for the sake of illustrating any particular plan of treatment, they should be accompanied by remarks (v. Dr. Rigby); and 3rdly, to warn those, high in authority, against urging the adoption of any operation, before it has sufficiently been tested by time and experience. If, then, in the course of these or any former observations, I may seem to have spoken somewhat too severely, permit me to state in excuse, that, in the present lax state of professional discipline, to speak the truth plainly and honestly, is, oftentimes, to utter the most biting sarcasm, and to speak with the utmost severity.

It is but too common, in these times, to find cases published, not so much for the objects of science, or their own intrinsic interest, as to laud the dexterity of one operator, or the boldness and daring of another, in mutilating the forms of his fellow creatures; but I gladly leave this subject, and refrain from further censure, trusting to the dawn of better days, and, in the confident hope, that time will soften, and correct, some of these more glaring deformities.

I remain,

Your obedient servant,
CHIRURGUS.

October, 22nd, 1844.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Oct. 24, 1844.

The Valerianate of Quinine.—Dr. F. Devay, already known to the profession by his researches on the mode of action of the valerianate of zinc, has just published the result obtained with the valerianate of quinine, first described by Charles Bonaparte, prince of Canino, correspondent of the Academy of Sciences, Paris. This substance is not only useful in intermittent fevers, especially those produced by sudden moral emotions, in which the attacks are owing to the excited state of the nervous system, but likewise in all affections of a malignant, ataxic, or adynamic character. It is composed of one equivalent of valerianic acid, one of quinine, and two of water of crystallization; it crystallizes in octahedrons or hexahedrons, or in light, silken masses; offers a slight smell of valerianic acid; bitter taste; soluble in water, alcohol, and olive oil; decomposed by the mineral, and almost all the organic acids; at 194° F. it loses an equivalent of water and melts like resin; at a higher temperature it is decomposed, and mono-hydrated valerianic acid is disengaged; the aqueous solution, at 212° F. is also decomposed, and small globules, like oil, soluble in alcohol, insoluble in water, appear on the surface of the liquid.—*Mode of preparation:* It may be obtained by double decomposition, by mixing together the alcoholic solutions of the valerianate of lime, or baryta, and the sulphate of quinine; the following mode, however, though somewhat longer, is preferable:—To an alcoholic solution of quinine, add, first, valerianic acid in slight excess, and then twice as much distilled water; submit the whole to a gentle heat (not above 122° F.); as soon as all the alcohol is evaporated, the valerianate appears in beautiful crystals, which, after a few days, must be separated from the mother water and dried in the open air.—*Characters by which it may be recognised.* 1° A concentrated alcoholic solution precipitates a neutral and concentrated aqueous solution of nitrate of silver; the precipitate is re-dissolved when water is added in excess. 2° An aqueous solution is not precipitated by the chloruret of barium. 3° The aqueous solution, when boiled, is decomposed, and globules resembling oil are formed, by the melted hydrated valerianate floating on the surface of the liquid. 4° On adding an acid to the solution, it is decomposed, and valerianic acid is set free, recognizable by its odour; 5° When crystallized valerianate of quinine is decomposed by a concentrated acid, valerianic acid is obtained of an oleaginous appearance.—The diseases in which it has been given are: *Febris intermittens* (quotidian, tertian): one case had resisted, though gr. iv. of the sulphate of quinine had been administered for a dose; in another, the fever was complicated with delirium; and in a third with coma; finally, in two others, with ataxic, and ataxo-adynamic, symptoms. *Variola confluenta*, with ataxic symptoms. *Neuralgia faciei*. *Periodic neuropathia*. The dose is from gr. j. to gr. viij. per diem, in pills, or in a solution of gum arabic, in ℥iiss. of which gr. x. of the valerianate may be dissolved; another advantage it presents, is, that being soluble in olive oil, it may be employed in frictions on the splenic region, in the following proportions:—℞ Ol. olivæ, ℥ij.; valerian. quinin., ℥j. M.—In neuralgia, the

dose is generally gr. j., mixed with the most simple substances, to prevent its decomposition.—(*Gaz. Medicale*.)

Neuralgia (Curious Cases of).—1^o A municipal guard, while playing with a comrade, received a violent blow on the right side of the forehead, which for some time gave rise to no bad effects; gradually a pain, sometimes dull, at others acute, was felt in the contused part, radiating towards the eyes and ears, accompanied with giddiness, buzzing or tingling in the ears; hearing obtuse; disturbances of sight; ineertitude in the gait; insomnia; anorexia; loss of strength. Dr. Begin made an incision on the spot which had been struck; the next day, there was a diminution of the symptoms, and, in fact, the cure was complete, even before the cicatrization of the wound.—2^o M—, twenty-three years old, a pork-butcher, strong and hale, cut the skin deeply on the first phalanx of the left fore-finger; the wound healed rapidly, without causing any accident. Two months after, without any appreciable cause, he was attacked with fits, which lasted about ten minutes, and came on as follows:—pain and numbness, commencing in the cicatrix, and extending gradually to the hand (which was also agitated with convulsive movements), fore-arm, arm, thorax, and head; features red, swollen, and puffed up; limbs rigid; jaws forcibly closed; froth at the mouth. Frequent venesections, having been fruitlessly had recourse to, Baron Michel recommended a ligature on the finger above the cicatrix, which produced only a slight amelioration; a plaster of the extractum opii was next applied, but without effect; Baron M. then ordered the following pills:—R. Extract. opii gr. ij., pulv. indig. gr. xvj., extract. valerian., extract. cinchon. aa gr. xxiv.; M. Ft. pilul. xxiv. sumat. ij., mane nocteque quotidie. superbib. eyath. infus. arnicæ montanæ. This treatment was commenced on the 2nd Oct. 1843, and the last fit took place on the 24th Dec. 1843; since this period, the patient has been quite well.—3^o Ponteau (*Œuvres posthumes*) relates a case of a young woman, who, subsequently to a blow on the mastoid process, and a violent fit of passion, became affected with paralysis, stuttering, dysphagia, delirium, and convulsions, in which state she remained three days; pressure on the part increased the intensity of the affection, which was radically cured by an incision on the spot.—(*Gaz. des Hop.*)

Fracture of the Skull, complicated with Rupture of the Pericardium.—Dr. Michon, surgeon to the Hôpital Cochin, communicated the following case to the *Société de Chirurgie*. A young man, while at work, fell from a scaffolding thirty feet in height. Picked up, and brought to the hospital, the symptoms observed were:—coma; stertorous respiration; pulse feeble, intermittent; beatings of heart dull, and so rapid that it was impossible to reckon them; paralysis of the motility and sensibility; involuntary stools; flow of blood from the mouth and nostrils; insensibility; wound on the left side of the head; ecchymosis of the right eye; death took place two hours after.—*Section*: Fracture of the skull, extending from the internal angle of the right orbit to the centre of the left parietal bone; sanguineous effusion in the cavity of the arachnoid; contusion of the cerebral substance near the apophysis cristæ galli.—*Thorax*: Rupture of the anterior portion of the pericardium, about seven inches in length, through which opening the heart protruded, so as to touch the lung. A deep furrow divided the part, exterior to the pericardium, from that contained in its cavity; the former was red and considerably swollen.

Case of Lypemania; Anatomical Lesions: communicated by Dr. Belhomme to the *Société Médicale du XII Arrondissement*.—Mrs. —, ætat. 42, had a grandfather and mother insane, and a son, fifteen years old, who presented symptoms of melancholia. Brought to the establishment under his direction, she was found to fall off considerably, from her refusing to take sufficient nourishment, a resolution in which she persevered until death closed the scene. *Autopsy*: Emaciation extreme; head not symmetrical, the right side jutted out posteriorly, the left anteriorly; on removing the skull, the bones anteriorly were

thicker than usual; arachnoid and pia mater impregnated with a sanguinolent serosity, but could be removed without being torn; medullary substance red, and of its normal consistence superiorly; septum lucidum and fornix softened; same lesion of the crura cerebri and the thalami nervorum opticorum; left lung, containing some grey tubercles, in one place softened; pericardium enclosed a little sanguinolent serosity; heart very small; abdomen distended with gases; mucous membrane of the intestinal tube of a red slate colour; liver and spleen atrophied.

On the Chemical Composition of the Parenchyma Pulmonaris, and Tubercles, by F. Boudet, M.D.—In this memoir, the author examines: 1^o the parenchyma pulmonaris deprived as much as possible of the blood and other foreign substances; 2^o tubercles in their different phases; 3^o a diseased (in a phthisical patient) compared to a healthy liver.—1^o *Parenchyma pulmonaris* is composed of: a substance susceptible of being converted into gelatine by ebullition (cellular tissue);—a substance soluble in cold water, precipitated by nitric acid, and coagulated by heat, containing albumen and hematosine;—a substance analogous to caseine;—fibrin;—uncombined oleic and margaric acids;—oleate and margarate of soda;—cerebric acid;—lactic acid;—cholesterine, about 5-100ths of the weight of the lung, dried at 212° F.;—water, whose weight is to that of the lung dried at 212°, as 82 is to 18: that is to say, the lung, thus dried, is reduced to less than one-fifth of its original weight;—the ashes contain considerable quantities of chloruret and sulphate of soda, a small quantity of phosphate and carbonate of lime, and traces of silica and oxide of iron.—2^o *Tubercles, in the incipient stage*, composed of: albumen;—caseine;—a substance analogous to fibrin;—substance soluble in boiling alcohol (cerebric acid);—oleic, and margaric acids;—saponified fat;—lactate of soda;—cholesterine 0.045, or 1-20th of the weight of the dry tubercle. The ashes, like those of the lungs, contain: soluble salts (chloruret and sulphate of soda); insoluble salts (phosphate and carbonate of lime): silica; oxyde of iron.—*In the stage of cheesy ramolissement*, they are alkaline; mixed with water, the solution is partly coagulated by heat; the albumen being removed, a liquid remains, which, like milk, is precipitated by acetic acid, and, when evaporated by a gentle heat, forms a pellicle. In order to ascertain whether the liquid obtained from the tubercles presented any analogy with cow's milk, they were mixed with carbonate of barytes and water; the result in both was identical.—*When passed into the state of a calcareous concretion*, they contain but a small proportion of insoluble salts (phosphate and carbonate of lime); on the contrary, they have considerable proportions, 70 per cent., of the soluble salts (chloruret, sulphate and phosphate, of soda). This fact explains why the sputa of phthisical patients sometimes have a saltish taste.—3^o *Comparison between a diseased and a sound liver*. The analysis was found to be:—

	Diseased.	Healthy.
Water	55.15	76.39
Animal matter dried to 212° F. ..	13.32	21.00
Saponified fats	30.20	1.60
Cholesterine	1.33	0.17

The accumulation of the fatty matter is probably owing to the imperfect state of the respiration.—(*Bulletin de l'Acad. de Med.*)

Cancer of the Stomach.—According to Professor Rostan, this denomination is improper, applied as it is to different lesions, such as encephaloides, scirrhus, &c., an opinion which has already been expressed by Professor Andral, and many other authors. The disease does not, as is generally stated, commence with hypertrophy; the membranes not only increase in volume, but likewise are in a diseased state, which does not take place in hypertrophy, where the parts are simply thicker than usual. In cancer, they are generally changed into an amorphous mass, which presents none of the characters of the constituent parts of the organ. On other occasions, on dividing the mucous membrane, it is found simply hypertrophied, and, on penetrating deeper, the fibrous and muscular coats are perceived in a similar condition. When the thickening has reached a certain de-

gree, the parts assume an appearance like bacon; they become firmer, and produce, when cut, the crackling noise characteristic of scirrhus. This degeneration may not only affect the stomach, but also extend to the surrounding organs, even the vertebral column. As to the frequency of the disease in the different parts of the stomach, they may be classed as follows: pylorus, cardia, little curvature, great curvature, and, lastly, the whole organ at the same time. The alteration may affect:—1^o *The vessels*, causing hæmorrhages; this accident may, however, not only be produced by ulceration, but likewise by exhalation; 2^o *the nerves*:—Dr. Prus, who has published an important work on the state of the pneumogastric nerve in cancer of the stomach, states that, frequently, it is impossible to distinguish it from the diseased parts. The three principal signs of this affection are, vomiting of a dark liquid, pain and swelling; they may, however, exist without cancer, and *vice versa*. The following cases are proofs. A young woman entered the *Salpêtrière*, presenting a tumour in the epigastrium, accompanied by vomiting and pain, and, after remaining some time in the hospital, left it much in the same state as on her entry. Many years after, having met with the same person, I was astonished to find that the tumour had completely disappeared, and with it the other morbid symptoms. At her death, the autopsy having been performed, I found the gastric mucous membrane healthy, and that the tumour was formed by a cyst situated between the rectus and transversalis muscles, nothing remaining but a small kernel, the liquid portion having been absorbed. A woman, in the same hospital, had experienced, when 30, all the characteristic symptoms of cancer of the stomach; the vomiting after some time disappeared, and the patient lived, or rather languished, twenty years longer. At her demise, the cessation of the emesis was explained by the existence of an ulceration, which had enlarged the pylorus, previously narrowed by the cancer. But this last-mentioned symptom may, as Dr. Magendie has demonstrated, be owing to the contraction of the abdominal muscles, and it is thus, that we may account for persons, the coats of whose stomachs are incapable of contracting, being still able to reject the substances contained in that organ. An important question here presents itself. Can this disease be cured? The Professor answers affirmatively, and quotes in favour of this opinion several cases: that of Beclard, who died of an affection of the brain, after having presented, some years previous to that event, evident signs of an organic disease of the stomach. At the *post-mortem* examination, a cicatrix was found on the mucous membrane of the stomach. Also, that of a young rachitic woman, who offered all the characteristic signs just described: vomiting; pain; tumour in the epigastrium; yellow tint of the skin; all of which, however, disappeared, and the patient died many years after of disease of the heart. On examining the stomach, the mucous membrane, lining the pylorus, was wrinkled by the seat of a fan-like cicatrix, indicating, manifestly, the previous existence of an ulceration. It must not be forgotten that tumours, in elderly persons, may be formed by a collection of feculent matter in the transverse colon, and be accompanied by pain and vomiting; in this case, a purgative will set all to rights.—*Gaz. des Hop.*

Academy of Sciences.—Sitting of the 21st Oct.—Baron Charles Dupin in the Chair. Received "Dissertation on the true age of the world, in which is determined the chronology of the period, from creation, to the Christian era," by Professor Wallace.—Lieut.-Col. Everest, F.R.S., late Surveyor General and Superintendent of the great Trigonometrical Survey of India, present at the sitting, offered a copy of his memoir relating to the Geodetical operations of India.

On the Coloration of Bones in Animals fed on Rubia Tinctorum: by A. Brullé, Professor at the Faculty of Sciences, Dijon. The author, conjointly with Professor Hugué, performed several experiments to ascertain whether the fact announced by Duhamel was correct or not. Thus, several animals, whose bones had been coloured by madder, were submitted to their ordinary food, and the result was, that the bones be-

came white; that they whitened in some places, and remained red in others; that this took place, more or less, according as the ordinary food had been given for a greater length of time. The author concludes, from his researches, that, in bones coloured by madder, the red tint does not disappear with the osseous substance; that the red layers are covered only by white ones; that the layers, which appear white, are not really so: but, when examined carefully, present a tint which decreases in intensity as the distance from the red portion increases.

On the Maturation of Fruit: by M. E. Fremy.—From the facts related in this memoir, the following conclusions may be drawn:—1° When a varnish is put on fruit, so as to prevent the action of the air on its surface, and its transpiration, the development does not take place; 2° the transformation of oxygen into carbonic acid, during the maturation of the fruit, is a phenomenon which seems to be dependant on its organization; for, when the pericarpium is crushed, this no longer takes place; 3° the gas, contained in the fruit, is often a mixture of azote and carbonic acid; oxygen exists in notable quantity, but in green fruit. This result confirms the observations made on the respiration of the fruit; 4° the tartaric acid contained in the grape, is not owing to the chemical changes which take place in the molecules of another acid, since it exists in all the phases of the development of the fruit; 5° the fruit of a tree, watered with an alkaline solution, though its exterior and its aroma are as usual, presents a peculiarity, viz.: a very small quantity of, if any, sugar; 6° at the moment of maturation, the acids contained in fruit are partly saturated, and form salts of potass or lime; 7° the changes which fruit undergoes, when fallen from the parent stem, belong to a species of decomposition, on which the air exercises considerable influence; and, in some cases, the cells of the pericarpium lose their adherence; 8° some azotised substances, of vegetable or animal origin, change their organic salts into carbonates. This curious property not only shews how the alcalis are regenerated during vegetation, but also explains the origin of the carbonate of lime, deposited frequently in the tissue of the leaves. The author announces that he intends reading, shortly, another memoir on the composition of fruits at the different periods of their development. The researches, in this memoir, will be performed with M. Decaisne, to whom devolves all that relates to Botany.

Researches on Anisic Acid and its Compounds. By M. A. Cahours.—Under the influence of not very powerful oxydating substances, the molecule of the essence of the *pimpinella anisum* is separated into two parts, which, being oxydated separately, produce oxalic acid and hydruret of anisyle. This last, when mixed with a substance that yields its oxygen with facility, is converted into anisic acid, which may, also, be obtained by boiling the essence of *pimpinella anisum* with nitric acid; formula $C^{32}H^{16}O^6$. This essence differs essentially from that of *cuminum cyminum*, in its isomeric constitution, the molecules of which, in similar cases, give rise only to cuminic acid.—*Hydruret of anisyle*, when pure, is liquid; of a slight amber colour, which darkens in time; an aromatic odour similar to new made hay; pungent taste; slightly soluble in water; soluble in alcohol and ether; boils between 541° and 545° F.; is dissolved by ebullition in a solution of potass; formula $C^{32}H^{16}O^4$. If we admit the separation of the molecule into two parts, as above stated, we have the following formula: (essence of anise) $C^{40}H^{24}O^2 = C^8H^8 + C^{32}H^{16}O^2$. The carburet of hydrogen C^8H^8 furnishes oxalic and carbonic acids; whilst the ternary compound, $C^{32}H^{16}O^2$, first absorbs O^2 to form the hydruret of anisyle, and then O^4 to form anisic acid. The oil, obtained by the action of nitric acid on the essence of *pimpinella anisum*, when mixed with bromine or chlorine, loses an equivalent of hydrogen, and absorbs an equal quantity of the bromine or chlorine. Ammonia transforms it into a crystalline substance; with potass, hydrogen is disengaged, and an alkaline anisate is obtained. Formulae:

Hydruret of Anisyle $C^{32}H^{16}O^4$
Chloruret do. $C^{32}H^{14}O^4 + Cl^2$

Bromuret do. $C^{32}H^{14}O^4 + Br^2$
Anisidryamide $C^{32}H^{16}Az$ 3-fourths O^2
Crystallized Anisic Acid $C^{32}H^{16}O^4 + O^2$

The ethers, formed by anisic acid, have not the property of uniting with bases, but are neutral compounds; these, as well as that obtained with salicylic acid, present a peculiarity when chlorine, or bromine, is added to them; these substances act on the acid, not the base, as M. Malaguti has observed, in most of the ethers he has examined. The chloranistic, bromanistic, or nitranistic ethers, may be obtained by causing chlorine, bromine, or fuming nitric acid, to act on anisic ether, or the anisate of methylene. All the ethers obtained from anisic acid and its compounds, with *esprit de bois*, are analogous in their composition to those produced by the action of salicylic acid on alcohol; this is not astonishing, since anisic acid differs from salicylic acid, by $+C^4H^4$, and the *esprit de bois* from alcohol, by $-C^4H^4$. In fact, the formulæ are as follows:

Anisic Acid	$C^{32}H^{16}O^6$	$-C^4H^4 =$	Salicylic Acid.
			$C^{28}H^{12}O^6$
Esprit de bois	$+C^4H^8O^2$	$+C^4H^4 =$	Alcohol.
	H^4O^2		$C^8H^{12}O^2$
			H^4O^2
	$C^{36}H^{20}O^6$		$C^{36}H^{20}O^6$

Anisate of Methylene. Salicylic Ether.
Academy of Medicine. Sitting of the 22nd Oct.
Dr. Ferrus in the chair.—Dr. Desportes stated, that what he had said was not reported in the *proces verbal*.—Dr. Dubois d'Amiens, in reply, said, that he had not so done, because, very frequently, words escape a speaker, which he would not like to have mentioned in the proceedings.

Craniotomy.—Dr. Capuron read a report on a memoir of Dr. Negrier, Professor of Midwifery, at the secondary school of Angers, on craniotomy, and on a new instrument for performing this operation. Conclusions: thanks (adopted).

Vaccine.—Dr. Fiard read a memoir on the result obtained with the new matter, and its comparison with that formerly employed. (The principal facts in this memoir have already been published in the *Medical Times*; proceedings of the Academy of Sciences.) Several members having requested that the memoir should be sent to the *Comité de Vaccine*, Dr. Cornac proposed naming Dr. Gaultier de Claubry on the present occasion, the more so as he had assisted at the experiments already performed.—Dr. Bousquet stated, that his absence alone prevented his mentioning, to the Academy, the result of the comparison made with the two vaccines. He had vaccinated children on one arm with that of 1844, and, on the other, with that of 1836, and found no difference; he, however, intended repeating the trials with Dr. Fiard, and would not fail informing the Academy as soon as any result was obtained. Dr. Cornac's proposition, being seconded, was now adopted.

On the Action of Vinegar and Acetum Cantharidis on the System.—Dr. Brame, Professor of Chemistry at the Preparatory School of Medicine and Pharmacy, Tours, read a *resumé* of his experiments, performed in order to ascertain the action of acetum cantharidis on the system. The peasants, in Touraine, collect, as is well known, large quantities of cantharides, which are killed by means of vinegar, into which they are thrown. This vinegar is often kept for the ensuing year, and being in the hands of a great number of individuals, has, through mistake or otherwise, been the cause, not only of serious accidents, but even of death in many families, and it is to this substance that a recent case of poisoning may be attributed. Dr. Brame has ascertained, from analysis, that vinegar dissolves a sufficient quantity of the active principle of the cantharides to become a poison, and cause death in small doses. This substance is the more dangerous, since the symptoms, produced by it, differ but little from those of very violent gastro-enteritis; in some cases, it is true, phlyctenæ and ulcerations may be observed in the mouth, but they are not constant. Besides this, the dogs, on which Dr. B's experiments were performed, died, without anything indicating, a short time previous, that this result was about to take place. The acetum cantharidis, prepared with one part of cantharides, and twelve of vine-

gar, at the dose of 3x., in the space of six hours, killed a middling sized dog, kept fasting twenty-four hours previously. The same, given daily, at the dose of 3iss. or 3ij., destroyed another on the sixth day. The lesions, observed on these dogs, were principally in the intestinal tube, the urinary organs, and the different liquids. Thus, in the animal which died six hours after the administration of the poison, the vascular system was so full of black plastic blood, as to resemble an artificial injection. Vinegar itself, as Dr. B. proves by comparative experiments, produces, in small doses, similar lesions, though less manifest; but, what is peculiar to the active principle of cantharides, soluble in vinegar, is the contraction of the bladder, which organ, in the first dog, was not larger than a walnut; the increased size of the prostate; the lesions of the kidneys, the ureters, the mucous membrane of the bladder; and the alteration in the gastric juice, which becomes alkaline and albuminous, and contains the colouring matter of the blood. If the poison has acted energetically, and caused death to ensue rapidly, the substances contained in the intestines are composed of bile in an altered state, albuminous fæces, and the colouring matter of the blood; the urine is also albuminous and alkaline. Vinegar may produce the secretion of an alkaline, but never of an albuminous, urine. Another remarkable fact, mentioned by Dr. Brame, is, that one part of the acetum cantharidis, prepared as before stated, mixed with 100 parts of milk and the white of an egg, prevented putrefaction taking place; and the liquids found in the stomach of the dog, which had taken the medicated vinegar for six days, possessed the same properties. Moreover, the bodies of the dogs offered, for several days, no decomposition, although the temperature was at 86° F. As to the principles dissolved in the vinegar, Dr. B. ascertained that the green oil and the cantharidine were soluble; but, as his experiments are not yet terminated, he does not positively assert that this alone is the case. Be it as it may, the facts announced are of sufficient interest to draw the attention of those persons who study pathological anatomy, or legal medicine. Thus, the former will find, perhaps, in the rapid production of albumen, in the gastric juice, and especially in the urine, coinciding with the plasticity of the blood, facts by which several obscure points of the history of phlegmasiæ may be elucidated; and the latter, whether, after the administration of this poison, it is not possible to discover the crime, though this substance cannot be recognised in the parts after death. Finally, its powerful action on the urinary organs will, in all probability, cause it to be prescribed in certain diseases of this apparatus.

Encephalocèle.—In the previous sitting, said Professor Velpeau, I stated my regret at being unable to give the necessary details on the case of the child, presented by Professor Moreau, not having had time to examine the parts. Since then, I have carefully dissected them, and I discovered that we were all wrong; and I will confess my errors, convinced that my honourable colleagues will be equally frank. But, before stating in what my error consisted, I wish Professor Blandin to mention anew his objection as to the presence of the dura mater in the kyst. If I remember right, he said that the liquid, if it was not in that membrane, had, in all probability, escaped through an opening in it.—Professor Blandin, in reply, stated that he had said there were not two kysts, but only one.—Professor Velpeau: The walls of the kyst were lined with a pseudo-membrane, distinct from the dura-mater; the part, which protruded, was not formed by the cerebellum, but by part of the left lobe of the cerebrum, and it was this which gave rise to the difference observed in the size of the two hemispheres; in the lobe which formed the hernia, clots of blood, of ancient date, were perceived; the opening in the occipital bone was small, and lined with false membrane; the pedicle of the tumour comparatively small. So much for the pathology; and now I will add a few remarks on the operation, and on its necessity. As to the latter, evidently the child was doomed, if nothing were done; and, as the removal of the tumour was

the only resource, it, consequently, ought to have been performed; but, as to the former, was the modus operandi the best? I think so. Reduction was impossible; a ligature, employed alone, would have been of no use, no more than excision. I, therefore, concluded, and still am of opinion, that the union of the two last was the best. But, as this case is unique, it is impossible to reason by analogy. Finally, as to the cause of the death: I do not think it can be attributed to the operation, there being numerous facts on record, in which patients survived, after losing suddenly a part of their brain, quite as large as that removed in the present case. At the demand of Professor Berard, the discussion of this interesting case was postponed to the next sitting.

On Anatomical Models.—Professor Berard presented, in the name of Drs. Carteaux and Chaillou, models of several parts of the human body, made by a process invented by them, and by means of which the different organs may be faithfully represented.

Esthiomenos of the Face.—Dr. Gibert presented a patient cured by him.

Fœtus; absence of the Upper Part of its Skull.—Dr. Niélas presented the body of a fœtus, born during the eighth month of intra-uterine life. The mother (it was a first labour) experienced during pregnancy frequent syncope, and her breasts did not develop themselves. The movements of the fœtus were felt, for the first time, in the fifth month, and were never very strong. The accouchement presented nothing extraordinary, the only accident being the escape of a small portion of the cerebral substance, during the last uterine contractions. The fœtus lived thirty-three hours, and, on examination, was found to offer the following defects: 1^o absence of the upper portion of the bones of the skull, the brain being covered by the skin, which was thinner than usual; 2^o absence of several phalanges on the hands and feet; 3^o abnormal adherences of several parts of the face, and of the fingers and toes. After dissection, a detailed account of the state of the organs will be read before the Academy.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

Erratum.—P. 60, col. 1, instead of "after several ineffectual attempts, they were removed," read, "after several ineffectual attempts, it was removed."

NOTICES TO CORRESPONDENTS.

A Friend (Brighton).—We shall report the discussions of the Medico-Chirurgical Society this year, as last. The other Societies we shall notice, whenever the discussions happen to be of higher interest than the average they have usually reached.

S.—There are three or four Lectures by Sir B. Brodie, forming adjuncts to those published, which we hope to give very shortly.

Mr. Leader.—Any well-meaning man will set our correspondent right as to the best mode of entering the Profession, if he be fit for it.

A Practitioner suggests that the University of London, in its examinations, should have the examiners sent in, without a name attached, sealed envelopes, opened after the examinations, being the only means of finding out the author. Our correspondent does not suppose any injustice done at present by the distinguished examiners—but has observed that the disappointed student always imagines that he owes his defeat to an improper preference.

Two or three papers have reached us, on the Spleen. We cannot, however, give more of our columns to a subject already much discussed in them.

Medicus-Chirurgus sends us some suggestions on Medical Reform. He recommends assimilation of qualifications for each grade, freedom of Pharmaceutical Practice to all medical men, limitation of Medical to Medical, and Surgical to Surgical Practitioners, and Examinations of Chemists and Druggists, &c.

Mr. W. S.—Argus—A Council-man—A Warm Friend—declined. We must exclude all further notice of the transactions.

The Poor-Law Commissioners.—These gentlemen have addressed the Poor-Law Guardians of Sturminster Union, approving of all Mr. Deshon's treatment in the case recently narrated in our columns; but noting, as worthy of admonition, his attending the patient every other day, instead of every day. Mr. Deshon, we understand, is so disgusted with the unhandsome treatment he has received, that he has announced his intention to resign his medical officership to the Union.

Several papers—amongst others, Dr. Rigby's Reports—are unavoidably postponed till next week.

Chirurgus.—Caveat-emptor. If the treasurer sues them, he sues us.

Anatifax.—Dr. W. M. is one of the few cheats who begin with deluding themselves. He is a mistaken enthusiast. We believe he is a reverend gentleman. The work named would be only advertised by our notice.

The Scotsman has been sent at least half-a-dozen times to us, to call our attention to some strictures there given on the pencilling of Professor Syme. After stating that our sketch was not written by a rival, or any one malicious, we really must be excused from entering into the aimless discussion whether it was the Town Council of Edinburgh, or the Government, with which the understanding was come to that the aged predecessor should retire: and as to the very harmless persiflage on the personal characteristics of Mr. Syme, a controversy would be much like an attempt to fether the winds. No charge of an immoral or disgraceful tendency was made, or even remotely implied—and the Professor's intellectual deserts were certainly not under-rated, or ungrudgingly lauded. We gave him in our columns, as we honestly thought he gives himself to the world medical: and if he be handsomer or more amiable than we have fancied, we shall be glad to say that he is so far above the common estimate. We should correct one error—not material, however. We have learnt that Mr. Syme declined the duel with Mr. Liston, not "on principle," as we said, but from a delicate domestic incident, that every husband and father can appreciate.

A rather prolonged revision of Dr. Corrigan's second lecture, again postpones its appearance till next week.

THE MEDICAL TIMES.

SATURDAY, NOV. 2, 1844.

Those best can bear reproof who merit praise

THE Medical Association of Marylebone—or rather the forty respectable gentlemen who form its Committee—we give their names below*—have just issued what, however magniloquently called "a manifesto," those who approve and those who condemn, must equally admit as most important. Accepting—it would appear—in a good spirit, the correction we with more unwillingness, than pleasure administered to their last published resolutions, they have prefaced this pamphlet with the modest motto—"Moniti meliora sequamur," and we are bound to own, that this time, in point of language, the most anxious stickler for our brethren's literary character, can see nothing to complain of. On opinions our dissidence, we fear, is as great as ever.

On the numerous clauses which point out the value of the General Practitioner, we have nothing to remark. If people are ignorant of our importance, it is well they should be taught it; albeit the task may enforce on our delicacy the violence of exhibiting ourselves as the exponents of our own high merits. Mr. Pennington, and the

forty practitioners, have done this duty *con amore*. We were never better pleased with ourselves than seen in their mirror.

This is all plain and very agreeable sailing. It is when they come to discuss the Bill that they get out to sea. Why, before the perilous voyage, was there no friend (*ex.gr.* the selector of the motto) to cry out

Quid axis? Fortiter occi pa
Portun, Nonne vides ut
Nudum remigio latus, etc!

Only imagine that of the two proper "objects" of a Medical Bill, the second announced is, "to protect the rights and privileges of qualified men, and to render it penal for unqualified persons to practice!" We do not know whether the penalties are to come when the "protection" has been given, or are to be the means of giving the "protection,"—but in either case, we must protest that, however useful or politic they may be, they constitute neither of the two objects of Medical Legislation. Penalties are bad enough as means—but as an object—the great "object of Medical Legislation"—Heaven forbid that a British Parliament should ever think of them.

We are then told that the New Bill is nugatory in protecting either the public or profession. Now, if this were true, the bill might yet be good, for the great objects of Medical Legislation can only be considered a twofold kind of "protection" by gentlemen who have a very exaggerated notion of the benefits of State almsgiving.

We affirm that protection is the very least of our wants. Give us justice, give us fair play, and we shall know how to protect ourselves. Protection is for the feeble, the helpless: the strong man, if honest, is independent, and if fairly dealt with, knows how to defend himself. No! gentlemen! "the proper objects of Legislation in medical affairs," are not protection, but justice. Protection is the exception, not the rule: the weak and ignorant victims of Quackery demand it: and, as citizens, it is our duty to get it for them: but, for us, the things to be desired are, among others, first, a responsible guarantee that the cupidity of our Medical Corporations shall not lead them to inundate us with unworthy members, and, by flinging all kinds of suspicion on our competency, depress our social standing; secondly, a system of Medical Government which shall unite us into one body, each member of which shall be distinguishable by undoubted marks to his brethren and the Public as a qualified Practitioner (forming us in fact into a great Profession, directly connected by its best members with the Government of our country—whose acts, in a great department of its policy, it may directly influence) and thirdly, a general system of Medical administration, by which the scientific energies of our brethren, may be stimulated to their utmost exertion, alike to the honour of the British Profession, and advantage of our race. These are results, which would make any Medical Bill valuable that would produce them; and yet are wholly overlooked by our Marylebone friends in their draught of what they conceive the cause of Medical Reform demands!

Before leaving this interesting Pamphlet for next week's further notice, we must extract from it the observations made on that project of a College of General Practitioners, which, according to our double warning, the insane proceedings of the London Surgical Council, were sure to warm into existence. Differing as we do, in several points, from the Marylebone Committee, we cannot but admit with an earnestness that approaches to

* President—Robert R. Pennington, Esq.; Vice-Presidents—John Property, Esq., James Clayton, Esq., George J. Squibb, Esq.; Treasurer—John Dodd, Esq.; Members of Committee—Henry Ansell, Emanuel Baker, James Bird, Isaac B. Brown, Walter J. Bryant, Arthur Cocke, C. Craddock, Nathaniel Grant, Nicholas G. Hobson, W. H. Hodding, Thomas Jervis, Edward Joseph, P. Jackson, John Keal, J. W. Lambert, W. Owen Lucas, William Maclure, Edwin Moss, William Macdonald, Edward Newton, Thomas G. Phillips, Thomas Porter, William Richardson, Robert Tanner, T. Tunaly, W. R. Vickers, George Webster. The Honorary Secretary still continues to be Mr. Wm. O'Connor.

solemnity, that the recent conduct we have had occasion to notice and denounce, from the London College to its members, justifies—as far as it is concerned—any procedure which would deliver from their absurd and foolish—nay, childish—in-sults, to the General Practitioners of this Country. Another, and more serious circumstance, which we suppose our Marylebone friends, have duly weighed, is whether so grand a secession could be accomplished, first, with success, (a doubtful matter,)—and secondly, with the avoidance of greater evils than those likely to be incurred by taking other

“—arms against the sea of troubles,
And by opposing, end them.”

Let, however, their own observations speak for them rather than we:—

“That the first step towards procuring a prompt and efficient remedy for the evils that afflict this large and important class in the profession, (general Practitioners,)—the anomaly of position, the defects in education, the want of defined privileges and protection,—is, unquestionably, for the great body of general Practitioners in the kingdom to combine, and form a society of their own.”

“That, manifestly, nothing would so effectually secure the public interests, as the establishment of a College of General Practitioners in Medicine, Surgery, and Midwifery; and, therefore, the further object should be to obtain a Charter of Incorporation, and a new Act of Parliament, or a modification of some existing Act, giving an elective Council, and Court of Examiners, with power to frame bye-laws, and to examine and license all future General Practitioners.”

“Est modus in rebus; sunt certi denique fines,
Quos ultra citraque nequit consistere rectum.”

We quote the famed axiom of Horace as a fitting motto with which to head a certain scrutiny we have made in the case of the Birmingham General Hospital. The subject possesses an immensity of local, and not a little of general interest, from the relation which it holds to medical institutions and elections generally, and from a popularity with which it has been invested by—among more important causes—the criticisms of contemporary journals. We have carefully, and with every impartiality, read the various epistles of Mr. Gutteridge and Mr. Ledsam, concerning the alleged enormous abuses of the Hospital in question; and with the object of honestly confirming or confronting them, we have made every possible inquiry of sources well-informed in all the bearings of the subject. Be it understood, then, that we approach it without prepossession or prejudice—without any love for its notoriety, or for its facilities of scandal—without any knowledge of the accusers or the accused, further than has been obtained from printed documents and facts,—but with a full, fair, and free determination to compare these documents and facts, scrupulously, with each other; and with a sincere hope to be able to lay an unvarnished tale and an unveiled truth before our readers.

In the several allegations that have been made by Messrs. Gutteridge and Ledsam, there is mixed up so much personality and pique, that we have had some little difficulty in sifting them, so as to get at the general subjects—which, of course, we can alone entertain in our columns. The burden, then, of the charges is, first, that Mr. Gutteridge was deprived of the Surgeoncy to the General Hospital at Birmingham, by some illegal proceedings of its managers; and, secondly, that corrupt means are used, and undue influence exerted, habitually, by certain attorneys of the town, to secure the election of the Medical Officers. The

Lancet for Oct. 12th, 1844, p. 19, declares that “no answer has yet been put forth to any of Mr. Gutteridge’s statements.” *Nous verrons.* As the *Lancet*, however, has a sort of license for not being very particular in what it says, we conceive it to be better worthy of us to refute than to reprimand its voluntary statements. It tells us (*loc. cit.*) that, “on the 17th of March, 1843, Mr. Jukes, a Surgeon of the Hospital signified his intention of vacating his office in the June following”—that, “the attorneys filled up the appointment as early as the 21st of April, although the legal day of election was not until the 16th of June.” On consulting the *Birmingham Gazette* for March 20th, 1843, we find therein Mr. Jukes’s actual resignation, dated March 17th, and Mr. Gutteridge, amongst others, applying for the vacant office. And in the newspaper of the week previously (March 13th), we discover Mr. Gutteridge anticipating Mr. Jukes’s resignation, and advertising himself ready and willing to serve in his (Mr. Jukes’s) place, whenever it should be accessible. So much for attorneys, or any other class of men, getting the start of Mr. Gutteridge, or conducting covertly an election.

The next charge is: that the election of Mr. Jukes’s successor was fixed for the 21st of April, instead of the 16th of June—thus, leaving only 35, instead of 90 days, for canvassing subscribers, collecting proxies, &c.* To us the space of five weeks has “ample room and verge enough,” in all conscience, to summon one’s friends and supporters at a Provincial Hospital election. Therefore, as regards the chances of candidates, we should say that the man who could not get his votes together in five weeks, would not be likely to muster a large amount if three months were given him. Now for the *cui bono* of shortening the date of election. What was it? Simply this. Mr. Jukes, from a daily-increasing infirmity, which has lately numbered “an honoured and an honest man” with the dead, gave up his appointment, because he could not fulfil its obligations. The managers, unwilling that the Institution should be long deficient in a member of its Surgical Staff, altered the day that was authorised by the custom of previous elections, for the appointment of Mr. Jukes’s successor. This was the sum and substance of their offending. Scores of sick and afflicted were waiting the services which had been lost to them by Mr. Jukes’s sudden, melancholy, and fatal illness—and the wicked, hard-hearted, inconsiderate managers, rather than suffer these poor creatures to languish and die, appointed that the usual canvassing gossip should be shortened, and that every man must be ready with his friends and voters in five weeks! Cruel managers! You can never hope that the prayers and praises of those you hastened to relieve, will be heard above the groans of Mr. Gutteridge, or the lamentations of the *Lancet*. On March 17th, 1843, the day of Mr. Jukes’s resignation, it was resolved, by the Weekly Board of the Hospital, that “the Governors be requested to keep their votes disengaged, until the day of election; and that candidates do send in their names, testimonials, and places of abode, addressed to the Secretary, on or before Thursday, the 13th of April.” And it was further resolved, “that this Board be adjourned until Friday, the 21st of April, to meet at the Public Office to elect a Surgeon to fill the vacancy.” (*Birmingham Gaz.*, March 20th, 1843.)—Now, whether the election of Surgeon had been appointed to take place in five weeks, five months, or five years, the order of the Weekly Board as to the sending in of names of Can-

didates, &c., ought to have been abided by. It is a power inherent in the Annual, Quarterly, or Weekly Board; it is a law, in fact, that one of these Boards, as the case may be, shall order the names of candidates, &c., to be sent in by a certain day, and shall order the Medical Board to examine and report them, and that these forms shall be observed prior to the election of any medical officer. It must also be borne in mind that the day or date of these observances is left to the discretion of the Board, and has no necessary relation to the day or date of an election. At the time appointed, Mr. Crompton and Mr. Amphlett sent in, in due form, their applications and testimonials—they were the only men who did so—and were, consequently, the only candidates for the vacant office, at what time soever it might be filled up. On the advertised day of election, Mr. Amphlett resigned, and Mr. Crompton, being left without an opponent, was proposed, seconded, and elected, unanimously—not a voice being raised against him.

Subsequently, Mr. Gutteridge sent, *uninvitedly*, his application, &c. On the 2nd of June, the Weekly Board agreed to send them back unopened, inasmuch as they had not been forwarded at the required time; and there was nothing relating to them that the Board could take cognizance of. It will be seen that, however Mr. Gutteridge might dispute the day of election, he ought not to have disputed and disregarded the time advertised for names of candidates, &c.; but as he did do so, the Board had no alternative, but to disregard his future communications.

On the 16th of June, 1843, at a Quarterly Board of the Hospital, Charles Shaw, Esq., in the Chair, Mr. Crompton, in consequence of Mr. Gutteridge’s complaints about the illegality of the date of the last election, openly and freely resigned his appointment, willing to give to Mr. Gutteridge, and to every other man, in common with himself, another opportunity of contesting the office. Mr. Vaux, on the same day, resigned his surgeoncy, himself being about to leave the town. Two vacancies, therefore, were declared on this, the 16th of June, to be filled up on the 15th of the following September. On the 17th of June, the day after these declared vacancies, Mr. Gutteridge dates a letter, which appeared in the *Birmingham Gazette*, of June 19th, announcing himself as a candidate for one of the “two vacancies in the Surgical Staff of the Hospital.” “The election,” he says, “to supply both is fixed for the ensuing Quarterly Board day, the 15th of Sept. I beg leave again respectfully to tender my services as surgeon, and to solicit the favour of your support.” This advertisement he over and over again repeated; and, in the *Birmingham Gazette* for August 28, he says, “On the 15th of Sept., I shall appear, of course, as a candidate,” &c. What better proofs than these could we have that Mr. Gutteridge considered the two vacancies, advertised to be filled up on the 15th Sept., *valid*? And what better personal proofs could we have that they were *valid*, for Mr. Gutteridge was the only likely man to raise a quibble about them, if opportunity had served? The names of candidates, &c., were ordered by the Quarterly Board of the 16th of June, to be sent in on the 31st of August. Mr. Gutteridge, in common with others, sent in his application, &c., which, with the rest, were in due form examined, and reported upon. The 15th of Sept. came—the legitimate day, “as it was in the bond,” for the election. Three candidates were proposed and seconded—Crompton, Amphlett, and Baker—Gutteridge, after many attempts, could find no man bold enough to nominate him; but the ballot gave him four votes, whilst nearly as many hundreds were given to the two first candidates. Crompton and Amphlett were, of course, declared duly elected: and Mr. Gutteridge immediately, on this very day, claimed a prior right to act as Surgeon to the Institution! Our readers may perhaps smile, but it is a fact. After having advertised himself in the newspapers, and sent in his personal application to the Board, for the vacancy to be filled up on the 15th Sept., on that day, after having searched in vain for a proposer and seconder, he claims to have been appointed on the 16th of the previous June, to an

* It must be understood that there is no fixed time required to intervene between the resignation of one medical officer and the appointment of another. If the resignation should occur, as Mr. Jukes’s did, at one Quarterly Board, the custom has been not to fill up the vacancy until the meeting of the next Quarterly Board, thus making an interval of three months; but if it should occur at any time (sufficient for advertising, &c.) before the Quarterly Board next ensuing, at that Board the new appointments would be made. So that, whilst in one case three months might intervene, in another, there might be only a fortnight.

office, which he himself, in the *Birmingham Gaz.*, of the 19th of June, and on many subsequent occasions, advertised to be vacant. Well may the *Lancet* cry "*proh pudor!*"

We must do Mr. Gutteridge's energy the justice to say that no opportunity was lost by Mr. G. himself on the 15th September, to secure his election. He was in *propria persona* at the public office; he importuned some half score of men to nominate and second him, and all refused; and he had a dozen or more paupers in an anti-room, in rank and file, living monuments of his professional skill! Yes, hear it, all ye who sneer at testimonials, Mr. Gutteridge took none of your dirty scraps of paper from Doctors and Professors in this antiquated University, or in that emporium of learning, but he had a staff of *bona fide* patients, of all sizes and shapes, dancing a Polka of praise around him, and vowing that but for his skill they should have been dead and buried! Yes, these were Mr. Gutteridge's testimonials, and this was his sense of professional honor—old men and women, scamps, scavengers, and cadgers, *et hoc omne genus*, not bottled but bolstered up, living advertisements of the skill of a man who wanted to be a Surgeon to the Birmingham General Hospital! We scarcely think our readers will wonder that he did not prove successful. Now let us sum the matter up as far as we have gone. Mr. Jukes resigned, from fatal indisposition, his situation in the Birmingham Hospital—the managers, unwilling that it should lack the services of one of its surgical staff, ordered that at the end of five weeks, instead of three months, his successor should be appointed—the Weekly Board required the names of candidates &c., to be sent in on a specific day—two candidates only, obeyed this requisition—one resigned, without a murmur, on the day of election, and the other was appointed, legally and unanimously. One party, however, who had in no single instance answered the previous requirements of the managers, held that the election was not valid, because forsooth, from humane motives, they ordered the election a few weeks before the accustomed time—the successful candidate, with a rare liberality, resigns his office—the fresh vacancy is publicly acknowledged, advertised, and canvassed for by the declaimer, who in a new election is beaten in the votes at the rate of one hundred to one and he then turns round and declares that he was appointed some months previously, and that justice has not been done him!! We have given a faithful statement and analysis of facts, which we scarcely need say require from us no further comment.

The *Lancet* says (*loc. cit.*) "the nomination of a candidate, (Mr. Gutteridge himself) who had started as a rival to the gentleman temporarily appointed, the chairman on the 16th June, refused to put to the meeting; and the same chairman is reported to have suppressed the reading of certain letters having reference to the business before the meeting, until after its dispersal." These silly charges are easily refuted. In the first place, Mr. Gutteridge could not possibly be a candidate on the 16th of June because he had not sent in his application by the 13th of April, as ordered by the Weekly Board; and he himself acknowledged that Mr. Crompton's resignation rendered the surgeoncy vacant, and afterwards, as we have just shewn, over and over again, advertising and canvassing for it! In the second place, it so happens that the letters were read before the meeting separated. There were two of them, one from Lord Bradford, the other from Mr. Gutteridge. His lordship's letter was to advise that the previous election should be considered null and void, and that the surgeoncy should be again declared vacant. But all this had been done by Mr. Crompton's liberal and independent resignation, so that if his lordship's letter had been suppressed, no harm or injustice would have been done. Mr. Gutteridge's letter, as read by Mr. Unett, was listened to with a fortitude worthy of the name of martyrdom, whilst it detailed in every noble particular, the history of two cases of successful surgical operations performed by himself (Mr. G.), and deducing therefrom, that he was pre-eminently qualified to be a surgeon to the Hospital!

Subsequently to the 16th of June, 1843, Mr.

Gutteridge attacked most violently the private and public character of various of the Hospital Governors, and of Mr. George Whately in particular. On the 7th of September, 1843, Mr. George Whately moved, at a Weekly Board of the Hospital, that a Committee should be appointed to inquire into the charges with which his character had been assailed by Mr. Gutteridge. The Committee met on the following day,* and consisted of Sir Francis Lawley, (Chairman), Rev. John Garbett, James Taylor, Esq., J. W. Unett, Esq., The Rev. Egerton Bagot, Edward Armfield, Esq., John Cadbury, Esq., William Harrold, Esq., J. O. Bacchus, Esq., E. T. Moore, Esq., Westley Richards, Esq., Clement Ingleby, Esq. Of these gentlemen, the third and fifth were the proposer and seconder of Mr. Gutteridge on the 16th of June (when he was not legally a candidate for the Hospital), and his intimate personal friends. The first, seventh, and eleventh, were also his friends. The unanimous decision of this Committee, after every inquiry and cross-examination, was, that Mr. Gutteridge's charges were "unwarrantable and unjustifiable," and "utterly unfounded." This Report was signed by every member of the Committee, and universally circulated. It would have satisfied most men; but it seems not to have satisfied Mr. Gutteridge, for he attacked it and its authors right and left, declared them to be packed, prepossessed, &c., and, in a letter, addressed to the whole batch of them, on the 18th of January, 1844, claimed a public meeting, to be held in the 'Town Hall, or in Dee's Royal Hotel.' Nobody opposed him in his wish; he called his meeting, and held it. Thirteen persons were present, and Mr. Gutteridge had it all his own way; for he appointed no chairman, he gave no evidence, there was neither proposition nor resolution; and so the members met and separated. Between this time and the 20th of September, 1844, the day of the Annual Meeting of the Hospital, Mr. Gutteridge, still a "non-content," printed and circulated various letters, containing a repetition of his alleged grievances, and claiming another Committee of Managers for the investigation of his charges! On the 20th of Sept. 1844, Mr. Gutteridge and Mr. Ledsam, at their joint requests, were permitted to be present at the Annual Meeting of the Governors and Subscribers of the Hospital, for the specific purpose of stating and substantiating, as they solemnly promised, their allegations. There were a hundred Governors and Subscribers present, besides newspaper reporters, and a considerable number of strangers. Lord Dartmouth presided. We have before us a printed report of the meeting, which we have scrupulously compared with each of the newspaper reports of it, and we learn from every and all of them, that after Messrs. Gutteridge and Ledsam had been called into the room and expressly solicited, over and over again, to bring their charges, they positively refused to do so, unless another Committee were appointed! At this part of our subject, the affair is almost too ridiculous for comment. We find Mr. Gutteridge asking for a Committee of Inquiry in September, 1843, which Committee, consisting partly of his own personal friends, met and decided the question against him; not satisfied with this, he declares on the 18th of January, 1844, that he will only abide by the decision of a public meeting; he called one, and held it himself; but he brought forward no facts or charges, and after telling the assembly how fine a fellow he himself was, dismissed it. He then declares that justice has not been done him, and he will not be satisfied, unless he be permitted to appear before the Annual Board of the Hospital. To this Board he is invited, and when he gets there, he says, that assembly won't suit him, and he must have another! To us, this seems a climax of all human absurdity and doggedness. As for the Annual Board, consisting, as it did, of a hundred gentlemen, with the addition of the representatives of the press, and many strangers, being a packed, or prepossessed, assembly, we cannot believe that any man in his senses would, for a moment, imagine such a thing.

* Mr. Gutteridge was invited to attend; but, in spite of having faithfully promised to do so, he failed to show himself.

The *Lancet* of Oct. 26, 1844, p. 136, in speaking of the Annual Meeting, observes—"Messrs. Gutteridge and Ledsam are called upon to furnish proof of their charges. They reply, 'No. Appoint an impartial tribunal to hear and decide upon the evidence which we are prepared to adduce; we shall then be ready and willing to go into the investigation.' Then, in direct violation of one of the standing laws of the establishment, the accused parties remained, and voted that they were a remarkably fine set of fellows." If the Editor of the *Lancet* had troubled himself to ascertain the facts as they were, he would have given a very opposite version of them, for the only difference between his tale and the truth is, that no motion, whatever, was made by the accusers, and, consequently, no vote was taken upon the question of abuses, &c. The managers, disgusted at Mr. Gutteridge's paltry avowal, that the previous committee and public meeting did not suit him, and that the present one was too partial and prejudiced to hear his charges, very properly objected to being called together upon his express business again. As for voting themselves "a fine set of fellows," the Editor ought to have known that the two gentleman, against whom Mr. Gutteridge's complaints were chiefly to be levelled, Mr. George Whately, and Mr. Welchman Whately, were the proposer and seconder of a motion to the effect, that Mr. Gutteridge and Mr. Ledsam "be called upon to substantiate their charge of the 'corrupt system of election of the medical officers of this institution;' and this was the motion, lost almost unanimously, of which the Editor treats with such condescending drollery. And it was lost for the simple reason, that, first, Mr. Gutteridge's charges had been heard, and refuted, on previous occasions; and secondly, that he had already obstinately refused to submit them to the consideration of the present meeting.

Upon the subject of bribery and professional legal services, in the case of medical elections at the Birmingham Hospital, the information we have obtained enables us to challenge any man living to prove, that a bribe or professional fee was ever solicited or accepted by an attorney to secure the return of a medical officer. As for the hundred pounds, unasked for, and unexpected, given to Mr. George Whately by Dr. Evans after the election of this gentleman to the Hospital, we think that the occasion and circumstance of the gift will be best explained in Mr. Whately's own words, published in the *Birmingham Herald* of April 27, 1843. "I think it right (says Mr. W.), in order "to prevent misapprehension, to state that, though "more than once applied to, I have always refused "to act professionally on behalf of a candidate for "any office, except for a seat in parliament; and "that I have never taken a part in any election, in "the hope or expectation of the slightest recompense."

"With respect to the case alluded to by Mr. "Gutteridge, the facts are these:—In the year "1835, Dr. Evans was a candidate for the office "of Physician to the Hospital. He was then, as "now, my intimate personal friend. On two "former occasions, I had gladly rendered him my "best exertions in contests for the Dispensary; "and he felt some delicacy in again accepting "my services, and wished me to act for him professionally. This I positively declined to do, "but tendered him my services as his friend, which "he at length accepted.

"For the space of a month, the whole time of "myself and several of my clerks, was occupied "in the contest, which was unusually severe. "Some time after the election, which ended in "Dr. Evans' favour, I received a most gratifying "letter from him, stating that he and his family "fully appreciated the honourable motives which "led me to refuse my professional assistance; "but he felt that he had no right to permit me to "be a loser in the salaries of clerks, and in the "expenses necessarily attendant upon a contested "election. These expenses were incurred for "postages of letters, horse hire, printing, &c., "which I had paid out of my own pocket. He, "therefore, while he gladly accepted of my own "services, inclosed me a bank note for £100, to "relieve himself of that part of the obligation

"which consisted of a pecuniary debt; and he begged that I would on no account do myself the injustice of refusing to accept it. I consulted my friend Mr. Spooner, of Cheltenham, and, subsequently, Mr. D. Crompton, begging them to tell me how I could return the money so as to give the least possible pain to Dr. Evans. They both thought I could not return it without giving annoyance to Dr. Evans and his family. I felt bound to act upon their advice, and I am permitted to refer to both these gentlemen, and also to Dr. Evans, for confirmation of this statement.

"This is the transaction which has been so much misrepresented, and upon which this charge of unworthy motives has been founded."—(Vide letter.)

As regards corrupt practices and undue influence at the elections in general of the Birmingham Hospital, we have already challenged the proof of a single instance of bribery, professional fee, or unfair persuasion. Mr. Gutteridge's reputed case, we think, Mr. G. Whately's letter sufficiently explained away. After much inquiry and deliberation, we give it as our unequivocal judgment and belief, that the charge as to unjustifiable means of election is utterly without foundation. Neither Mr. Gutteridge, nor Mr. Ledsam (who are the only complainants) has given a shadow of a proof of the truth of his allegations. On the various public opportunities that have been offered them, they have failed to adduce a single particle of evidence. Mr. Gutteridge has written epistles without end, to the cost, he says, of nearly £500; yet, in all this writing, there is no substantiation of charges, save empty charges themselves, and petitions for opportunities to prove them. Now, if these have been withheld from Mr. Gutteridge (which we have already shewn is not the fact), why does he not get at the body of Governors by the means he is most an adept at, viz.: letter writing? Instead of asking them to give him *another meeting*, why not put the evidence he would fain lay before such meeting—in print? It would not only reach every Governor and Subscriber, but we, and the rest of the public, would get at it, and it would last until doomsday. How much shorter, surer, and cheaper a plan would this have been two years ago, than that of begging, from time to time, various opportunities of evolving his budget of untold tales!

As to any undue influence being exerted in the case of the Birmingham Hospital elections, the improbability of such a thing (apart from the absence of every proof of it), is sufficiently shown in the fact, that the Governors and Subscribers are mainly composed of the wealthy merchants and manufacturers of the town, and of the county clergy, gentry, and nobility; most of whom, we apprehend, are neither to be *managed* by bribes, nor by covert influence and insinuation.

PENCILINGS OF EMINENT MEDICAL MEN.

DR. GOLDSMITH.

By nature pre-eminently endowed with a mind sensible to the refinements of life, what a strange and disagreeable world must this English one appear to the poet during the early days of their acquaintance. To predicate of such a person that he is in general poor in the outset of his career, is well warranted by experience, which, commonly and unhappily, supports the further assertion of poverty at its close. To be imaginative,—to conceive all things in the spirit of imagination, veiling them from head to foot in virgin, spotless, beauty—is a quality of the poetic mind, granted by construction, because involved in and necessary to the existence of such a mind. What consorts do these conditions make for one another. To what mind, of all others, would poverty in this English world be the least advantageous. By no means to one that cannot brook with indifference the insolent assumption of mere money; most insolent, by the way, when held in hands whose labour never contributed to its increase. This is no country for Nature to send her bright samples of merit into, unless she provide them, at the same time,

with the bouchal appendage, that so often passes for it, by mistake. To half the English world, in the days of his glory, if he be poor, what is the value of the literary man? Why his fate serves them as a moral by example, to be held, *in terram*, over the first urchin, that indicates an understanding superior to the counter. Do they pity him? Possibly.—Do they relieve him? To what use? Is he not a poet, and will he not be as bad as ever in a little again? If so, and it be true that "the hand of little employment hath the daintier sense," and, by consequence, the hand of much employment, a sense by no means so dainty; to be sure there is more mercy in leaving the unfortunate as he is. Besides, though poverty appear a very great evil to persons that never experienced it, and may seem hardly supportable, there is no telling what shifts are to be made; how a little contrivance with half a dinner here, and a half a dinner at some other place, may eke out a very comfortable—nay, a very glorious existence! Moreover, with these people it becomes, when their charity is pressed upon, a question involving much consideration, whether it be not a flying in the face of their beloved "propriety" to encourage the excesses that induced the present want by removing such want, or lending hand to the removal. For how else could the occasion for charity arise, but through misconduct. Imprudence—mere imprudence, could never have worked such a disaster; and if it be shewn that its original was nothing in verity, beyond an imprudence, the code moral of their constitution will pronounce to you that indiscretion and misconduct are so near one another, it is impossible to discern the distinction. Every one had read such and such a novel; such a picture had been sold for so many pounds; the whole world had gone to see such a play; no library was without such a poem; and what in the name of wonder, but a palpable dereliction from "propriety" could in spite of all this leave the man poor. They forget the hard bargains they have driven in the days of their shopkeeping. The chink of pound upon pound trumpeting the success of their diplomacy over property, beaten from the want of natural or cultivated cunning, and the want of ammunition combined, is a sound no longer remembered. They forget how many of them send forth their virtuous condemnation of "improvident genius" from the silken ottoman purchased with gold and silver, in moral honesty, purloined, from the very man they are denouncing! And where the leaven of the publisher is suggestive of no such remembrance, but the moralist is the simple shopkeeper, generally meant by that designation,—suppose, for instance, the cheesemonger retired, upon his parings—does not he, in the hour of his virtuous inspiration, forget his petty peculations in false weights and prices: the small, by degrees, and "beautifully bigger" system of fraud, whereby he amassed that wealth, which, Proteus-like now transforms into a thousand shapes, so foreign to its first, that the possessor himself is fain to imagine it more worthy than it was, and exalt himself with his possession? Is the labour, unpaid in the times of its plenty, forgotten? No remembrance had of the profit torn out of the mouth of wretchedness, which had no appeal—built up with those elements humanity so much delights in the employment of—with sighs and tears, and hunger and nakedness, and prostitution of honesty in man, and chastity in woman. Did it never occur to this moralist, who now holds his bed of justice from his bed of down, that a little advantage foregone, might make glad hearts in place of bleeding ones; might and certainly would and must have kept some men honest, and some women virtuous, and changed his own condition from that of a brute to that of a human being? Or was he so absorbed in the consideration of himself; so taken up with the desire of portions for his daughters, as an inducement for rank to stoop to the elevation of his family; of professions for his sons, and luxurious retirement for himself, that he had not one moment to reflect, how terrible it is to want the needful things of life; how rending to the heart, wherein the brutal world, which men, like him, compose, has left a drop of feeling to listen to a child's demand for food, when he has none to give it. And if he was in his own sight so dear and precious a thing

as to think a calamity so great, well happened in its result, the aggrandizement of his person—how dare such a man as he raise his voice in condemnation of the wretched, no matter how guilty! Vice, were conduct accountable only to man, should stand in his presence as virtuous as himself, and beyond the pale of his jurisdiction. But if vice need not blush in his presence, what shall be the condition of mere imprudence? And yet so powerful in this country does money make the man, that a fellow of this kind dares even to assail virtuous misfortune itself with condemnation, hazarded, for the most part, by the impulse, to condemn, without warrant of a fact ascertained, or turned up, in the event, and, consequently, a lie!

Is this compensated to the poet by the respect he meets with where his abilities are recognised? Why, indeed, he is never told that he is a vagabond to his face, and perhaps not considered to be one for the reason that suffices elsewhere; nor, truly, if he were so considered, would the door be less open to receive him, so long as he is witty and complaisant, and especially careful of the humours of his patrons. Patrons, and nothing else, are the men that have wealth to those that have it not! And, perhaps, while viewing this fact with some indignation, that a man with brains should stand even in this relation to one without them, it would be well to reflect whether the provision be not a wise one, in order that those who are contemptible by nature should have something by courtesy of society wherewith to patch up their deficiency.

But the same superiority of mind, which in youth is so offended with the world, enables the man after a time, when experience has torn away the bright vestments his imagination had robed it in, and his eye becomes accustomed to it in its native deformity,—that same superiority gives him an elevation wherefrom he looks upon the littlenesses of men with much the same spirit with which rich men regard the miseries of the poor—with the spirit of indifference. He does not despise the world; he "lets it slip!" 'Tis true, he is kicked hither and thither, often making transit from the drawing-room of the nobleman to the confined and confining apartment of the sheriff; but he has a world of his own to retire into, where, happily, he has the regulating of all things to his taste without interference; and finally, one way or other, he lives till he dies, which is all the knowing ones do. Then, again, he lives after he dies, which is more than the knowing ones do, except for the little time that they live in their deeds—and a very miserable existence, in most cases, it is.

From this long introduction, which professes no particular application to the subject of our pencilling, but will include, it is hoped correctly, many others, we turn to Dr. Goldsmith himself, the elegant and hearty author of the "Vicar of Wakefield," "The Traveller," "The Deserted Village," &c. After he had been at college seven years, "my father," he says, "died and left me his blessing. Thus shoved from shore to shore without ill nature to protect, or cunning to guide, or proper stores to subsist me in so dangerous a voyage, I was obliged to embark in the wide world at twenty-two; but, in order to settle in life, my friends advised, (for they always advise when they begin to despise us,) they advised me, I say, "to go into orders."

"To be obliged to wear a long wig when I liked a short one, or a black coat when I generally dressed in brown, I thought was such a restraint upon my liberty, that I absolutely rejected the proposal. * * * I rejected a life of luxury, indolence, and ease, from no other consideration than that boyish one of dress; so that my friends were now perfectly satisfied I was undone,—and yet they thought it a pity for one that had not the least harm in him, and was so very good-natured."

Goldsmith was not only at this time accessible to the promptings of vanity;—a quality universally decried though every one has it, which is also, perhaps, the reason why it is decried on all sides, because one man's vanity offends another man's; for no one thinks anybody has a right to be vain

but himself, or rather that which in himself he believes to be only, a moderate and just perception of merit—in any other man, he believes to be arrogance and totally disgusting. But Goldsmith's vanity was, in truth, an "amiable weakness;" he plumed himself with no man's feathers but his own; he was not jealous; he thought well of himself, as every one did and does. This anecdote shews him, in this respect, more amusing than unpleasant:—

As Colonel O'Moore and Mr. Burke were proceeding to dine with Sir Joshua Reynolds, they observed Goldsmith, also on his way thither, standing near a crowd, who were staring and shouting at some foreign women, in the windows of a house in Leicester Square. "Observe Goldsmith," said Burke to his companion, "and mark what passes between him and me, by and bye, at Sir Joshua's." Proceeding forward, they reached the house before him; and when the poet came up to Burke, the latter appeared to receive him coolly, when an explanation of the cause of offence was with some urgency requested. Burke appeared reluctant to speak; but, after some pressing, said, "that he almost regretted keeping up an intimacy with one who could be guilty of such gross indiscretion as he had just exhibited in the square." The poet, with great earnestness, protested he was unconscious of what was meant. "Why," said Burke, "did you not exclaim, as you were looking up at those women, what stupid beasts the people were for staring with such admiration at those painted Jezabels, while a man of your talents passed by unnoticed?" Goldsmith was utterly astonished. "Surely—surely, my dear friend, I did not say so!" "Nay," replied Burke, "if you had not said so, how should I have known it?" "That's true;" answered the poet with great humility, "I am very sorry—it was very foolish; I do recollect that something of the kind *passed through my mind*, but I did not think I had uttered it." Nor had he; it had only passed through his mind; but Burke, judging his thoughts in the square from his character, betrayed the simple mind into the confession.

As additional proof of his simplicity, here is another anecdote.

He was sitting one day at the tavern where he was accustomed to take his supper, when he called for a mutton chop, which was no sooner placed on the table, than a gentleman near him, with whom he was intimately acquainted, shewed great tokens of uneasiness, and wondered how the doctor could suffer the waiter to place such a bad chop before him. "Bad," exclaimed Goldsmith, "in good troth I do not smell it."—"I never smelled anything so unpleasant in my life," answered the gentleman, "the fellow deserves a caning for bringing you meat unfit to eat." "In good troth," said the poet, relying on his judgment, "I think so, too; but I will be less severe in my chastisement." He then called the waiter, and bid him eat the chop, by way of punishment. The waiter resisted, but the doctor threatened to knock him down with his cane if he did not comply. When he had eaten half the chop, Goldsmith relenting a little, gave him a glass of wine, in order to render the rest of the sentence less painful. When the waiter had finished his repast, Goldsmith's friend burst into a loud laugh. "What ails you now?" said the poet. "Indeed, my good friend," said the other, "I could never think that a man whose knowledge of letters is so extensive as yours, could be so great a dupe to a stroke of humour; the chop was as fine a one as I ever saw in my life." "Was it?" said Goldsmith, "then I will never give credit to what you say again; and so in good troth, I think I am even with you."

After studying medicine under the celebrated Munro, at Edinburgh, he visited the Continent, and graduated as a physician at the University of Padua. Returning to London, he successively filled the posts of usher in a country school, and assistant to a chemist. Relinquishing both of these appointments, he was enabled, by the assistance of some friends, to establish himself as a physician in Bankside, Southwark. He now assumed the physician's garb of the day, and not having means to purchase a new one, he procured a second-hand velvet coat, displaying the ad-

ditional disadvantage of a tolerably sized and conspicuous patch on the left breast. Imagine the poor physician, the future "historian, naturalist, and poet," making his visits in this coat, and covering the unseemly patch with his hat.

This attempt, however, and others, to establish himself in practice proved abortive. Some publications he had been engaged in, turning equally unprofitable, we come to a period of his life when we find him in a garret concluding his exquisite "Vicar of Wakefield." Even garrets must be paid for, and Goldsmith was now some weeks in arrear of rent for his. His landlady is pressing; lays her bill before him and demands of him its discharge, or—now what in conscience did the landlady demand? Even in the conscience of a landlady, with her lodger several weeks rent in her debt? Nothing less in the world than the poet himself in marriage! A visit from Dr. Johnson, accompanied by his pecuniary assistance, saved him.

Peculiarly happy was Goldsmith, whenever he came in contact with his sententious friend. Mentioning that he thought he could write a fable, stating the simplicity which that kind of writing required, he observed that in most fables the animals introduced seldom talk in character. "For instance; the fable of the little fishes, who said, birds fly over their heads, and envying them, petitioned Jupiter to be changed into birds.. The skill consists in making them talk like little fishes. While speaking of this, he observed Johnson stroking his sides, and laughing and immediately continued "Why, Dr. Johnson, this is not so easy as you seem to think; for if you were to make little fishes talk, they would talk like whales."

Again, while at supper together on one occasion, on rumps and kidneys, Johnson observed, "Sir, these rumps are pretty little things; but then a man must eat a great many of them before he is satisfied." "Ay," said Goldsmith, "but how many of them would reach to the moon?" "To the moon! Ay, Sir, I hear that exceeds your calculation." "Not at all, Sir," said Goldsmith, "I think I could tell." "Pray, let us hear." "Why, one—if it were long enough!" Johnson growled at this reply for some time, but at last recollecting himself, "Well, Sir, I have deserved it; I should not have provoked so foolish an answer by so foolish a question."

Goldsmith, on another occasion, talking of a project for having a third theatre in London, solely for the exhibition of new plays, in order to deliver authors from the tyranny of managers, Johnson treated it slightly. "Ay, ay," rejoined Goldsmith, "this may be nothing to you, who can now shelter yourself behind the corner of a pension."

Here is an instance of the imprudence adverted to in the introduction of this sketch. Imprudence enough, to be sure, but indicating a heart that would bleed at the story of distress as much as the sufferer's. He fixed a day for payment of his tailor, who was pressing him, and procured the money, forty pounds. Meantime, Mr. Glover, calling upon him, and relating a piteous tale of his goods being seized for rent, the doctor gave him the whole of the money. When the tailor called, he was told that had he arrived a little sooner his bill should have been paid, but that he had just parted with the provision he made for it, to a friend in distress, adding, "I should have been an unfeeling monster not to have relieved distress when in my power."

A female beggar, in Fleet-street, once asked an alms of Goldsmith, with whom was a friend. He gave her a shilling. His companion censured him for his imprudent humanity, telling him, "That the shilling was misapplied, for that she would spend it in liquor." Goldsmith replied, "If it make her happy, my end is answered."

Mr. Prior relates another anecdote, as follows, which, again, instances the humaneness of the medical poet's disposition:—Playing at Whist, in the house of Sir William Chambers, in Berners-street—the party at the table consisting of Sir William, Lady Chambers, Baretti, and Goldsmith—the latter hastily threw down the cards, at a critical point of the game, flew out of the room, and, as appeared by the opening at the door, into

the street, returning speedily, and resuming his seat. Sir William, conceiving that something unusual had occurred, ventured, after the lapse of a few minutes, to inquire the cause of his sudden retreat, trusting it had not been occasioned by the heat of the room. "Not at all," answered he, "but, in truth, I could not bear to hear that unfortunate woman in the street half singing, half sobbing; for such tones could only arise from the extremity of distress; her voice grated painfully on my ear, and jarred my frame, so that I could not rest till I had sent her away." It appeared afterwards, that others had, likewise, noticed a female voice of peculiar character, attempting to sing, but without remarking that mingled tone, which conveyed the idea of misery to the mind of the poet, and which he had quitted the room to relieve.

Dr. Johnson has summed up the character of Goldsmith in his epitaph, which runs thus: "Thou beholdest the tomb of Oliver; press not, O stranger, with the foot of folly, the venerable dust. Ye who care for nature, for the charms of song, for the deeds of ancient days, weep for the historian, the naturalist, and the poet."

CHARGE OF WHOLESALE PLAGIARISM IN THE "PROVINCIAL MEDICAL JOURNAL."

To the Editor of the "Medical Times."

SIR,—In 1835, Dr. Hunter, now of the Westminster Hospital, delivered a lecture, introductory to the course of medical studies in Glasgow, which lecture was shortly afterwards published by McPhun; and an inspection of the following parallel columns, containing extracts from the lecture of Dr. Hunter, delivered nine years ago, and that of Mr. Ikin, of the Leeds Medical School, delivered on the first of the present month, and published in the *Provincial Medical and Surgical Journal*, will enable your readers to form an opinion of Mr. Ikin's claims to originality.

HUNTER, 1835.

Medical science is of vast extent, as well as paramount importance, and for the attainment of the multifarious knowledge which it embraces, the mind of the student must be originally well constituted:—previously educated in certain preparatory branches of knowledge, and fitted for protracted study. * * Of all sciences, medicine is the least insulated; it was incorporated and blended with almost every other department of natural knowledge, and the more intimately acquainted the medical student is with the other departments of knowledge, the less difficulty will be experienced in the prosecution of medical science, and the more likely, also, will he be to promote its interests, and extend its boundaries. * *

Without a knowledge of the Latin and Greek languages, the very technicalities of your profession cannot be understood, and unless you are initiated into the modern languages of Europe, particularly the French, German, and Italian, you cannot keep pace with the knowledge of the present day: you will be excluded from

IKIN, 1844.

Medicine being a science of vast extent, as well as of paramount importance, the mind of the student must be originally well constituted, previously educated in certain preparatory branches of knowledge, and fitted for protracted study. * * Of all sciences, medicine was the least insulated; it was incorporated and blended with almost every other department of natural knowledge, and the more intimately acquainted with the other departments of knowledge, the less difficulty would he experience in the prosecution of medical science, and the more likely would he be to promote its interests, and extend its boundaries. * *

He should be familiar with the Greek and Latin, as well as with some of the modern languages, more especially French and German, otherwise, he could not keep pace with the knowledge of the present day, and would be excluded from sources of information, the want of which, he would often have reason to deplore.

sources of information, the want of which, you will have often much cause to deplore. * *

But mathematics, useful though they be, are of less importance to the medical student than a knowledge of the laws of *physics*, an epitome of which is found concentrated in man.

Without some knowledge of the science of optics, you cannot comprehend the mechanical beauties of the organ of vision. Without a knowledge of acoustics, you cannot understand the intricacies of the organ of hearing, or the principles upon which the varied parts of that organ perform their functions. The circulation of the blood, and respiration, are, no doubt, vital, as well as mechanical, functions, but even the simplest parts of these functions, the mechanical, cannot be understood without a knowledge of hydraulics and pneumatics. * *

I am also strongly disposed to include among your preparatory studies the art of drawing—an elegant accomplishment in itself, and of great practical moment to the medical student. * *

As a primary department of medicine, chemistry requires your early consideration, and fortunately for the young student, a course of chemistry is fraught with ever-new and never-failing delight. Chemistry being the science of the elementary constituents of bodies; it leads us, therefore, to an intimate acquaintance with every object of nature. Without a knowledge of chemistry, you cannot comprehend the nature of some of the animal functions,—the composition of some of our most active medicinal agents,—the nature of the morbid products generated by disease, nor see your way through the intricacies of jurisprudent medicine. * *

As a department of natural history, *materia medica* is highly interesting, and as a branch of medicine, it is, to the medical practitioner, indispensably necessary. * *

With these facilities for improvement, you will be enabled to store up a fund of useful knowledge, and which may be turned by you to advantage, long after you have left the schools and entered upon the

Besides a thorough grounding in these, *natural philosophy* must be studied, for an epitome of the law of physics was found concentrated in man.

Without a knowledge of the science of optics, the mechanical beauties of the organ of vision could not be comprehended or appreciated; without a knowledge of acoustics, the intricacies of the organ of hearing could not be understood, or the principles upon which the varied and complicated parts of that delicate organ performed its functions; without some acquaintance with hydraulics and pneumatics, the functions of the circulation and respiration, which were mechanical, as well as vital, could not be understood. * *

Mr. Ikin also alluded to the art of drawing, as being an elegant accomplishment in itself, and of great practical value to the medical student. * *

As a primary department of medicine, chemistry required the earliest consideration, and was, moreover, a study fraught with ever-new and never-failing delight. Chemistry being the science of the elementary constituents of bodies, leads, therefore, to an intimate acquaintance with every object in nature. Moreover, without a knowledge of it, we could not comprehend the nature of many of the animal functions, nor the composition of the most active medicinal agents,—the nature of morbid products generated by disease, nor see our way through the intricacies of forensic medicine. * *

Another fundamental study was that of *materia medica*—an interesting department of natural history. It is a branch of medicine indispensably necessary to the practitioner. * *

With these facilities for improvement, they would be able to store up a fund of useful knowledge, which might be turned to advantage long after they had left school, and when they had entered upon the laborious and trying

laborious and trying duties of professional practice.

Indeed, with the exception of some extracts from a contemporary journal, which he is magnanimous enough to acknowledge, and some declamatory remarks on Medical Reform, Mr. Ikin's lecture seems but a transcript of that of Dr. Hunter, and ought, therefore, from beginning to end, to have been placed in inverted commas. In conclusion—for you and your readers must be tired of these quotations—allow me to suggest the propriety of some clever lithographic writer, getting up a course of lectures in imitation of manuscript, and, like those of another class of learned gentlemen, culled from such a variety of standard works, though involving the most palpable contradictions, that to question their orthodoxy in sentiment, would be to involve the unholy heresy,

October, 25th, 1844,

THE COLLEGE FELLOWSHIPS.

Mr. Lee presents his compliments to the Editor of the *MEDICAL TIMES*, with the accompanying letters, having thought it a duty to himself and to the profession, to make known, in the proper quarter, the grievance of which he, in common with many others, has such just reason to complain.

28, Upper Southwick Street,
30th Oct., 1844.

TO THE RIGHT HON. SIR JAMES GRAHAM,
BART., &c. &c.

SIR,—I respectfully solicit your attention for a few moments to the following statement, of one among the many instances of abuse of the power, granted by the New Charter to the Council of the Royal College of Surgeons, as regards the selection of a certain number of the members to be created Fellows possessing peculiar privileges. The first list published by the Council excited considerable dissatisfaction among the profession, in consequence of the very partial manner in which several gentlemen, whose diplomas are only of a few years date, and who possessed no special claim to be preferred, were elected to the exclusion, of many others much their seniors, and who, in other respects, were more entitled to be included. This was felt to be the case even by some members of the Council, and it was partly admitted in a manifesto from the College, that some who had strong claims might possibly have been inadvertently omitted, which omissions would be rectified in the second list. In order to prevent any such inadvertency as regards myself, I had previously submitted my claims to the consideration of the Council, and being well known in the profession, at home and abroad, as the author of several works, on which account, most of the principal medical societies in France, Italy, and Germany, had conferred upon me their honorary diploma; being also the successful competitor for the Collegial prize, offered for the best essay on one of the most important subjects in surgery, I had just reason to expect that I should have been among the first chosen. I have, however, been excluded from both lists; and by this means, after having devoted many years, and expended much money, in my endeavours to promote the science of medicine, I am now, as regards the College, placed in a position inferior to many who are several years my juniors, and to others, whose claims could in no wise compete with my own before any impartial tribunal. Feeling this to be the case, I cannot but consider that my exclusion has been caused by the exercise of an influence hostile to me individually; the more especially as one of the most justly esteemed members of the Council stated, that he thought I had been elected, and that nothing could be openly advanced against the validity of my claims. I have thus, Sir, stated as briefly as possible, the injustice which has been done me, by the covert attempt to place an obstacle in my professional career, which has excited the indignation of my friends, acquainted with the circumstances; thinking it right that the

way in which a power, delegated to effect good purposes, is frequently perverted to subserve individual ends and animosities, should be made known in the quarter whence redress is most naturally looked for.

I am, Sir,
Your most obedient, humble servant.,
EDWIN LEE.

18, Oct., 1844.

To EDWIN LEE, Esq.

Sir James Graham presents his compliments to Mr. Edwin Lee, and begs to acknowledge the receipt of his letter of the 18th inst.

The selection of Fellows of the Royal College of Surgeons is vested in the Council, and Sir James Graham has no authority to interfere with that body, in the exercise of their discretion on this point.

Whitehall, 19th, Oct., 1844.

To the Rt. Hon. SIR JAMES GRAHAM, Bart.,
&c., &c.

Mr. Lee begs to express his thanks for the considerate attention which Sir James Graham has bestowed on his case, and takes the liberty of enclosing the last list of Fellows, the great majority of whom are unknown in the medical world, beyond their respective localities; and a glance at the recently dated diplomas of several among them, will sufficiently refute the assertion of Sir Benjamin C. Brodie, that Mr. Lee's claims have had every fair consideration. The suggestion of Sir B. C. Brodie, that one of Mr. Lee's position, in the estimation of the profession in England and on the Continent, should again subject himself to an examination, and pay a sum of money to the College, for that to which, by seniority and in other respects, he has a much greater right than very many of those who have been elected, tends to confirm Mr. Lee in his suspicion of the hostile feeling, which he has grounds for believing has existed, towards himself, and is the real cause of his exclusion, which is farther corroborated by the circumstance, that the number of Fellows which the Council was empowered to create, on the last occasion, was not restricted, as also, by the supposition of the eminent member of the Council alluded to, that Mr. Lee had been elected, and his opinion, that nothing could be openly advanced against him, or the validity of his claims.

Sir James Graham will be able to form some estimate of the feeling excited among the profession, by the manner in which the Council have exercised the power of selection, from a perusal of the remarks on the reverse of the list, in the *Medical Journal* whence it is extracted.

Oct. 26, 1844.

To SIR B. C. BRODIE, BART., President of the
Royal College of Surgeons.

SIR,—I take leave to express my surprise at the assertion which you have made, in reply to a communication from the Home Office, respecting the omission of my name from the list of Fellows of the College, viz.: that my claims have had every fair consideration; inasmuch as I conceive, that there are few persons in a position to know better than yourself, how much more valid they are, than those of a very large proportion of the gentlemen who are included: having commenced my education as a pupil of the college, attended your lectures nearly twenty years ago, filled the office of House Surgeon to St. George's Hospital at the time of your official connection with that institution, and being known to you as the author of one of the Jacksonian Prize Essays, as well as of other works on medical and surgical subjects: having, moreover, since my admission as a member of the college, sixteen years ago, always maintained the dignity of the profession, and endeavoured, as far as my opportunities allowed, at great personal sacrifice, to advance the science of medicine.

Without entering into the question as to the superior eligibility of many gentlemen whom the Council have thought fit to enrol among the Fellows, to that of others who have been excluded, I beg to enquire, as you admit that there are many others of acknowledged pretensions, besides my-

self, in the latter category, upon what grounds these gentlemen have not participated in the honour, as the number of Fellows, which the Council was empowered to create, on the last occasion, was not restricted.

You must be aware that your suggestion,—that I should submit myself to an examination, in order to obtain that to which I have a much greater right than very many of those who have been preferred before me—is not likely to be adopted by any one of my standing in the estimation of the profession in England and on the Continent; and, I must add, that I regard such a suggestion, on your part, as an aggravation of the very great and manifest injustice to which I have been subjected.

I am, Sir,
Your very obedient Servant,
EDWIN LEE.

28, Upper Southwark Street,
October 28, 1841.

STATE OF PROFESSIONAL FEELING.

At a numerous meeting of the Medical Profession of the borough of Sheffield, and the surrounding district, convened by a previous circular, Dr. Thompson in the chair, the following resolutions were adopted:—

Moved by Henry Jackson, Esq., and seconded by Joseph Law, Esq.:

"That this meeting views with satisfaction the attempt now made by Sir James Graham to put an end to the discussion unfortunately for some time back existing in the medical profession, on the subject of medical government; and considers, that he is fully entitled to the sincere thanks of all its members, for his endeavour to connect so important a branch of the social community of this country with the State, thus enhancing its dignity and extending its efficiency."

Moved by Henry Thomas, Esq., and seconded by Hugh Wood, Esq.:

"That, although certain of the provisions of the intended Bill are, in the opinion of this meeting, decidedly objectionable, there are others which are deserving of the approbation and support of the profession, such as the connection of the medical profession with the State, the registration, and that clause, by which degrees in medicine, conferred without residence and without examination, are not recognised."

Moved by Dr. Favell, and seconded by Dr. Shearman:

"That this meeting deeply regrets, that by the vague and feeble wording of the 31st clause, full opportunity is given to unqualified persons to take advantage of that part of the first clause, by which all restriction on the practice of physic and surgery is removed, and would respectfully urge that legally qualified and registered practitioners of medicine and surgery are fully entitled to protection against the practices of unqualified persons, which they would suggest ought to be effected by some stringent and summary process."

On the motion of Gabriel Reedall, Esq., and seconded by J. Walker, Esq., the following petition was adopted:—

"That your petitioners witness with great satisfaction the introduction of a bill, intitled 'A Bill for the better regulation of Medical Practice throughout the United Kingdom,' which by its provisions will, in the humble opinion of your petitioners, conduce to the dignity and interests of the medical profession, by connecting it with the State, by favoring an efficient registration of all legally qualified members, and by not recognizing degrees in medicine conferred without residence and without examination."

"That your petitioners deeply regret that the intended bill does not afford that protection from the irregular practices of unlicensed persons, to which all legally qualified practitioners feel they are fully entitled, and humbly pray that your honorable House would be pleased to enact some clause by which such persons shall be more summarily dealt with, and such practices effectually prevented."

On Wednesday last upwards of seventy physicians, surgeons, and general practitioners, assembled in the lecture-room of the Literary and Philosophical Society, Newcastle-upon-Tyne, to take into consideration the Medical Bill of her Majesty's Government.

Dr. Headlam said, a bill had been introduced to the consideration of the legislature and of the country—which was a most important step in the progress of medical reform. For the first time the government had acknowledged the medical profession as a useful institution, and its title to promotion and protection. The bill was defective, but he saw in it a basis of sound medical legislation. That the subject had been recognised at

all by her Majesty's government, was a great point gained by the public and the profession. Fundamental principles had been laid down, by a principal secretary of state, on which some measure of reform must ultimately be carried out.

Dr. Brown, of Sutherland, moved the first resolution, thankfully acknowledging the obligation conferred upon the profession and the public by the government, and expressed his conviction, founded on the candid spirit in which the bill had been received in the provinces, and on his knowledge of the profession in his own district, that the resolution would receive the unanimous concurrence of the meeting. The government might not have embodied in the bill all that was required, and they might have introduced some provisions which it would be well to reject; but, in his opinion, they had behaved fairly, and even handsomely, to the medical profession and the country. (Applause.) At the end of a long and laborious session, they had laid their bill on the table of the house, with the evident intention of affording ample time for consideration and discussion. Having stated their own views and sentiments, the government invited the same frankness from all parties affected by their bill.

Sir John Fife, in moving the second resolution, (approving of many of the provisions of the bill, but declaring that, on the whole, it would be more injurious than beneficial,) commended the proposal to require a heightened and uniform qualification to practise, but was of opinion that the measure would place the profession in a worse situation than the present. (Applause.) Its fundamental defects were the total absence of all representation of the great body of general practitioners, the most laborious and useful class in the profession, and the omission to impose any direct, or positive, or severe restraint on empiricism. He was somewhat surprised, however, that any medical man should contend for the suppression of quacks as a measure of "protection to the profession." To demand it on this ground was to exhibit less wisdom than the litigious attorney, who petitioned that the parish-clerk and school master might be allowed to follow the profession of will-making, because their blunders would yield a rich harvest of law-suits. (Laughter.) It did seem, however, most extraordinary, that in a country where no man could sell spirits without a license, and where a spirit-vendor must give guarantees of his respectability, any man, the most illiterate and unprincipled, was to have full liberty to take charge of the health, ease, and lives of the people! (Hear, hear.) He hoped that, in this respect, and also as to the absence of due representation of the profession in the council, the government would consent to the amendment of their bill, and thereby entitle themselves to the gratitude of their country. (Applause.)

Dr. Knott, of Newcastle, the seconder of Sir John's motion, observed, that if the profession were united, he had no doubt of their success. He had consulted the census of 1841, and found the proportion to be two to one in favour of the medical men; and if they would only cordially combine their strength on the present occasion, there could be no doubt of their success in amending the bill. (Applause.)

Mr. Greenhow, of Newcastle, the mover of the third resolution, thought there could be no question as to the desirableness of a presiding body. It was very proper that a secretary of state should be made president. It would be an honour, indeed, to the profession, to have one of her Majesty's ministers at their head. They would thereby be connected with the government, and the country would have a guarantee for the propriety of the proceedings of the council, and that they would not be biassed by selfish considerations. It was also, perhaps, a proper arrangement, that the regius professors should have seats at the council-board. But that the colleges and the crown should appoint the remaining members of the council, twelve in number, while of the whole eighteen not one was properly representative of any department of the medical profession whatever, was highly objectionable; and he was inclined to think from the conduct of the government, that they would feel disposed to listen to the petitions

of the profession, and concede their claims to be fairly and fully represented. (Applause.)

Mr. Dixon, of Sutherland, who seconded the resolution said that he could not too earnestly urge the importance of securing the direct representation of the profession, and thereby getting rid of one of the only two bad features of the bill.

A gentleman, apparently a stranger, contended that it would only widen divisions in the ranks of the profession, if they were entrusted with the choice of representatives.

The resolution having been unanimously adopted, Dr. George Fife moved the fourth resolution, and it was seconded by

Dr. De Mey—who condemned the conduct of the English government in countenancing quack medicines, for the sake of a paltry revenue of £35,000 or £36,000 a-year. He corroborated the observations of Sir John Fife as to the consequences of empiricism, and suggested that magistrates should have summary jurisdiction over quacks.

The *Gateshead Observer*, from which we have abridged the above clever report, observes, "The proceedings were marked by a wise spirit of candour and moderation. The fairness and frankness of the government, in the introduction of their Bill into Parliament, were reciprocated by the meeting, and a disposition evinced to co-operate with its framers in the construction of a beneficial measure of reform. Such conduct presents a gratifying contrast to the proceedings of certain factious practitioners in the metropolis; some of whom, apparently, oppose the Bill, not upon its merits, but because it is Sir James Graham's."

ON MEDICAL REFORM.

(To the Editor of the Medical Times.)

SIR,—I have for some time noticed the Reports of the numerous meetings of my professional brethren, who have held meetings to consider the outlines of Sir James Graham's Bill: I observe that one and all find fault with it, for not being stringent enough to put down quackery, and most of them pass resolutions to shew the evils of the system; but at no meeting have I seen a resolution passed, likely to induce the legislature to forego the benefits derived from quackery, and with all Mr. Wakley's talk, he must know very well, that no minister will forego a real benefit to the State, or give any reform without a *quid pro quo*. (By the way, that self-dubbed champion of reform has been very like the guide post, standing still and *talking*, but not going the way in earnest.) I now, Mr. Editor, in a few words, give you my opinion on the only method to induce Sir James Graham to put down quacks, and those *disgusting* advertisements, and lies in the newspapers, and in the placards stuck over the walls in London. Let the medical gentlemen call a general meeting of practitioners in London, and propose that every medical gentleman, on the registry of the new Bill, shall pay annually, as physician, £2; as surgeon, or apothecary, £1; for every year he practises, as an indemnity to the Government for abolishing quackery. The profession will, perhaps, think the proposition monstrous; but, if they want Medical Reform, they must not expect Government will give up 20 or 30,000*l.* per annum, without an equivalent, and there will be no great hopes from the county members unless we are liberal. As to joining with the Apothecaries' Company, they ought to throw them overboard; they take the money of those who qualify, and allow those who do not qualify to practice to the injury of the qualified, although they know no one can prosecute a non-qualified practitioner but themselves; and yet the country swarms with them. Buy up quackery and its advertisements, and then the profession will begin to feel that the Government will assist in giving them a good reform. Hoping some of your readers may approve such a plan,

I am, sir, your obedient servant,

THOMAS HACKER.

Hutton, Oct. 24th, 1841.

GOSSIP AND NEWS OF THE WEEK.

The following gentlemen, we are told, constitute the Liverpool Standing Committee of Medical Men:—Dr. Jeffreys; Dr. Formby; Sir Arnold Knight, M.D.; Dr. Freckleton; John P. Halton, Esq.; Dr. Sutherland; James Long, Esq.; Dr. Dickinson; Samuel McCulloch, Esq.; Edward Batty, Esq.; William H. Bainbridge, Esq.; John L. Minshull, Esq.; and King Ellison, Esq. We understand from Mr. Millett Davis, the Secretary, that very courteous and satisfactory answers have been received, and read to the committee, from Sir James Graham, the four members for the county, and the two members for the borough.

APOTHECARIES' HALL.—Gentlemen admitted members on the 17th of October, 1844:—Robert Smith Rogers, Edward Neve Lison, and Robert Barnes. 24th of October:—Alfred William Gabb, Henry Hiller, William Fenton, James Seymour Leeson.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Gentlemen admitted members, on Friday, October 25th, 1844:—T. Dobson, C. Jewison, H. Brook, J. Brown, W. Bayes, F. A. Crisp, W. Bowden, C. Ede, J. W. Harrison, B. Cawthorne.

Messrs. Radcliffe, of Birmingham, have submitted to us a newly-invented Shower Bath, for which they have recently taken out a patent. Our examination has convinced us, that while it will prove an useful aid to the washing and bathing movement of the day, it is especially worthy of the attention of the Profession. It is a neat, portable bath, which—with the advantages of more cumbersome apparatus—can be self-administered with ease, almost under all circumstances, and thus meets a want too well known to the straitened tenant of the dressing-room or sick-chamber. Hence, also, its value as a medical agent, in cases of incipient apoplexy, and other forms of disease where congestion is present. It may, too, be of use as an adjuvant to the taxis, in the reduction of hernia: and is not unlikely, indeed, in many cases, to supersede the cold plunge, ice-bladder, and similar remedies, with a useful result.

Dr. Gordon has resigned the physicianship of the London Hospital.

Mr. Stanley, as we anticipated, has been elected Examiner to the College of Surgeons. Many are surprised that Mr. Swan, and some other gentlemen, were passed over, Mr. Stanley being one of the youngest members of the Council.

A very important meeting was held on Friday last, in Lambeth. The resolutions and speeches seem to have been so much in accordance with the meetings held at Sheffield and Newcastle, that we may content ourselves with stating that the speakers were, Dr. Silvester (the chairman), Dr. Greenwood, Mr. Prior, Mr. Havers, Mr. Churchill, Dr. Webster (it is not mentioned which), Mr. Crisp, Mr. Rindle, Mr. Pilcher, and Mr. Howell.

The Provincial Medical and Surgical Association are immediately to hold a great meeting at Derby, to consider the New Bill.

The Editor of the *Lancet* inserted, last week, Dr. Costello's reply to each of his four assailants, except himself. He omitted that part on the promise of immediately writing to Dr. Costello for an explanation of his charges. We are told he has not written!

SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 68.)

POTION, WITH THE IODURET OF IRON (Cullerier): four to six grains of the ioduret of iron, four ounces of gummy julep. Mode of exhibition—by spoonful, during the day in scrophulous, syphilitic affections, &c.

POTION, KERMETIZED: ten grains of gum tragacanth powder, one grain of kermes mineral, rubbed together in a glass mortar, with an ounce of simple syrup, to which is added gradually four ounces of distilled water of ground ivy. Mode of exhibition—by spoonful every hour, as an expectorant, the bottle being shaken each time it is used.

POTION, IODURETTED (Cullerier): two grains of iodine, two grains of ioduret of potassium, four ounces of gummy julep. Mode of exhibition—by spoonful, during the day, in the treatment of syphilitic and scrophulous diseases.

POTION, WITH MUSK AND OPIUM (Cheselden): two grains of musk, rubbed up with six ounces of fennel-water, to which is added, ten drops of tincture of opium, and two drachms of syrup of poppies. Mode of exhibition—a spoonful every hour in tetanus.

POTION, WITH NITRE: twenty-four grains of nitrate of potash, one ounce of syrup of the five roots, four ounces of fennel-water. Mode of exhibition—a spoonful every hour, in the treatment of painful affections of the urinary apparatus.

POTION, PHOSPHORETTED: two drachms of phosphoretted oil, two drachms of powdered gum arabic, three ounces of mint-water, two ounces of simple syrup. A mucilage is first made with the powdered gum arabic, and ten

drachms of the mint-water, and put into a small bottle; the phosphoretted oil is then weighed in the same bottle, and shaken briskly together with the mucilage for several minutes, after which, the syrup and the remainder of the mint-water are added by degrees. This potion, the formula for which is given by M. Soubeiran, contains one grain of phosphorus. The physician will diminish or increase the dose, according to the indications which he may wish to fulfil.

POTION, PURGATIVE (Cruveilhier): one ounce of oil of sweet almonds, one ounce of castor oil, one ounce of syrup of marsh-mallow, mixed together. Mode of exhibition—by spoonful in puerperal peritonitis, after venesection, baths, and uterine injections.

POTION, PURGATIVE: eight drops of spurge, or two or three drops of croton oil, eight grains of powdered gum tragacanth, one ounce of syrup of apples or peach-flowers, rubbed together in a porcelain mortar, three ounces of distilled water being gradually added. Mode of exhibition—as the preceding.

POTION, PURGATIVE (Form. Hosp. Paris): two drachms of senna leaves, four drachms of sulphate of soda, one ounce of syrup of buckthorn, four ounces and a half of boiling water. The senna is to be infused in the water for twenty minutes, and then strained; the salt is next to be dissolved, and the syrup added. Mode of exhibition—in one dose in the morning, fasting.

POTION, PURGATIVE (Form. Hosp. Paris): two drachms of senna, four drachms of sulphate of soda, two ounces of manna, three ounces of boiling water. The senna is to be digested in the water for a quarter of an hour, and then strained, after which, the salt and the manna are to be dissolved, and the infusion again strained. Mode of exhibition—as the preceding.

POTION, PURGATIVE, OR PURGATIVE POTION OF PAIN-TERS (Form. Hosp. Paris): one ounce of diaphænic electuary, one drachm of powdered jalap, two drachms of senna leaves, one ounce of syrup of buckthorn, four ounces of boiling water. Pour the boiling water on the senna, allow it to stand for twenty minutes, and then strain; mix with the infusion, the electuary, jalap, and syrup. Used in the treatment of colica pictorum.

POTION OF ROBERT THOMAS OF SALTSBURY: two to five grains of crystallized acetate of lead, dissolved in two ounces of rose-water, and two drachms of syrup of violets added. Mode of exhibition—a small spoonful every four hours in the treatment of whooping cough.

POTION, WITH MEDICINAL SOAP: ten grains of gum tragacanth, one ounce of syrup of fumitory, rubbed together in a marble mortar, and three ounces of distilled water, in which two drachms of medicinal soap have been previously dissolved, gradually added. Mode of exhibition—by spoonful, in enlargement of the abdominal viscera.

POTION OF SQUILLS: four drachms of oxymel of squills, three ounces of hyssop water, half a drachm of alcoholized nitric acid. Mode of exhibition—by spoonful, as a diuretic.

POTION, SEDATIVE (Pharm. Batav.): twenty grains of hyoscyamus seeds, two drachms of sweet almonds, four ounces of water, made into an emulsion, and strained. Mode of exhibition—by spoonful, during the day, in asthma and catarrh.

POTION, STIBIATED AND OPIATE (Paysson): one grain of tartar emetic, one grain of opium, twenty-four grains of gum tragacanth, rubbed together in a marble mortar, and eight ounces of common water, and two drachms of orange flower water, gradually added. Mode of exhibition—by spoonful every half hour, in the treatment of intermittent fevers.

POTION, STIMULANT (Magendie): one grain of pure strychnine, or six grains of brucine, rubbed in a glass mortar, with two drops of acetic acid, two ounces of distilled water, and three drachms of white sugar. Mode of exhibition—a coffee-spoonful every evening and morning, in the treatment of general or partial palsy.

POTION, SUDORIFIC: three drachms of acetate of ammonia, five ounces of red wine, two drachms of tincture of cinnamon, one ounce of simple syrup. Mode of exhibition—by spoonful in the day.

POTION, TONIC: one ounce of syrup of gentian, bark, or tolu, two drachms of tincture or extract of bark, four ounces of water of germander, mixed together. Mode of exhibition—a spoonful every hour.

POTION, TONIC (Form. Hosp. Paris): six drachms of syrup of bark, two drachms of compound spirit of balm, one ounce of peppermint-water, three ounces of common water, mixed together. Mode of exhibition—as the preceding.

POTION, EMETIC: one to three grains of tartar emetic, or twenty to twenty-four grains of powdered ipecacuanha, triturated with twelve ounces of simple distilled or camomile water. Mode of exhibition—in three doses, with half an hour's interval between each. If the two first doses cause vomiting sufficiently freely, the third need not be given. The early effects of vomiting may be aided by drinking largely of warm water, which should also be given at intervals while it continues.

POWDER, ANTHELMINTIC (Dupuytren): fifteen grains of powdered jalap, six grains of rhubarb, mixed together. Mode of exhibition—in the evening, in a single dose.

POWDER, ANTI-DIARRHEAL: one grain of powdered ipecacuanha, one grain of powdered opium, one grain of powdered camphor, mixed together. Five or six such doses to be given in the course of the day, in an appropriate menstruum.

POWDER, AGAINST GOUT: the powder which is sold under this name at Toulouse, and at Castro, is probably only powdered gratiola (Dr. Magnes). This substance, which is very far from often effecting a cure, may cause dangerous irritation of the gastro-intestinal mucous membrane.

POWDER, ANTIMONIO-MERCURIAL (Smith): thirty grains of black sulphuret of mercury, two grains of antimonial powder, mixed together. Mode of exhibition—in two doses, in the treatment of scrophulous affections.

POWDER, ANTIPSORIC: twelve drachms of powdered washed sublimed sulphur, six drachms of powdered arctium lappa, six drachms of powdered liquorice, one drachm of camphor, mixed together. Mode of exhibition—two packets containing a drachm in each, daily, in a little water.

POWDER, ANTIPYRETIC (Journ. Ital.): an acid decoction of bark, precipitated by potash. The sulphate of quinine is generally preferred.

POWDER, ANTISEPTIC (Hartmann): thirty-six grains of powdered red bark, five grains of camphor, mixed together. Mode of exhibition—a pinch every quarter of an hour, in gangrenous affections.

POWDER, ANTISPASMODIC (Recamier): four grains of subnitrate of bismuth, forty-eight grains of magnesia, forty-eight grains of sugar, mixed together, and divided into four equal doses. Mode of exhibition—at four doses, in obstinate non-inflammatory gastrodynia.

POWDER, ANTISPASMODIC (Magendie): half a grain of cyanuret of zinc, four grains of magnesia, four grains of cinnamon, mixed together. Mode of exhibition—in a single dose, in cramps of the stomach.

POWDER, ANTISPASMODIC (Brachet, of Lyons): six to twelve grains of oxide of zinc, twenty to thirty grains of sugar, mixed together, and divided into six packets. One to be taken every two hours in a little sugared water, in infantile convulsions. A few grains, from six to ten, of the extract of hyoscyamus may be added.

POWDER, ARSENICAL (Justamond): eight parts of powdered white oxide of arsenic, sixteen parts of powdered crude antimony, mixed together, and melted in a crucible, again powdered, and from two to six grains of extract of opium added, according to the prescription of the physician. Mode of exhibition—externally, to dust lightly fleshy excrescences, and fungous and obstinate ulcers.

POWDER, ARSENICAL (Dupuytren): one to six parts of arsenious acid, ninety four to ninety six parts of calomel, prepared by steam, mixed together. Used in cases of corroding ulcer, by dusting the part with it, or in the form of paste. In the first case, after having removed by poultices the scabs which cover the ulceration, a little lint is dipped in the powder, and a layer of it not thicker than a millimetre, at the utmost, is laid upon it. If the ulcer is of small extent, it is entirely covered, but if it be larger, half, or a third, or even a fourth of the wound only, is dusted at once, and the powder is applied over the remainder of the surface on the following days. A paste is also made with this powder, powdered gum arabic, and a sufficient quantity of distilled water, which is applied on the ulcerated surfaces, with lint, or a spatula, the same precautions being observed as when the powder is used. See also Rousselot's powder.

POWDER, ASTRINGENT: one drachm of powdered alum, sixteen grains of powdered opium, one hundred and eight grains of powdered sugar, mixed together, and divided into packets weighing from twelve to fifteen grains each. Mode of exhibition—a packet every two or three hours, in obstinate diarrhoea.

Metropolitan Mortality for the Week ending Saturday, October 26th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	506	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	207	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	50	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	93	152	157
Diseases of the Lungs, and of the other Organs of Respiration	104	312	286
Diseases of the Heart, and Blood-vessels	5	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	30	66	69
Diseases of the Kidneys, &c. ...	...	6	5
Childbirth, Diseases of the Uterus, &c. ....	...	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	5	6	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age .....	...	74	71
Violence, Privation, Cold, and Intemperance!	5	26	26

SCIRRHUS OF THE UTERUS.—In the *London and Edinburgh Medical Journal*, a case of scirrhus of the uterus is mentioned by Dr. Scott, where none of the usual signs of that disease appeared, but which for two years prior to death presented all the symptoms of spinal neuralgia, constant cough, vomiting of food, exquisite pain almost to fainting, upon pressure of the spine, and progressive emaciation. The patient died from slight uterine hæmorrhage. The uterus was scirrhus and enlarged, but not ulcerated; the lungs and stomach were healthy.

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LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. CORRIGAN, M.D., Consulting Physician to the Richmond Hospital, Lecturer to the Dublin School of Medicine, &c.

Gentlemen,—Before entering upon our classification of inflammation, it is only right that I should make you acquainted with the opinions which are, at present, reckoned most worthy of credit, as to the changes which take place in the vessels of a part in an inflamed state. This state of the part has been termed the "proximate cause" of inflammation. With regard to the old opinions, relative to the nature and cause of inflammation, such as Galen's, of "Visciditv of the Blood," or Boerhaave's of "Error Loci," we shall leave these to the curious in such matters, whose wish for information, as to the opinions of the above, will be amply gratified by a perusal of their respective writings. Neither shall I take up your time, by giving you a history of Cullen's theory of "Spasm of the Minute Vessels," but shall again refer you to his work for an account of his opinions, where, in addition to much that the present advanced state of medical science holds untenable, you will find a mass of practical information, far superior to those works, which issue in such profusion from the medical press of the present day. The statement of the most trustworthy writers, of the present day, on the subject of inflammation, namely, Drs. Hastings and Wilson Philip, is that, in an inflamed part, the capillaries are in a state of debility, while this state of debility is followed up by one of increased action in the large vessels or arteries supplying these capillary vessels. This you may readily perceive, by pricking the transparent web of a frog's foot with a pin, or by placing upon it a drop of nitric acid; when, by means of the microscope, you will, after a while, perceive the vessels of the pricked part, which were clear and colourless, become filled with red blood, and the arteries supplying them in a state of increased action. In France, the famous Andral has mentioned, that this dilatation of the capillary vessels, far from being a mark of debility, is, on the contrary, one of increased action in these vessels; while Dr. Hastings asserts the contrary. Hear Andral in support of his own theory: he had been illustrating his subject by a reference to the enlarged and humid leg of a female patient, who had died in the hospital *La Charité*. Addressing his class, he says: "You perceive, from the enormous quantity of blood that has flowed, and still continues to flow, from the incision which I have made in this dark coloured tumefied leg, that the capillary vessels must have been in a state of sanguineous congestion, caused by increased action set up within them, owing to the presence of inflammation." But, surely, this cannot be reckoned a decisive test of the presence of increased power in these vessels; it cannot be considered as the *experimentum crucis*, by which the matter can be finally settled. It does not follow, because

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a part may be swollen, painful, and higher coloured than ordinary, presenting the usual signs of inflammation, that these appearances prove to us, that the capillary vessels of that part are in a state of increased action or power.

Dr. Hastings says, that the arteries, supplying the inflamed parts with blood, are endowed with additional circulative vigour, which force, acting on the delicate anastomosing capillaries, distends their bore gradually, so as to make a passage for the, otherwise too large, red globules of the circulating fluid. He explains, quite differently from Andral, the fact of inflamed parts bleeding freely when divided. He likens the contractile tissue of the capillary system to a parcel of gum elastic tubes, which, in consequence of their distention, have lost their elasticity; through which, when divided, the blood continues to flow copiously, owing to the force of the distending agent (the arteries of the part) remaining undiminished. So that this opinion, or rather explanation of the before-mentioned fact, upsets Andral's theory, altogether. The opponents of the theory contend, that the capillary vessels of a part, in a state of inflammation, are debilitated," adding, as a counter argument to this, the phenomena which accompany the growth of horn in the stag. In this animal, the antlers are shed at Autumn annually, when the young and growing horns may be perceived, of a soft velvety feel, with numerous vessels ramifying on their surface, while, at the same time, the temperature of the growing part is considerably above the natural standard of the body. They infer from this, that the parts are inflamed, or in a state analogous to inflammation, and, as the parts are acquiring greater bulk every day, consequently, that this increase must depend on increased action of the vessels of the part. But this is erroneous. They also bring forward the phenomena attending on pregnancy, in support of their theory of increased vascular action. We know that, in this state, the arteries and veins of the uterus acquire additional calibre, from the stimulus of impregnation; but, though we know that, at this period, the vessels of the uterus become larger than natural, we have no grounds for asserting, that this increase of volume is owing to inflammation. Inflammation has been divided, by the generality of writers, into two varieties: acute and chronic. But this arrangement I consider faulty, as it would seem to imply that a fixed length of time must elapse, before the acute form can merge into the chronic. This classification of inflammation is also apt to mislead the student into serious practical errors. Now, there are some diseases, which are erroneously reckoned acute inflammations. For instance, fevers: when the treatment generally adopted for the removal of acute inflammation, if put into operation, would quickly prove fatal. In cases of brain affection, in fever, how often are we called on to administer wine and other stimulants internally, and to apply leeches externally? And the successful event of the generality of such cases proves the correctness of the aphorisms which I have just pronounced, namely: that there are varieties of so called acute

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inflammation, which, were they treated agreeably to the directions, laid down in books for the cure of inflammation, would quickly end in the patient's destruction, to the sorrow and mortification of the attendant physician. Now, in the case of fever, above alluded to, were we to treat our patient with bloodletting and other depletive measures, we might bleed and purge him to death—and to death we should send him certainly, long before we could cure him. Allow me, now, to say a word or two on the "vexata quæstio," as to whether the inflamed parts are in a state of debility or otherwise. You behold this cast, taken from the leg of one of those poor, unfortunate, basket women, of the city, whose miserable occupation forces them to undergo the "pelting of the pitiless storm," exposed to hardships and deprivations of every sort. You behold the enormous size to which it has attained, and you will naturally imagine that this increase of bulk cannot be owing to increased, general, vascular action of the part. In producing this state of hypertrophy, the function of circulation is not at all concerned; it is owing, exclusively, to the function of nutrition or secretion. You are aware that I assume (what is generally allowed), that the human system is a triple compound of the functions of nutrition or secretion, circulation, and innervation. The hypertrophy of this limb is owing to the increased action of the function of nutrition, however it has been brought about; and, though it may appear paradoxical, that, in a person labouring under general debility of constitution, one particular part should possess inordinate functional power, still, though it may seem strange, it is nevertheless strictly true. An instance or two will, I trust, prove this to your satisfaction, and at the same time demonstrate clearly, that the nutritive system may be in a state of hypertrophy, while that of circulation has become quite atrophied. It is well known that, during the summer of the Arctic regions—the season most conducive to the activity of the function of nutrition or secretion—in that period when food is most plentiful and easy of production, the function of nutrition or secretion is not by any means so vigorous as it is during the winter. I mean so far as the skin is concerned, whose office it is to secrete the hairy or furry covering of the animals, indigenous to these regions. Their fur is always finer, shorter, and thinner, than it is during the winter months, while the functions of circulation and innervation are above the winter standard. In winter, we find the skin becoming endowed with a greater secretive power; in consequence of which, the summer coat of hair or fur becomes thicker in quantity, and coarser in quality, and in every way much better adapted for defending the animal from the rigour of that dreadful season. Turn your attention to this liver, which I hold in my hand, and which you may perceive enlarged to twice or thrice the natural size; this enlargement, in the living subject, may be frequently felt, extending as low down as the iliac or pubic regions. The general appellation, given to this form of hepatic enlargement, is that of "scrophulous liver"—

which, when we come to speak of hepatic disease, we shall find to be anything but a correct one. Its proper name is the "large, yellow liver." No one can attempt to deny that, here, there has been excessive activity of the function of nutrition, in throwing out such a quantity of lymph, which, becoming organized, has increased the viscous to such a considerable amount above the natural, healthy, standard; still, this liver has been taken from an unhealthy, debilitated man; its presence is invariably looked upon, by discerning medical men, as demonstrative of extreme debility of constitution, whether congenital or acquired; and, woe to the unwary practitioner, who shall have recourse to antiphlogistic measures to reduce this enlargement. The man of practice immediately recognises the propriety of discarding theory altogether, here, and trusting to practical experience alone. This tells him to shun all lowering plans of treatment whatever, and to have recourse to tonics. One more instance, Gentlemen, of the fact of which I have before spoken to you, namely: that you may have constitutional debility, and excessive local action amounting to hypertrophy; you must all be aware, that, when horses are hard-worked, and poorly fed, they become covered with a long, rough, coarse hair, and in greater quantity, than when well fed and idle. It is known, that nothing but generous feeding will ever remove this foreign coating from the horse. Here, again, you have an instance of weakened, general, constitution, while one part of the animal's body, the skin, is in an increased state of secretion, which, strange to say, is to be removed alone by means, best calculated to put the whole system into the same active state of secretion.

You will, from these instances, bear in mind, that these are cases of inflammation or functional lesion; to treat which, successfully, you will be called upon to renounce your ideas, of treating inflammation on purely antiphlogistic grounds; and, while you bleed (if necessary) with the right hand, you will have to hold the wine glass in your left. What the cases are, which call for such a seemingly paradoxical mode of treatment, I trust to be able, gentlemen, to make you acquainted with, during the present course of lectures, on the elements of medicine.

I, for my own part, am not disposed to view inflammation in the light of a simple affection; on the contrary, I am inclined to regard it as one of the most complex propositions in its nature, which can be submitted to us for consideration. On the last evening, I stated, that the definition of inflammation, as laid down in books, would answer, in every particular, were man constituted similar to, or endowed with an organization not exceeding that of, the simplest type of animal life—the organization of which consists but of one simple function, that of nutrition; but, in man, to this are added, those of circulation and innervation. Inflammation in man varies, according to the implication of one or all of these several functions. It varies in its peculiar marks, accordingly as the functions of circulation, nutrition, or innervation, may be concerned separately or conjointly. Thus, in the common definition of inflammation, marked by heat, pain, swelling and redness, we find all the functions conjointly affected: the altered function of circulation, causing the redness; the altered function of secretion, or nutrition, the increase of bulk, constituting the swelling; while the pain, which the patient experiences, is caused by the altered function, or lesion, of innervation. In speaking of, or describing, the various changes which these several lesions of functions produce in parts, some writers have ceased to describe them under the name of inflammation; that is, they have adopted another word, than the term "inflammation," to signify their several respective changes. Among these is Andral, who has discarded the term altogether, substituting for it the name of "hyperæmia," from two Greek words (signifying *super* and *sanguis*—an increased flow of blood to a part.) His division of hyperæmia, is, into sthenic (corresponding to the word acute), asthenic, and mechanical. This division I shall adhere to, substituting, however, for Andral's hyperæmia, a term which I think preferable to it, on the score of simplicity,

namely: functional lesion, specifying, at the same time, which of the triple functions it may be, that is implicated. Of the lesions of functions, we shall begin with that of circulation, adhering, as I have already premised, to Andral's classification of it, into sthenic, asthenic, and mechanical. The terminations of sthenic lesion of the function of circulation, or hyperæmia, whichever you choose to call it, are, properly speaking, but two, namely: resolution and mortification. Of those several terminations of sthenic hyperæmia, as they are termed, which we find in systematic works, I shall not treat at any considerable length, for this reason, that I shall content myself with referring you to elementary works for information, because a course of lectures, such as the present, does not present the opportunities requisite for discussing the subject, at the length it merits. Another consideration also moves me; it is this: that I had determined, on the present occasion, to adhere to the routine which has guided me at other times. This has been, to give you all the original information, which it is in my power to lay before you; and, for the other points, in the history of disease, to refer you to systematic works on the subject, whenever I think that the accuracy of the history of disease, as it appears in such works, would warrant me in so doing, consistently with your proper education. At the same time, not failing freely, but fairly, to condemn or criticize whatever I deem objectionable, or repugnant to practical knowledge, in such class books of medical education.

We shall resume this subject, gentlemen, on a future evening.

CLINICAL LECTURES ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDINER GUTHRIE, Esq., Jun.
November, 6th, 1844.

LECTURE IV.

On the Classification of Cataract.

THE most efficient and least troublesome arrangement of cataracts is, to include them in two classes: the *true*, and the *false* or *spurious* cataracts.

The *true* cataracts are those, of whatsoever description they may be, which have been caused by disease of the lens or its capsule, or by both, but unconnected with any perceptible general derangement, or of attachment to the iris or adjacent parts. The *false*, or *spurious*, cataracts are those, of whatever kind, which are combined with derangement or disease of the iris or adjacent parts, the sequelæ of inflammation.

The term *complicated* may be retained to mark the presence of other more important diseases, such as amaurosis, glaucoma, iridophthalmia, &c.

The principal object of these divisions is, to point out, at one view, those true cataracts which are relievable or removable, with every prospect of success by the usual known operations, and to comment on these in the second class as of false or spurious cataract, which require a different or more complicated operation, and are not so likely to be followed by favourable results.

On the Diagnosis of True Cataract, or of the First Class.

This class contains three genera:

1. Cataracta lenticularis, or lenticular cataract,—when the lens alone is affected.
2. Cataracta capsularis,—when the capsule alone is affected.
3. Cataracta capsulo-lenticularis,—when both lens and capsule are affected.

Of each of which there are several species.

Cataracts were formerly considered or classed under the heads of *ripe* or *unripe*, *mature* or *immature*; terms which were used with reference to the state of solidity or softness of the lens, and which are, therefore, now rejected as illusory, and which have been applied latterly in a different manner;—that is, with reference to the state of vision, which is no longer supposed to be dependent on the hardness or softness of the opaque lens,

but on the degree of opacity. The term *unripe* being used when the patient can just see to distinguish objects sufficiently for the common purposes of life; *ripe*, when he is nearly blind, so as to be able only to see the shadow of anything passing before the eye. These words must always, from their usual acceptation, cause an impression, relating more or less to the time during which the opacity has existed, and are equally improper and unnecessary when applied to indicate the state of the cataract, and ought to give place to the terms *fitness* or *unfitness*, *proper* or *improper*, for operation.

On the Diagnosis of Hard Cataract.

It having been ascertained that some opacity really exists behind the iris, inquiry should be made whether the dimness of sight, or loss of vision, which preceded or accompanied its formation, were attended by pain either in the eye or forehead, or with increased sensibility to light. In what manner the complaint came on, to what diseases the patient is hereditarily disposed, particularly gout, rheumatism, erysipelas, or fits of any kind; and whether his parents suffered from this disease. These questions being answered favourably, imply the probability of the disease being a true cataract. The eye should now be examined by the touch, in order to ascertain that it possesses its natural firmness; the iris should be attentively examined, in order to see that it is of its natural colour, perfectly plane on its surface, and that the pupil possesses its regular motions when exposed to the influence of light in the manner I described in my last lecture. The cornea should be pellucid, and the sclerotic coat free from discoloration or enlarged vessels. The patient, on being placed before a window on a clear day, should be able to distinguish the shadow of objects placed before the eye, such as the fingers, the bars of the window, &c. &c. The state of the lens next demands attention: it should be examined under a direct front view, at the time the motions of the iris are under inspection; and subsequently sideways, in order to discover how far the lens interferes with the posterior chamber of the aqueous humour, whether it retains the proper distance from, or presses forward against, or recedes from, the pupil. The opaque hard lens is seen at the usual distance from the iris, the depth of the posterior chamber of the aqueous humour being intact. The distance of the iris from the lens, when the parts are otherwise healthy, causes a slight narrow shade, of a dark colour, to be thrown on the opaque part on the side next the light when it falls upon it obliquely, which cannot be seen when the cataract is large and advances forwards against the iris. The surface of the lens under the naked eye seems to be finely polished, in a hard, small, lenticular cataract; but which appearance it loses if the capsule should be also opaque.

The pupil should now be dilated by the application of atropine, or belladonna to the eye itself, or where persons are easily alarmed, by applying a solution of either substance once or twice a day to the forehead or brow, until the dilatation of the pupil is effected. Under these applications, the pupil will be fully dilated and round in every part, or the points of adherence of the iris will be clearly demonstrated by their remaining fixed, and whilst the other parts have become equally dilated, the salient, or irregular points mark the attachments to the capsule of the lens behind. The pupil may resist the influence of the atropine, shewing that the whole internal surface of the iris has adhered to the capsule, in which case no separation or distance can be perceived between them; or if the pupil should remain undilated after a fair and free application of atropine, the distance between the iris and the opaque lens being natural, the cataract is complicated with other derangements, oftentimes with a tremulous state of the iris, and the case is not one fitted for any of the ordinary operations for the removal of the lens.

The whole of these parts should now be submitted to examination under a double convex lens, or such other glass as may be best suited to the eye of the surgeon. In the hard lenticular

cataract of middle-aged and elderly persons, the lens is usually of a grey or amber colour, deeper in the centre, and verging to a yellow, or a brown walnut hue; its distance from the iris, and its central situation, can be clearly perceived. It is said that cataracts have sometimes been seen perfectly black, and capable of being mistaken for amaurosis, from the deep black colour observed behind the pupil; all, and every part of which statements I doubt, and believe that they are founded in error; my father never having seen, in the whole of his great experience, a single case of the kind, although in many, the colour of the opaque lens has been of the darkest brown mahogany, easily, however, and at all times to be distinguished within the eye. He suspects that, in the cases alluded to, the pupils were not dilated by belladonna; and he does not believe that a black cataract, or anything approaching to it in colour, was ever removed from a human eye.

When the opacity begins rather behind the centre of the lens, all the symptoms of hard cataract may be present, and the patient be nearly blind, the anterior part of the lens scarcely partaking of the disease; in which case, when the pupil is dilated, the opacity will be seen deeply seated, and the surface of the lens will shew what may be compared to a thicker coat of polish than is usual in ordinary cases of cataract. The lens, in these instances, is generally found to be very hard on extraction, and thinner than usual.

When the opacity does not actually commence in the centre, it oftentimes occupies three different parts, corresponding to the three portions into which the lens may be divided, by boiling or charring it; the divisions between these parts being semi-transparent, and of a different colour. In some cases, the central division appears to separate the lens into five different parts, as in the sketch I now present to you.

In persons about the middle period of life, and sometimes much later, the opacity, as I have already stated, does not begin in the centre in an observable manner, but from the circumference, which can only be perceived when the pupil is fully dilated by atropine. I saw, within the last two days, a gentleman, eighty-four years of age, who complained of the gradual, but increasing, dimness of vision, from which he had suffered the last two years, and which, unless the pupil had been dilated by belladonna, might readily have been mistaken for amaurosis, by those unacquainted with the distinguishing symptoms of cataract. The eye was so perfect and sound in every respect, except the dimness of vision, and the state of parts behind the pupil was so clear and transparent, that the formation of cataract could only be suspected. The atropine removed the difficulty, by withdrawing the curtain formed by the iris, and shewing the commencing points of opacity, corresponding to the ciliary processes around the circumference of the lens, which, when carefully examined, showed a very slight deviation from its normal pellucid state. This gentleman was thus saved an unnecessary treatment for amaurosis, which might materially have injured his future health and prospects from an operation.

In such cases, the lens gradually becomes more and more implicated; the central part loses its transparency; white striæ are seen running from the circumference towards the centre, which, as the disease becomes completely formed, which sometimes occupies months, and even years, assumes a deeper hue than the surface, which is usually of a slight yellow, or pearly colour. The central part is hard, and will so rarely yield to the knife, as not to admit of the operation, by division, or for removal by absorption. The point the most important for consideration in selecting the method of operating for the disease, and the point on which inexperienced persons are the most likely to commit an error, and to which we shall hereafter allude, in considering the advantages and disadvantages of the different modes of operating. The surface of such cataracts is actually softer than the centre, and of a lighter colour, easily separating from it after extraction, or under the knife, when the operation is attempted by division, leaving however the hard central nucleus in a situation to cause all sorts of evil;

such as, long-continued pain, inflammation, and suffering, and the eventual loss of the eye, unless this hard part can be fortunately depressed, and even then, as in the case of Mrs. Busby, now in the hospital, this small portion will sometimes spring up again, after the lapse of nearly two years, and give rise to a state of irritation, which often terminates unsatisfactorily.

When a hard cataract is nearly white, it may be compared to a white cornelian; it does not tend towards a blueish tint; has always a dense appearance, implying a solid body, and of a fine, smooth, and polished surface to the naked eye. It is not, in general, of a dead white colour, neither is it clouded, nor speckled,—marks which are indicative of a soft cataract. It is proper to remark, that although a hard cataract usually preserves its natural size, or is even less, and at a distance from the iris, a white, and even a soft cataract, is not always protuberant.

On the Diagnosis of Capsular Cataract.

Capsular cataract may be, and is considered to be, the consequence of an action of a peculiar kind, which is looked upon as inflammation, and confined to the capsule of the lens, and to the ciliary processes, from which it principally derives its nourishment.

The capsule of the lens is divided into two parts, an anterior and a posterior. The anterior part of the capsule is much stronger and thicker than the posterior, which does not seem to receive its supply of blood so directly from the ciliary processes.

The posterior capsule, probably from this circumstance, is not affected by opacity in a similar manner with the anterior capsule, and it constantly happens that it remains transparent, when the anterior portion, and even the lens, are opaque; a fact which is generally exemplified after the extraction of a hard lens, accompanied by a greater or less degree of opacity of the capsule. It is also shown in those cases of depression, in which the lens has been lowered below the upper edge of the pupil before it has been carried backwards to be deposited deep in the vitreous humor, and out of the axis of vision. I am, therefore, disposed to believe, and, it appears to me, to be satisfactorily proved, that opacity of the posterior part of the capsule of the lens is a rare disease. The surgical fact is accounted for by the late anatomical investigation made at the College of Surgeons, by Mr. Quekett, who finds that, although the posterior capsule of the lens can be injected in the fetus through the central artery of the vitreous humor, it can only be injected from the artery of the retina in the adult, and then principally when the eye is diseased. In the puppy and kitten, two vessels can be shown, running from the membrana pupillaris to the posterior capsule, but they disappear with it. In the reptilia, the posterior capsule can be injected from as many as four branches of the arteria centralis retinae.

The appearance of the capsule in a true case of insidious disease, free from any local causes, is that of a fine semi-transparent membrane, or of the silk which is termed white Persian in this country, drawn perfectly tight over a white or colourless substance, which peculiar shade is best seen by allowing the light to fall obliquely upon it. It is not always of an equal hue, but appears to be veined of different shades of colour, and does not possess that polish which is observable when the capsule is not affected. In other instances, the appearance of the capsule is best represented by what is called silver, or thin tissue paper. In most instances, the commencement of the opacity, and, at all events, its greater density can be observed very distinctly to begin, when the pupil is fully dilated, from its circumference or edge, in the way I have described, of a whiter and shining colour, somewhat resembling spermaceti, and passing on in a less defined manner towards the centre. These triangular points are situated at equal distances from each other, and remain sometimes stationary for a considerable time; but when the disease increases rapidly, the capsule often thickens, depositions seem to take place in it, and upon its surface; it assumes a spotted, chalky, streaked, or pearly colour, giving rise to appear-

ances, which have induced German ophthalmologists to invent names for them, which are however perfectly useless. The opacity very rarely begins in the centre, and is never uniform, and whenever a central white spot is seen, the complaint is, in all probability, congenital. When the capsule is alone affected in an adult (which it seldom is for any time), the opacity does not necessarily approach to, and, therefore, does not alter the appearance of, or interfere with the movements of, the iris. When the lens is affected, the complaint becomes a capsulo-lenticular cataract, and as the case must always be treated as such by operation, a further diagnosis of the state of the capsule is useless.

I have stated that posterior capsular cataract is a very rare disease, the opacity usually supposed to commence and exist in that part being, in fact, an affection of the lens itself. In the first edition of Mr. Guthrie's work on the Operative Surgery of the Eye, published in 1823, he stated that he had operated in such cases at an early period of this complaint, with the hope of arresting, or preventing, the occurrence, or progress, of the disease in the other eye, and found the opacity to be in the posterior layer, or layers, of the lens, and not in the capsule, which induced him to doubt the disease existing, or commencing alone, as an opacity of the posterior capsule, a fact which has since been appropriated by subsequent writers as a discovery of their own.

When the complaint begins at the posterior part of the lens, it often remains stationary, or nearly so, for years; the patient complaining of indistinctness of vision, which is oftentimes improved by a magnifying glass. On looking into the eye, a muddiness can be observed in the situation of the lens, but more deeply seated, so that the thickness of the lens may be estimated anteriorly to it; and on examining it sideways, or from the side of the eye, it has a coneave yellowish turbid appearance, generally accompanied by lines, which can be often distinctly perceived, crossing it, but seldom intersecting each other. These appearances may be irregular, but they do not resemble the chalk-white, or shining light-coloured spots observed on the anterior capsule. As the lens becomes opaque, they are of course lost in the general opacity, and as it is usually hard, it assumes the characters indicating that state, and the opacity of the posterior capsule can only be ascertained after the operation, if it should be then perceivable.

When the capsule becomes affected, or remains opaque after an operation or accidental injury, which gives rise to the removal of the lens, the complaint is called *secondary capsular cataract*.

On the diagnosis of capsulo-lenticular cataract.

Capsulo-lenticular cataracts are most commonly fluid, soft, caseous, or siliquose, and occur principally before and during the middle period of life. They are more rarely seen after fifty years of age, unless as a consequence of inflammation by extension from the neighbouring parts, with adhesions, in which cases I have found that the lens was more or less pellucid, and, occasionally, even almost transparent.

Of fluid cataracts, there are three varieties having names:—1. The *common fluid cataract*. 2. *Cataracta Morgagniana*, lactea, or puriformis. 3. The *cataracta capsulo-lenticularis*, cystica, or encystid, or hydatid cataract, under which designation may be included the cataracta cum bursâ ichorem continente, or bursal cataract, and the cataracta cystica tremulens, which two last are really not genuine capsular, but spurious cataracts, complicated with other states of disease of the eye.

A fluid cataract generally resembles milk, or milk-and-water in colour, or is even less distinctly white, although clouded, as if of unequal density. When the pupil is dilated, and the eye put into quick motion, or if the eye and eyelids be sharply rubbed, the cloudiness will sometimes appear to change its situation, to render the whole surface of the opacity of an equal colour. This cloudiness of a particular part again becomes apparent after the eye has been a short time at rest, whilst in other more marked cases, a separation and subsidence of the denser parts may be distinctly perceived, forming a white layer at the lower portion of the opacity, the upper

part being still opaque, although less deeply colored; and then the patient can, in particular cases, perceive the difference of opacity between the two layers. The cataract does not, from the first, possess the polished surface always to be observed when the capsule is diaphanous, and although this part may remain, in some instances, nearly transparent, it very seldom does so, and the fine tissue-like appearance will be readily seen on examining the eye by a side light.

When the lens, and fluid immediately in front of it, which is called the liquor Morgagni, are altered from their natural state and the former becomes fluid, both are rendered more or less opaque. This change is usually effected with some increase of size, so that the convexity of the lens is more marked, and it occupies a greater portion of the posterior chamber of the aqueous humour, so as to appear in many instances to press the iris forward, and to render its anterior surface convex. The pupil undergoes a slight change, it is a little dilated, and its edge becomes black, which blackness is the posterior part of the edge of the uvea, which is pressed forwards and rendered evident from the same cause. The motions of the pupil under the influence of light, are slower and less lively than natural, or than in the other eye, if it should not be affected. If the belladonna is applied, the subsequent return of the pupil to its usual state requires a longer time for its accomplishment, than if the lens was sound. The opacity is close to the edge of the pupil, its convexity is readily perceived even protruding into it, and I have seen cases, in which, on bending the head forward, this protrusion became distinctly marked, and subsided on the head being restored to the erect position. No shadow of the iris can be seen, or be thrown upon it. These signs indicate a cataract larger than the natural size, even if it should not be fluid, and as large cataracts are almost invariably soft (although small ones are not always hard) it may be fairly concluded, that a cataract which possesses these characters is soft, and will yield to the knife in the operation by division for the purpose of facilitating absorption. The appearance of the opacity, if not fluid, will almost always enable an experienced eye to detect its nature, unless the capsule has become so much thickened, as to preclude all observation. The cataracta Morgagniana, lactea or puriformis, is of the fluid kind, and does not deserve consideration as a distinct genus. It is supposed to depend on an accidental effusion of the liquor Morgagni in a turbid state, which I doubt. It is said to occur more suddenly than all others, and to be often caused by exposure of the eye to the fumes arising from the oxydation of metals, severe seasickness, &c, of which I believe nothing. The lens in dissolving may be rendered gelatinous, or it may remain diminished in size, but hard, giving rise to the barbarous name of cataracta *fluide dura*. The existence of a portion of the lens in a hard state may be sometimes suspected by an experienced surgeon, but the distinction and the name are both useless.

The cataracta capsulo-lenticularis cystica, or encysted, or hydatid cataract, the cataracta cum bursâ ichorem continente, or bursal cataract, the cataracta cystica tremulens or natalalis, *cataracte tremblante* of the French, my father now considers, as complicated diseases, none of them being genuine cataracts, and the practical conclusion he draws is, that few persons having such complaints recover their sight after operation, and if any operation is done, it should never be by extraction, but always by the needle. These cases are said to occur in consequence of blows on the eye, or after inflammation, which is quite correct, and the eyes in which they occur are usually amaurotic. My father has seen several cases of staphyloma, in which, after removing the anterior part of the eye, the lens and capsule have rolled out in a fluid state, the little bag changing its shape as it was moved over in the palm of the hand. He has never seen this occur after the operation for extraction, as asserted by Beer, Richter, De Gravers and others, to have taken place with them, because the operation of extraction is not adapted for, and ought not to be performed in, such cases, which can

always be distinguished without the least difficulty, when they do occur, but they are very seldom seen.

Previously to the lecture, Mr. C. Guthrie performed three operations for extraction, and one for depression of cataract, with great quickness and his accustomed dexterity: and Mr. Bury Dament broke up a soft cataract. The operation of extirpation of the globe of the eye was also performed by Mr. C. Guthrie in a case of fungous disease. We hope to give an account of this last named case in a future number. J. F.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 74.)

Mrs. G—, æt. 25, brunette, tall, and stout; had an abortion in November, 1842; in a few weeks after which event, she consulted my friend and former pupil, Mr. Philip R. Sleeman, of Redcliffe-hill, Bristol. She complained of great pain of back, sense of dragging at the loins, &c; Mr. S. found the uterus enlarged, hard, and tender; these symptoms yielded to leeches, counter-irritants, and alteratives; about a month afterwards the same symptoms returned, but were not relieved by the same treatment; a new feature of the disease, also, made its appearance, viz., the formation of a large quantity of gas in the cavity of the uterus, which made it increase in size, producing much distension and uneasiness: has dysmenorrhœa, with exsudations.

October 10th, 1843.—She came to London to consult me. I found a considerable tumour in the lower part of the abdomen, which was hard and tender. The os and cervix uteri were of the natural form and size, and my impression at the time was that I could make the uterus move with my finger, per vaginam, independently of the tumour, but on pressing the tumour through the parietes of the abdomen, the uterus distinctly moved also. I introduced the speculum, and passed a catheter along it through the os uteri externum (os tinæ) to some little distance beyond, but not satisfactorily through the os uteri internum, and touched, with nitrate of silver, a few congested granulations which I observed there.

On questioning her, I found that she had had rheumatic gouty swelling of some of her joints; but, on examining the water, I could detect nothing unnatural.

Feeling that I had not made out the case satisfactorily, I requested a consultation with a physician of high standing in the metropolis, who, after examination, came to the conclusion that the tumour was formed by the uterus, the parietes of which had become thickened by interfused lymph from an attack of peritonitis, which she had some years previously; but I could not coincide in this view, as the frequent alterations from time to time, in the size of the uterus, rendered it improbable; she returned home the following day.

27th (by letter).—Catamenia appeared on the 20th, with much pain, as usual, during which she passed a long shred of fibrinous membrane. The tumour as hard and painful as when I examined it in London; her general health good. Mr. Sleeman has again carefully examined her, and thinks that he could move the uterus, slightly, without moving the tumour, and also vice versa, but does not feel certain about it.

He is inclined to agree with me, in suspecting that the tumour is not formed by the uterus, but is connected with the left ovary. The tumour has not subsided as it did before; the uterus is not so moveable as it ought to be. I advised him to pass a silver male catheter through the os uteri, and make another attempt to ascertain if the cavity of the uterus was enlarged.

R. Potassii iodidi gr. ij., liq. potassæ m. x. decoct. sarzæ co. 3iss. M Ft. haust ter die sumend.

Jan. 30th, 1844.—Mr. S. has tried to pass a

straight metallic catheter, but could not introduce it further than half an inch beyond the os tinæ. I recommended him to gradually dilate the canal of the cervix with bougies.

Feb. 7th.—I visited her at Bristol. The uterus feels moveable; the abdomen about as large as when I saw her in London. As I could only pass the uterine sound up to the os uteri internum, viz., about three quarters of an inch, at which point it seemed to meet with an insurmountable obstruction, I introduced my dilator, and dilated the canal of the cervix, and Mr. Sleeman immediately succeeded in passing the sound quite into the cavity of the uterus; it went up two inches and a half beyond the os tinæ. From this circumstance, and also from the tumour increasing considerably in size just before, and again diminishing after the catamenial periods, I thought there must be accumulation of menstrual fluid in the uterus; I, therefore, advised Mr. S. to keep the os uteri well dilated.

13th.—Mr. S. succeeded in passing a catheter (No. 8) into the uterus the same evening. The next day he had some difficulty in passing a sound (No. 10); it passed with a great deal of pain, followed by faintness, and nausea; a large discharge followed this operation, and continued through the night with a diminution in the size of the uterus; the catamenia followed the next day in good quantity, and with much less pain than usual. As soon as this is over, Mr. S. will repeat the dilatation, and endeavour to put in practice my wish that the uterus should be washed out by means of a long elastic catheter adapted to a syringe.

March 11th.—Mr. Sleeman continued dilating the os uteri until the 4th instant, when the catamenia appeared. He had gradually increased the sound from No. 8 to 14, and washed out the uterus by injecting warm water. "The tumour," he writes, "continued throughout of immense size; I must say I could not feel the point of the sound, when in utero, to the extent of the tumour. The instrument passed up four inches from the os uteri. The catamenia came on four days earlier than usual, preceded by no premonitory pain or suffering whatever, which formerly used to be the case."

As I had not heard of her since the above report, I wrote to request Mr. Sleeman would give me a short account of her progress up to the present time, which he has kindly permitted me to quote. Speaking of her gradual improvement since the dilatation of the os uteri was fairly effected, he says:—"The catamenia came on without any premonitory and acute pain; continued to flow with little or no inconvenience, while, before, they were attended with very distressing symptoms. The tumour, or rather the uterus, has resumed nearly its original condition; and she now enjoys, and has done ever since, a very tolerable share of health, after having undergone a protracted and painful illness. She is able to walk about as usual; appetite good; rest tranquil and refreshing, and has now the appearance of robust health."

The above case is interesting, not only on account of the great difficulty in coming to a correct diagnosis in the first instance, but also from its very successful issue, and it is only due to Mr. Sleeman to say that she is entirely indebted for her recovery to the able and persevering manner in which he carried out my views. She was of a rheumatic gouty habit, as seen by my report of her when in London (Oct. 10th, 1843), and to this I attribute the secretion of gas which had previously taken place from the uterus. The connection between the secretion of gas from mucous surfaces, and the rheumatic-gouty diathesis, as regards the uterus, vagina, and bladder, has, I believe, first been pointed out by myself in my work on uterine affections, in connection with mal-assimilation. It is a subject to which I shall now merely allude, in consequence of these symptoms having appeared in the present case, and shall enter more fully upon it when I come to that form of dysmenorrhœa, which essentially depends on this diathesis.

I have been anxious to report my opinions as I found them at my examinations, and not to suppress them because they afterwards proved in-

correct; because I have always considered that an honest report of an error is frequently more useful than of the most complete success; and am sure no one can read the plain and modest confessions of occasional unsuccessful practice by La Motte and Smellie, without respecting these distinguished authors for their honest candour, and feeling grateful for their having pointed out the rocks upon which they struck.

In my first examination, I merely passed a female catheter up the speculum, and finding it enter the os uteri for some little distance with such facility, I was too easily satisfied as to the state of the os uteri internum, although a little further reflection on the frequent increase and subsidence of the tumour made me regret that I had not satisfied myself more fully on this point. It was very shortly before I received from my friend, Professor Simpson, of Edinburgh, a specimen of his uterine sound; to the value of which simple instrument I can bear the highest and most grateful testimony, and feel sure, that if I could have used it when my patient was in London, I should, probably, have succeeded in ascertaining the contracted state of the os uteri internum, and at once have proceeded to effect the necessary dilatation.

Being rather stout, the external examination of the tumour was not easy; and from the indistinctness with which any slight shock, or jerk, at one end of the uterus, was communicated to the other, I was inclined to suspect some ovarian disease, the more so as she had experienced pain in that direction, and especially because her dysmenorrhœal attacks were attended with exsudations. Although Mr. Sleeman was inclined to concur in this view from his subsequent examination, I could not shut my eyes to the remarkable fact of the tumour occasionally subsiding, and again increasing; I, therefore, urged him to repeat the examination of the os uteri, and on his satisfactorily ascertaining that a stricture existed at the upper extremity of the canal of the cervix (os uteri internum), I determined to visit her at Bristol, and attempt its dilatation by means of an instrument which I have been in the habit of using for that purpose. The result was most successful, and the distance to which the uterine sound passed immediately afterwards, showed that the cavity of the uterus was considerably enlarged, and cleared up all doubts as to the real nature of the tumour.

I may here observe that, in a large majority of cases where I have been obliged to dilate the os uteri, it has not been on account of a contracted state of the os tincæ, or os uteri externum, but of the os uteri internum. Mr. Sleeman's observation (March 11th, 1844) that he could not feel the point of the sound to the full extent of the tumour, was probably owing to its impinging against the posterior wall of the uterus, inasmuch as it could scarcely be introduced to such a distance in the axis of the uterine cavity.

I now pass on to the consideration of dysmenorrhœa, arising from derangement of the assimilating functions; and, commencing with the simpler forms of it, will first report cases of mere uterine irritation connected with gastro-enteric derangement, and then pass on to the more severe and serious forms of it. I might perhaps divide the subject into derangements of the functions of primary and secondary assimilation, but although probably, strictly speaking, correct, such a purely physiological arrangement would lead me further into remarks of this nature, than would be desirable in reports of so purely practical a character as these. I will therefore merely state that, under the head of dysmenorrhœa arising from derangement of the assimilating functions, I shall bring the dysmenorrhœa from gastric irritation, and those forms which are connected with rheumatic or rheumatic-gouty diathesis.

The close sympathetic connection between the stomach and bowels, and the uterus, is well known. Perhaps no organs act and react upon each other so reciprocally and strikingly as these. The derangements from gastro-enteric irritation, as regards the uterus, are seen most conspicuously at the times of periodic excitement; sources of irritation which, during the intervals between the menstrual periods, had seemed to have little or

no effect upon the uterus, now act with much energy, producing considerable derangement of its functions. Hence we see that at no time is the uterus affected by gastric irritation so strongly as at the menstrual periods, and we rarely see that the existence of the one is found to any extent without a corresponding derangement of the other. In these cases the effect itself becomes a cause of further derangement; not only of other organs in the vicinity of the uterus, but in that one also (viz. the stomach,) which produced it. Thus it is by no means uncommon to see uterine derangements, which had owed their origin to gastro-intestinal irritation, become in their turn the cause of fresh derangement of the stomach and bowels, thus adding not a little to the difficulty and complexity of the case.

In the dysmenorrhœa merely arising from gastro-enteric irritation, the treatment will be simple enough, but where connected with a rheumatic, or rheumatic-gouty diathesis, it cannot be so, partly from the character of the diathesis which prevails, and partly from the variety of organs which, as well as the uterus, have become disordered.

Miss A., æt. 24—Brunette.

January 10, 1841. Sallow looking, with a torpid circulation and languid pulse, cold extremities, flabby tongue, capricious appetite, torpid bowels, aching limbs, general lassitude. Is well and active in the country, but suffers when she comes to town. The catamenial periods are attended with severe pain, the last was ten days later than usual, and the discharge sparing; she expects the next shortly.

R Pil. hydrarg. extr. lupuli, extract. colocynth. eo. aa ʒi. M. ft. pil. xij. sumat. ij. om. nocte.

R Infus. gentian. co. ʒxviij. acidi nitrici dil. tinct. lupuli aa ʒij. syrupi aurant. ʒss. M. ft. Mistura cujus sumat cochl. magna ij. ter die.

Her diet is to be simple, but nutritious; let her take some wine in the middle of the day at lunch, but not at her ordinary dinner hour, which is late; tepid sponging to the loins, and friction afterwards; she must take regular exercise.

When the pain of the approaching menstrual period comes on, let her use the following pills:—

R. Camphoræ, extract. lactucæ, extract. lupuli aa ʒj. M. ft. pil. xij. : sumat ij. incipiente dolore et rep. omni bihorio dum urgeat.

25th.—Catamenia appeared with pain, but says that the period passed over much better. The face is still sallow, and the bowels unhealthy.

R Hydrarg. c. creta. extract. lupuli aa ʒi. M. ft. pil. viij. sumat ij. h. s. Rept. mistura.

March 5th.—Still sallow looking; complains of pain at the left hypochondrium, and of left shoulder. She has passed a catamenial period with great ease; has been keeping the bowels open by the pills which I prescribed at my first visit.

R Hydrarg. c. creta, extract. anthemidis aa ʒi. M. ft. pil. viij. sumat ij. h. s. Rep. Mistura. Let her use active friction every morning with a salt towel.

The symptoms of atonic dyspepsia form the prominent feature in this case. To the feeble state of the system, must, in great measure, be attributed the sparing and tardy menstruation, which is noticed in my first report of her. The indications were two-fold, viz., to allay irritation and pain at the menstrual period, and to improve the state of the digestive organs during the intervals.

In torpid atonic habits of this sort, the old proverb of "feed and physic," holds good, and the stimulus of a little good wine, when effectually guarded by alteratives and laxatives, is useful in rousing the torpid digestive organs to a more healthy action. Wine, taken with a light meal in the middle of the day, and therefore before, as well as after, a certain quantity of exercise, will generally be found to agree with these patients much better than if taken at the late dinner hour of English society, and, therefore, without the advantage of exercise after it. Under these circumstances, it evidently promotes digestion, and assists the action of the bowels.

The combination of camphor, with extract of hop and lettuce, answered my purpose well in this case, where, from her torpid and feeble digestive powers, opium was by no means a desirable seda-

tive. Indeed, it was given when the bowels were still in an unhealthy state, while the opium would not only have increased the constipation, but would probably have caused much headache, and still further gastric derangement.

Lady G., æt. 23.

November 16th, 1840.—Complains of much pain, weight, tension, &c., in the lower part of the back for a fortnight before the catamenial periods; and, as the time approaches, of much lassitude and lowness of spirits. Appetite good; bowels torpid. Has had latterly a good deal of eruption upon the face, which she observes is distinctly increased just before the catamenial periods.

R Hydrargyri chloridi gr. iij. extracti lupuli gr. vj. M. ft. pil. ij. bis in hebdom. hora somni sumendæ.

R Extract. gentianæ, extr. hyoscyami aa gr. v. M. ft. pil. ij. om. nocte.

19th.—Pills did not act on the bowels; and merely made her feel sick.

R Pulv. rhæi, potassæ sulph. aa ʒi. Man- næ optim. ʒij. spir. myristicæ ʒss. aquæ carui ʒiss. M. ft. haustus bis in hebdom. post pilulas primo mane sumendus.

23d.—The medicines have acted briskly; has found great relief, and feels better in every respect. Eruption much less. Pergat.

December 7th.—Continues in good health and spirits, but as she expects the catamenia shortly, let her take the following pills at the time.

R Camphoræ, extracti lactucæ, ext. lupuli aa ʒj. M. ft. pil. xij. sumat ij. superveniente dolore et repet. secundâ quâque horâ pro re natâ.

11th.—Catamenia appeared; but the pain was entirely subdued by the pills. As she took a calomel pill on the 6th, let her take the next on the 16th.

The regular aggravation of the eruption before each catamenial period is worthy of remark; as it shows how all pervading is the sympathy between the uterus and every other part of the system. It affords also a good instance of effect becoming in its turn a cause; uterine irritation, which had been produced by gastro-intestinal derangement, exerting a very decided influence upon the eruption, which was itself a result of the same cause.

I expected the calomel would have acted sufficiently by itself, but the result proved that I should have obtained a better effect if I had prescribed the morning laxative in the first instance.

In this case, the half-way period was marked pretty exactly by the commencement of pain, which never left her entirely, until the catamenia appeared; but it was not severe, and only required the occasional mercurial purge for its relief.

I have seen her occasionally since, and also attended her in her confinement. She has continued to enjoy good health, except now and then, when knocked up by the laborious pleasures of a London season. Under these circumstances, the bowels become deranged; the appetite impaired; the catamenial periods again attended with pain, with general disturbance of health, and there is a good deal of leucorrhœa during the intervals.

[To be continued.]

ON THE SEAT OR SOURCE OF COMMON CONVULSIONS.

(Supplement to Papers on Reflex Nervous Acts &c. See *Medical Times*, p. 551 vol. 9.)

By T. WILKINSON KING, F.R.C.S.E.

(Continued from page 77.)

I must refer the reader to the analysis at the head of the former part of this paper, and now proceed with facts, in further corroboration of

SECTION II.

A young man, aged 20, violent pain of the forehead: it occurred in paroxysms, which generally continued four days, and were followed by intervals of partial relief, of about the same duration. After two years, died suddenly in the night, from *convulsion*.

A tumour, the size of a pigeon's egg, hard in the centre, and externally soft, in the substance of the

cerebellum; other parts healthy.—*Planque Biblioth.*, 111-348.—Abercrombie, p. 426.

A man, æt. 40: pain in the occipital region, and convulsive agitation of the limbs; difficulty of respiration: softening of *left hemisphere* of cerebellum.—*Spillan's Andral*, p. 206.

Out of 36 cases (of tumour, affecting the cerebellum, by different authors) there are but 8, in which motion was not in some way disturbed.

Complete, or incomplete, paralysis was observed 15 times.

In this number, there were but 4, who had hemiplegia; it took place on the side opposite to the lesion of the cerebellum in 3 cases, and, in a fourth, the two lobes were diseased.

There remain 4 patients, of whom nothing else is said with respect to motion except that they gradually became debilitated.

Involuntary contractions, affecting a greater or less number of muscles, were observed more frequently than paralysis; we met 22 cases in which these contractions were found to exist. In 15 out of these 22 cases, the entire body was agitated, at intervals, by convulsive movements, which became more and more frequent; and it was often in the midst of violent convulsions that the individuals died. Some, and that was the greatest number, retained their consciousness during the continuance of their convulsions; others lost it suddenly, and they presented the symptoms, which characterize an attack of epilepsy. In these patients, the lesion occupied different seats, sometimes confined to a single lobe of the cerebellum, sometimes extending to the two, sometimes occupying also the medulla oblongata.—(*Spillan's Andral*, p. 215.)

It is notable, that M. Andral's summary of cerebral apoplexies, entirely omits convulsive symptoms.

A child, of 4 years: unable to walk; articulation very imperfect; intelligence very deficient; deglutition very difficult; liquids swallowed, often returning by the mouth and nose; difficult respiration and frequent convulsions, but was full in flesh: had been in this state about a year; died in six months more.

Corpora olivaria, crus cerebelli, and tubercula mammillaria (encircling the pons) in a state of cartilaginous hardness; other parts sound.—*Abercrombie*, p. 431.

Morbid anatomy terms may be sometimes too strong or even too weak; the "hardness," here, scarcely obliterated any function. I place this case, however, by itself.

Section III.

A man, aged 36: occasional attacks of severe headache, shooting from behind forwards. After a few months, double vision; then, gradually, palsy of the right side, with distortion of the mouth, and inarticulate speech; the left eye drawn towards the nose; pulse natural. About two months from the commencement of the paralysis, he became convulsed, and died in twenty-four hours.

A tumour, the size of a hazel-nut, lying on the left side of the tuber annulare, and sunk into it. It extended to the left corpus pyramidale, compressing it, and the abductor nerve, and was closely attached to the basilar artery (i.e., near the mesian line), which contained, at this place, a small coagulum, and its coats were very soft. The tumour was in a state of imperfect suppuration.—*Yellowly, Med.-Chir. Trans.*, v. 1, p. 181.—(*Abercrombie* p. 437.)

A young man, of 15: deep-seated pain in the head; and, after six months, inarticulate speech. Three attacks of convulsion, each of ten or fifteen minutes' duration; the last left palsy of the right side, which disappeared next day. Died comatose in another month, having had repeated convulsive attacks, intense headache, impatience of light; afterwards, dilatation of the pupils, deafness, palsy of the eyelids, very difficult articulation, and some delirium.

Four ounces of fluid in the ventricles; on the left side of the pons Varolii, a hard tumour the size of a bean; surrounding substance softened, approaching to suppuration.—*Coindet sur l'Hydroceph.*, p. 98.—(*Abercrombie*, p. 430.)

A boy, of 14: severe headache for two months, then convulsion, followed by coma, and death on the eighth day.

A tumour, the size of a walnut, of a rose-colour, and a fatty consistence, behind the posterior part of the medulla oblongata; another, smaller, in the left lobe of the cerebellum. Serous effusion; diseased mesenteric glands; ulceration of the small intestines.—*Merat, Journ. de Med.*, tom. x.—(*Abercrombie*, p. 426.)

A girl, æt. 6½, began to squint, and lose the power of legs and speech. Mind good; no pain. The right limbs grew stiff. Urine and fæces involuntary. Increasing stiffness of all the limbs. Final palsy. Gelatinous hypertrophy of the pons Varolii, the left* half the larger. 13iv. in the ventricles.—*Bright*, p. 48.

A man, at work, had ringing in the ears; he screamed, rose, ran, and fell; he was unconscious, pale, and somewhat stertorous; his limbs were slightly rigid, but varyingly so, and jerking, especially if pinched.

In the pons was found a pouch of blood, which had burst into the fourth ventricle, and spread laterally.—*Ollivier*, case 89.

A man, about 50, was struck apoplectic and epileptic; he foamed; retained some feeling; was relieved by bleeding; stertor followed: fatal in three hours.

Blood was found in the fourth ventricle; and a cell, here, dividing two-thirds of the medulla oblongata (moelle allongée), posteriorly.—*Ollivier*, case 93.

A lady, æt. 40, with declining menses, had a syncope. The next morning, whilst sitting in bed, she had violent epilepsy; and, in the space of seven hours, fifteen fits, alternating with coma. After depletions she could swallow; was quiescent a day; then, at night, had slighter convulsions of all parts, every fifteen minutes; and again, the next night, when she sank. There was no decided palsy.

There was found a red inflamed mass in the summit of each hemisphere, the size of a walnut. In the centre of the medulla oblongata, there was a small, dark portion, as if caused by a drop or two of extravasated blood.—*Abercrombie*, p. 75.

A female, æt. 20, was seized, during accouchement, with apoplexy. There was difficult respiration, and convulsions of the four limbs, and speedy palsy. Death in two hours. Very considerable clots were found in the pons, breaking into the third, and also into the fourth, ventricle.—This is a fact by M. Monod.—See *Ollivier*, t. ij. p. 154.

The three following are from the last author, likewise.

A man, æt. 72, in good health, after walking a league in Paris, complained of fatigue, sat down, fell on his side, and vomited the coffee of his breakfast. The face was injected; the mouth not drawn aside; respiration gentle and noisy; coma profound. Several convulsive stiffenings of all the limbs—transitory. He died in two hours.

The pons Varolii was tumid, with an apoplectic cell extending into the crura cerebri and anterior pyramids—it occupied only these anterior columns.—Case 92.

A rich, keen financier, æt. 75, a large eater, was subject to brain fulness, and often bled; after a sudden and severe attack of loss of consciousness, and convulsive stiffenings of the limbs, which seemed subdued by active measures, in eight days, he resumed his ill habits, and, in five days more was found dead in bed.

In the centre of the mesocephale was a little blood-cell, healing, and around this were five others,

* The author's word is "right," but the plate denotes the left. The spinal marrow was "remarkably firm, almost like cartilage." (?) The eyes, the voice, and the two right limbs, give precedence to brain affection.

Ollivier's cases of more general convulsive affections, referred to spinal marrow, are open in very great measure to the suspicion of morbid pons. Indeed, it is difficult to account for the circumstance of this last author, with the facts before him, having missed the conclusion for which I contend. The same, however, applies, with little less force, to *Bright*, *Abercrombie*, and *Andral*.

fresh, of the size of a small pea, with softening around them.—Case 94.

A man, æt. 74, in good health, felt his head heavy: at six, the next morning, he was unconscious, and strongly convulsed, generally, for two hours, and, two hours later, he died comatose.

A clot, the size of a common (French) hazelnut, two lines deep, was found in the middle of the pons.—Case 91.

A middle aged man had fever, and debility, and lost the due controul of his limbs; the head rolled about on his pillow, face twitched, tongue trembling, feeling good, mind confused, stupor and epilepsy alternating.

A nacre-tumor (altered struma), the size of a walnut against the tuber annulare.—*Med. Gaz.*, Oct. 1834, p. 143.

Mr. Laurence described the case of an anencephalous child, in which pressure on the medulla oblongata caused convulsions.

Section IV.

I shall now set down a few sketches of cases which seem to afford satisfactory comment, or opportunity for comment, on what may appear to be objections to the inferences which I have endeavoured to establish.

Tuberculous mass in right lobe of cerebellum; pain of the head; hemiplegia of left side; blindness; intellects retained.—*Spillan's Andral*, p. 211.

This was the case of a man, æt. 29. All the inner half of one lobe of the cerebellum was changed. Wasting diseases elsewhere, and final acute peritonitis, precluded active capillary processes about the tubercle, and the pons escaped.

A female, æt. 46, had complete right hemiplegia several years. An old blood-cell, the size of a haricot-bean, in the middle of the left half of the pons, transversely.

Whatever may have been the symptoms at the moment of extravasation, we have evidence of the completely quiescent state of the part for a long period. There was a final sort of coma, and cerebriiform cancer affected the right ventricle of the heart extensively.—*Pinel Grandchamp*, and *Ollivier*, p. 95.

A female, æt. 60, had a fibro-serous cyst of greenish fluid, the size of a cherry, in the left crus cerebri. Hemiplegia on right side, of long standing, with diminution of sensibility. Death, four years after the appearance of this hemiplegia, from chronic peritonitis and ascites.—*Spillan's Andral*, p. 104.

A man, æt. 53, had pain in the occipital region; hemiplegia of right side, with contraction; preservation of intellect. Attack of apoplexy, of which the patient died. Old, limited, softening of the central part of left lobe of the cerebellum; great recent hæmorrhage in cerebral hemisphere of left side.

Andral seems carefully to have examined the brain, and to have connected the old lesion with the hemiplegia, in which case, the contraction is a notable point.—*Spillan*, p. 204.

A man, æt. 63, was seized with hemiplegia of the right side, after dinner. The next day, he raved; at night, coma and death. Double effusion of blood, one large, into left hemisphere of the brain, and the other, the size of a nut, into the centre of the left hemisphere of cerebellum. Both effusions were clear of the centre. (?)—*Spillan's Andral*, p. 196.

The following brief notices are only valuable with reference to my present object, as serving to shew that a little difference in the nature and seat of lesion affects the existence of convulsion, and that great nicety will be necessary in appreciating these differences, in necroscopy.

A man, æt. 29. Sudden loss of consciousness and of motion in the extremities of the left side: re-establishment of the intellect. At the end of nine days, a new attack of apoplexy, and death.

Considerable softening of right hemisphere of the cerebellum.—*Spillan's Andral*, p. 205.

A female, æt. 71, had softening of the right cerebral hemisphere. Acute pains in the left limbs, which subsequently became paralysed, still continuing painful.—*Spillan's Andral*, p. 145.

A man, æt. 77, had debility of right limbs, of long standing; sudden loss of consciousness; he-

miplegia on the right side, and contraction on the same side; *convulsive* movements and cataleptic phenomena of left side.

Softening in each optic thalamus: in the *left*, a yellowish softening, the size of a hazel-nut, in its posterior or middle part; in the right, a small softening, towards its inner posterior part.—Spillan's Andral, p. 150.

Pain of head, of long standing, limited to right side of cranium; left hemiplegia. Intermitting symptoms of cerebral congestion; great cancer, below, in right hemisphere.—Spillan's Andral, p. 189.

This was the case of a man, æt. 58, and I deem it a very remarkable one. It was severe and long. The full narrative seems to shew that the thalamus and striated body mainly escaped, and consequently the pons. Such cases may induce doubts, but they are amongst the very facts which prove that the visible cause of convulsions must be large in proportion as it is removed from the pons, just as the smallest tangible causes are to be looked for, concentrated in, or close upon, that grand centre of motion.

I may admit that I have yet reserved three or four curious statements, of rare occurrences, which hardly correspond to my views. These I regard as only solitary, or doubtful residuary objects of examination.

My *conclusion*, then, from all the foregoing, is, that any local cause, with 'acquired disorder of health (such as ever introduces fever, inflammation, or sudden changes in chronic affections), is capable of exciting disturbance of the capillaries of the pons, and may induce, more or less, general convulsions of the body.

There do not appear equal grounds for pretending any other seat or different cause, or other local origin, of common convulsions, or of epilepsy. The more partial, and almost less complete, convulsions or spasmodic movements of parts, attendant on so many kinds of disease invading the spinal marrow, are sufficiently distinct from the subject of my present remarks.

I find it would have been easy for me greatly to extend the number of facts,* corroborative of the views here stated, and indeed to produce almost an equal number of more precise illustrations. The variety, already collected, will, however, have its own advantages. The limitation my expressions may require, and the corollaries which the main conclusion affords, are too plain to demand immediate comment.

36, Bedford Square.

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSWILL, Esq., Surgeon, Leicester

(Continued from page 97.)

THE idea that variety of complexion results from no other cause than intermediate states of carbonaceous deposit, appears the more probable, when it is remembered that the colours of flowers depend upon a similar modification, and that whilst carbon, in its greatest quantity in these productions, assumes a dark green colour, its absence gives rise to white.

The colouring matter of plants is a principle called *chromule*, contained in cells protected by the epidermis, or thin transparent covering of the surface, which, by its transparency, permits the colour to be transmitted. It is chemically composed of carbon, in large quantities, hydrogen, and a small proportion of oxygen; it is found in the leaves of plants, and proceeds from the carbon fixed by the decomposition of carbonic acid; its colour in this situation is green, and as such it may be considered as carbon, presented by the vegetable kingdom in its *least degree* of combination with oxygen.

Many leaves change their colour at the approach

of winter, and frequently assume a bright red appearance (as is the case with the Virginian creeper), a circumstance caused by their having ceased to fix carbon during the day, but continuing to absorb oxygen at night. This condition, then, may be assumed as carbon, or chromule, in its *least amount in quantity*, under its *highest state of oxygenation*, and is most frequently met with in flowers whose function (the reverse of that of leaves) is to part with carbon, whilst they absorb oxygen.

We have in these examples the colouring principle of plants (carbon), presented under its two most opposed conditions, namely: in an abundant quantity, and little oxydised, assuming a dark green colour; whilst, in the opposite state, there exists only a small proportion, but at the same time it is exhibited in its highest degree of oxygenation, appearing as a bright red.

The intermediate colours of the xanthic and cyanic series, which flowers display, are simply manifestations of this chromule, or carbon, in varied states of quantity and oxygenation.

Whilst the oxygen of the air thus acts in producing the shade which flowers present, the influence of light is indispensably necessary, since, deprived of this stimulus, their organic functions cease. Hence, if a leaf be prevented from having access to light, it ceases to fix carbon, and becomes ultimately bleached.

The presence, therefore, of a white colour, depends upon the absence of carbon in the cells of the plant. Now, it appears from the preceding observations, that the colouring matter in both kingdoms, in the animal as in the vegetable, is a chromule—a substance chemically and essentially the same; in both instances deposited in cells beneath an epidermis, as transparent in the Negro as in the Albino, in the dark green leaf as in the whitest flower; that, in both instances, its varieties are nothing more than the modification of one primary colour, varying in shade according to its degree and state of combination with oxygen; and that the absence of this principle produces in the etiolated flower, as in the fairest skin of the European, the white hue which distinguishes the inhabitant of a temperate clime, or the production of a northern Flora.

It may next be enquired: what, then, is the reason why all individuals who are exposed to the same temperature, and placed under the same circumstances, do not present the same complexion? The explanation appears to be this; and if the remarks made in the commencement of this paper be borne in mind, their application, as a means of solving the question, will be obvious.

The colour, or complexion, of the individual, depends upon carbon deposited in the rete mucosum of the skin. Now, since there are certain organs, directly and indirectly, specially engaged in throwing off this principle from the body, it follows, if the balance of function, which has been assumed as constituting a normal standard of organic operations, be destroyed, certain of these organs must be rendered preternaturally active, whilst others are reduced to a state unnaturally passive. Thus, if the skin perform a very low amount of function, the lungs endeavour to compensate for its inactive condition, by discharging the carbon of the body by their individual agency, leaving the integument white and unstained. On the other hand, presuming that the skin, from any existing cause, perform a great amount of function, the same causes will, in most instances, induce a comparatively passive condition of the respiratory organs, and the carbon, instead of being discharged *principally* by the lungs, will, in a great measure, be eliminated by the surface staining the exterior of the body of a dark colour.

The different relative conditions of activity between the organs engaged in the function of decarbonising the blood, must, therefore, be regarded as the source of complexion, and the same action which, in accordance with this theory, produces the complexion of the individual, will likewise produce in him his constitutional diathesis, or that condition of organisation which predisposes to certain diseases.

The observations which have been adduced, in explanation of the complexion of the human skin,

must not, however, be applied to the hair, fur, wool, and feathers, of animals and birds. I make these remarks in order that such mistake may not occur. That the colouring principle in these textures depends upon carbon, cannot be doubted; but, being extra-vascular, they have been regarded as excretions, and less influenced by the vital powers. Like plants, it appears that the variety and brilliancy of their hues depend nearly as much upon the intensity of the light to which they are exposed, as to the elevated temperature in which they are found; for, whilst the backs, wings, and breasts of birds, present the most showy plumage, the interior of the wing, and under-surface of the body, are almost invariably white, or of a colour less attractive.

It has been previously intimated that the same cause, which produces complexion, must be regarded equally as the source of temperament. The connection which exists between temperament and complexion has long been remarked, and admitted; I shall now proceed to advance the opinions I entertain on this head, and endeavour to make my explanation as plain as possible.

It has long been a recognised fact, that certain diseases appear specially favoured in their development by certain temperaments; this will no longer excite astonishment, when we view the temperament as the consequence of organic conformation, and the disease as the result of the functional performance of such organisation. Every organ has its own proper and individual stimulus to the production of its functions; hence, if certain organs, engaged in the accomplishment of the same intention, become inert (provided the full performance of the intention be brought about by those whose function is still active), an increased amount of function must be performed by them, and an increased amount of function is understood by an increased amount of stimulus; for it is the material from which all secretion and excretion is effected, which constitutes the proper stimulus to the organ.* This amount of stimulus may continue, or pass off, without permanent injury to the organ; but, by long continuance, or frequent recurrence, it may proceed ultimately to disorganisation.

The sanguine, the bilious, and the serous, may be considered as the three primary temperaments into which the human race has been divided; in all cases, they result from organic function, and the same causes, which induce complexion, induce temperament, which temperament is indexed by complexion.

The diseases, therefore, which are attributed to individual temperament, are not really so attributable; they result from that peculiar condition of organic function, which is the origin of that peculiarity of complexion and formation, and which is recognised as the peculiar temperament of the individual.

1st.—The sanguine temperament is distinguished by certain physical signs, the chief of which are: a florid complexion, a lively countenance, fair hair, nervous susceptibility, and active imagination, whilst the diseases to which persons of this temperament are liable, are those of an inflammatory character.

With these physical conditions presented, it is impossible to mistake the character of the organic functions producing them, if the preceding remarks on complexion have been admitted. The florid hue of the skin, unstained by carbonaceous deposit, indicating an active performance of the decarbonising process by the lungs and capillaries, assisted by an extremely active condition of the liver, by which the carbon circulating in the blood is secreted from that fluid in the shape of bile, to be subsequently consumed in the lungs; whilst the skin remains cool, and performs, comparatively, no amount of function in the excretion of carbon. Inactivity of the skin, with increased activity and preponderance of function in the

* Thus, the blood is the stimulus under which the heart contracts; urea that which leads to the secretion of urine by the kidneys; whilst the carbon, &c., contained in the venous blood, which filtrates through the liver, acts as the stimulus which compels the liver to the secretion of bile.

* The writers quoted have not been exhausted. I should add, that ten or twelve of the cases from Abercrombie are transcripts.

liver, capillaries and lungs, is, therefore, manifestly the cause of the production of this temperament; and we find that, with such activity and preponderance of function in these organs, a corresponding liability to disorder occurs. The sanguine temperament is essentially a temperament of cold countries; and that such is the case is obvious, from various reasons.

The proximate cause of disease in the sanguine temperament, I apprehend to be the too active excretion of carbon from the body, an operation carried on with greater energy than its nutrition. Whilst the nutritive process keeps pace with the excretion of carbon, or the waste of the body, which is the same thing, animal heat will be supported by the combination of oxygen with the carbon and hydrogen of the food; but, when the excretion of carbon preponderates over the nutrition of the body, the oxygen, introduced into the blood by the globules, will continue to combine with the disintegrated tissues, whilst no fresh or adequate deposition of new substance occurs, and the liver, if sufficient material be supplied it for this intention, will rapidly convert the fat deposited in the cellular tissue into bile. So long as the supply of carbon is adequate to the quantity of oxygen inspired, the equilibrium between the nutritive and wasting functions will be preserved; but, when the supply of carbon is inadequate to the supply of oxygen (in order to support animal heat), the oxygen will combine with the elements of that organ, by which it is introduced into the body, and disorganisation of the lungs will result, unless, by motion, enough combining matter be furnished by the metamorphosis of the organic tissues, when simple emaciation of the body will be produced; the diseases of this temperament may, therefore, be presumed to result from a deficiency of carbon.

2nd.—The bilious temperament presents to our notice a skin, dark, and approaching to yellow, with black hair and eyes; the flesh firm; the muscles marked; the passions gloomy; the character firm and inflexible.

Both the physical and moral qualities of this temperament are equally the effect of organic functions. The liver, sluggish and indolent, with difficulty secretes the carbon from the blood, leaving a yellow tinge upon the skin, which, in addition to this cause of the tint, is usually active, as a co-operating, decarbonising agent, as is shewn by the copious perspiration which flows upon the least exertion, and the greasy nature of the exudation which is excreted by it. This state of the cutaneous surface, produced by an indolent performance of the hepatic and capillary functions, and consequent diminished amount of respiration, leads to the deposition of carbon in the rete-mucosum. It is the temperament most prevalent in hot and dry countries; the skin being engaged in the performance of a high amount of the decarbonising functions, the lungs, in addition to their receiving comparatively but a small amount of carbon from the liver and capillaries, admit, at the same time, but a diminished quantity of oxygen from the rarified atmosphere, whilst the external heat, drawing the blood to the surface, presents it to the oxygenating influence of the surrounding medium.

The diseases to which this temperament is obnoxious, are hepatic and skin affections, and may, I conclude, be generally attributed to a superabundance of carbon in the system, which the decarbonising organs, by reason of their inactivity, are unable to excrete.

3rd.—The serous temperament is that usually met with in cold and moist countries; it is characterized by an anasarctous condition of the body; soft flesh; a pale countenance; fair hair; a weakened circulation; and a form rounded, and without decision. The cold and moisture, acting upon the skin, prevent evaporation, and repel the blood to the internal organs; the skin is, therefore, inactive as a decarbonising agent, whilst the lungs, from the quantity of moisture contained in the atmosphere, can receive but a small amount of oxygen at each inspiration; consequently, carbon and hydrogen accumulate in the body, and, from deficiency of oxygen, being unable to be eliminated, either by

the skin or lungs, as carbonic acid and water, are deposited in the cellular tissue, in the form of fat—a compound of carbon and hydrogen.

It is, therefore, apparent, that the chief cause in the production of temperament is organic function,—the result of certain exciting causes, as climate, &c. &c., or hereditary organic conformation, which latter circumstance may be considered as that condition acquired at birth, while, in the first, it arrives only in the process of time, and from the continuance of the exciting cause. It is certain, however, that climate and hereditary conformation are not the only exciting causes, for any agent, which is capable of producing the same condition of function, is also capable of inducing similar results.

The connexion between constitutional diathesis and individual temperament, I conceive, must be evident. Diathesis is a term employed to signify a tendency to certain or particular affections; when, therefore, the connexion between temperament and organic function is admitted and understood, the connexion between diathesis and temperament will be equally evident; the causes, which produce the one, promoting the particular diseases which may be inferred from the other.

Consumption is, however, generally connected with the sanguine temperament, and it is the cause, producing this temperament, which we have to consider, especially, in relation to phthisis. Consumption is only one particular indication and result of a general condition of the system, which exists in connexion with the sanguine temperament, and such general condition may be expressed by the term—scrofulous diathesis. This diathesis, I apprehend, results from the non-sufficient fixation of carbon in the tissues of the body; the organization is unequally balanced between its fluid constituents and its solid parts; and this may result, either from a too active excretion of carbon, or from diminished nutrition. We constantly see the same thing occurring in the vegetable kingdom: for example, deprive a young plant of the opportunity of fixing carbon, by withdrawing it from that power (light) on which its fixation of that element depends, it will not only cease to fix carbon, but it will continue to excrete it, and the result is, a weak and watery stem, which will yield to, and fade under, the slightest prejudicial cause; but take the same plant, nourish it with nutritive material, expose it to the light, give it the opportunity of fixing abundance of carbon in its tissues, and the same causes which, under the first circumstances, would have rapidly induced its destruction, will, under these more favourable conditions, produce no effect upon it. As with the plant, so it is with the strumous individual; nutritious matter, administered in the shape of food, will not contribute to his strength, so long as the causes, which prevent its deposition as solid animal structure, continue, or as long as those, which contribute to its rapid elimination from the body, remain. Like the plant, such individual will also be particularly susceptible of, and influenced by, atmospherical changes.

The circumstances which contribute to prevent the deposition of organic matter, are: insufficient quantity of food; a food unsuited for the necessities of respiration, as well as those of nutrition; and a condition of the digestive organs, by which their power has been lost of bringing the food into that state in which it is best adapted for deposition of fresh material. Lastly, those causes which contribute to its rapid elimination, are: excess of waste, disproportionate to the amount of nutrition, produced by excess of exercise; and excess of oxygen, disproportionate to the supply of carbon and hydrogen.

But there are other elements, besides carbon, which require to be separated from the circulation; there are other performances, besides the decarbonisation of the venous blood, which are necessary to be accomplished, in order to render it pure, and fit for the purposes of nutrition. These objects consist in a separation from the blood of its inorganic principles, after they have ceased to fulfil their intentions in the nutritive processes of the body. I shall, therefore, now proceed to in-

vestigate the nature of these inorganic constituents, and the part which they act in the organic functions, whilst, finally, I shall draw attention to the manner by which they are thrown off from the system.

(To be continued.)

PROGRESS OF FRENCH SCIENCE

FROM OUR OWN CORRESPONDENT.

Paris, Oct. 31, 1844.

On the Use of Creosote in Sphacelus.—In a preceding letter (vide MEDICAL TIMES, No. 266, p. 80), I related a case of gangrene of the skin covering the genital organs and upper part of the thigh, observed in the wards of Professor Piorry, at the Pitié, and which was cured by the mode of treatment adopted by this distinguished practitioner. This method consisted in covering the parts with compresses, imbibed with an alcoholic solution of creosote (R. Creosot. ʒij., alcohol. rectif. ʒj.), washing them frequently with water, and sprinkling on the mortified parts powdered cinchona; at the same time, giving a nourishing diet, and good wine. Since that period, several other cases have occurred; the three following are the most interesting:—1°. M. —, an Englishman, ætat 25, entered the Pitié on the 11th Sept., 1844; employed as workman at the railroad now about to be established between Ronen and Havre; he presented, at his entry, nothing very remarkable; but, a few days after, he stated that his lower limbs were weak; when examined, the sensibility was found to be diminished, though not abolished, and the spinal processes of the 6th, 7th, and 8th dorsal vertebræ were prominent. Plessimetry, being rapidly performed, indicated nothing abnormal in the vertebral column. From this moment, the disease developed itself with rapidity, so that, ten days after, paraplegia was complete, accompanied with involuntary stools, and, at first, ischuria vesicalis, followed, soon after, by incontinence of urine. Shortly after, all the inferior portion of the trunk was paralysed, and the insensibility extended upwards, as high as the edge of the ribs; in order to ascertain its progress, a dark line was made on the skin, and it was not long ere it had increased, so as to be only an inch below the nipple. Motility abolished in all the parts affected, with loss of sensibility. Antimon. tartariz., which had succeeded in a case of paraplegia (hydro-myelitis), a month before, was given in strong doses, but without success; blisters, as well as six cauteries, were next employed, but failed to produce any effect; the gibbosity continued to increase. The lesions of the sensibility seemed, on the 26th, to have decreased in intensity; strychnine was prescribed, but without any good effect; and, on the 30th, gangrenous eschars appeared on the skin covering the sacrum, the trochanter, and on every part of the lower limbs on which the body rested. Nothing similar on the upper extremities. The eschars developed themselves with rapidity, and the method of treatment, first described, having been prescribed, the gangrenous smell did not declare itself; but the enormous ulcers, caused by the sloughing of the cuticle, exposed to view the glutei, with the aspect which they present when dissected on the body of a muscular individual, being only somewhat redder. All contractility, however, was abolished, since, on being irritated, no action was produced. The right trochanter major, covered by its fibrous envelope, appeared in the centre of an ulceration, of an oval form, its largest diameter being seven inches, the smallest six and a half inches; depth about an inch. The ulcer on the sacrum was not quite so large, but was deep enough to lay bare the spinous processes. The patient survived upwards of a fortnight, with these enormous solutions of continuity; and may it not be supposed, from facts recently observed, and especially by the case of a young woman already recorded, that if the alteration of the medulla had not existed, by frequently changing the position of the sufferer, the cicatrization of these large ulcers might have taken place. Here, however, as it was impos-

sible to remove the cause, sphacelus continued to attack different parts of the body, but without increasing in depth or extent on those already mentioned. The excessive diarrhoea (*enterorrhœa*) produced by the absorption of the putrid matter, secreted by the gangrenous surfaces, did not appear in the present instance; but the patient grew gradually weaker and weaker, more from the want of food—it being with difficulty that, towards the close of his miserable existence, he could be prevailed upon to take anything—than from the progress of the gangrene. The temperature, *even of the lower extremities*, and the intellectual faculties, were unchanged to the last moment; the circulation, especially the venous, was performed very feebly; the skin was waxy-white; the pulse very rapid. At length, death closed the scene, on the 17th Oct., caused by anæmia, as well as by the accumulation of froth in the bronchi.

Autopsy, 36 hours after death.—Before examining the spinal marrow, the body having been placed on the abdomen, percussion was performed on the dorsal region, over the seat of the gibbosity, and an evident matity, in breadth about three-quarters of an inch on each side, and in length about three inches and a half, was perceived; nothing abnormal along the remainder of the column. The sound heard was not like what is obtained by percussion on a bone, but similar to that given by a hepatized lung. The portion of the theca vertebralis, the seat of the disease, having been removed, the tumour was discovered on each side of the bodies of the 7th and 8th dorsal vertebræ, in the posterior mediastinum. It presented $3\frac{3}{4}$ inches in length, and $2\frac{1}{2}$ in breadth, which had already been ascertained by percussion. The two lobules, constituting the tumour, were received into two hollow spaces in the posterior lobe of each lung, and were covered by the pleura in its normal state. No tubercles in the lungs; aorta and œsophagus were sound, being only pushed aside by the tumour; the arteries of the lower extremities, examined attentively, were found to be permeable: spina dorsi presented an abnormal mobility, and an angular projection, at the diseased spot. The tumour was formed by an accumulation of particles of bone, clots of blood, and a whitish tubercular matter; the bodies of the two vertebræ were the seat of the lesion, their tissue being partly destroyed and friable; the intervertebral substance was separated from the corresponding vertebræ.—*State of the spinal marrow*: The spinal column being opened posteriorly, the following lesions were discovered: on the anterior part of the canal, formed by the bodies of the vertebræ, two tumours existed, of the size of the tip of the finger, and about an inch in length; leaving between them a small space, in which the medulla, considerably diminished in size, was perceived; dura mater healthy; pia mater containing small collections of pus; substance of the medulla, not only in the part corresponding to the tumour, but also several lines above and below, offered evident traces of myelitis.—To resume: there existed, destruction of the bodies of the 7th and 8th dorsal vertebræ; collection of particles of bone, clots of blood, and tubercular matter, developed on each side of the theca vertebralis, and in the canal, by which about an inch of the marrow was compressed; ramollissement of the medulla, and chronic myelitis.

2^o. A woman, on account of some changes which took place at the Pitié, entered Professor Piorry's ward. She was thirty years old, and might be placed in the category of patients, who, at the Salpêtrière, are called *gâtées*. Indeed, for the last six months, she had wandered from hospital to hospital; her stools were excessively frequent and involuntary; the skin covering the sacrum was the seat of a gangrenous and very fetid ulceration. Her intellectual faculties were so little developed, that she was supposed to be affected with dementia; very weak, and in so emaciated a condition, that she seemed doomed to a slow and lingering death. Some time after her entry, no amelioration was perceived; two large ulcers existed on the sacrum and trochanter major; she was then submitted to the treatment employed in the two former cases. Soon after, the fetidity ceased; the surfaces of the sphacelated

parts assumed a healthy aspect; the eschars fell; the edges of the ulcers became less elevated; and, ere a month had elapsed, cicatrization was complete. But, what is more extraordinary, as the general health improved, the lucidity of the poor sufferer increased in an equal ratio, so much so, that, when she left the hospital, all appearances of dementia had disappeared.

3^o. A female, ætat 27, was affected with typhoid fever, for which leeches had been applied on the abdomen. On her entry, she presented the following symptoms: stools liquid and frequent; pulse feeble, rapid; intellect weakened; abdomen tympanitic; skin pale; gangrene of the sacrum, which increased with great rapidity, and which presented an aspect similar to that in the cases already observed except that the destruction of the mortified parts was much greater.—Professor Piorry had observed, long since, that this lesion is often rendered much worse by the tractions performed by the nurses, who seize the pelvis to turn the patients in their beds, whence the necessity of using great care, whenever the skin of this region is the seat of disease.—A second eschar soon appeared on, and somewhat behind, the region of the right trochanter: the diameter being about $2\frac{1}{2}$ inches, whereas that on the sacrum was about 5 inches. The prognosis was the more serious, as almost always the eschars of the dorsal regions, with longitudinal solution of continuity, are fatal. Notwithstanding, the same treatment having been employed, the gangrene ceased to extend; the pain and smell disappeared. Entertaining some doubts as to the ulcers increasing in depth, the actual cautery was applied on a surface of about one inch in diameter; ice was applied on the abdomen, to soothe the irritability of the intestinal canal. Ten days after, the state of the patient was as satisfactory as possible, and she soon left the hospital, presenting only a longitudinal depression, the seat of the cicatrix, and resulting from the loss of substance.

These facts are sufficient to prove, how useful creosote is, in gangrenous ulcerations; and Professor Piorry, who has paid special attention to this subject, has observed numerous cases, which, at first, appeared hopeless, and where, nevertheless, the patients were cured, or kept alive for a considerable length of time; for instance, in one case, the sacrum, the coccyx, and the neighbouring parts, were completely denuded, and still the patient lived upwards of two months, in this dreadful state, and even appeared to improve. Unfortunately, these favourable symptoms did not last; the diarrhoea recommenced; the strength decreased; the facies became cadaverous; the extremities cold; and, as soon as the wound began to bleed, death closed the scene.—Finally: Professor Piorry never witnessed, with any method of treatment, results equal to those obtained with the alcoholic solution of creosote, combined with free bathing, cinchona, and a tonic regimen.

Vicarious Menstruation.—Dr. A. Forget communicated to the *Société Médicale d'Emulation*, the following curious fact:—Miss —, ætat 16, dark hair and eyes, general health good, menstruated for the first time at 15, since which period, the catamenia came on regularly every month without pain, and lasted four days. On the 27th of March, 1844, two hours after their apparition, a fright caused them to cease suddenly. The next day, intense cephalalgia declared itself; face red and heated; continual drowsiness; throbbing of the heart to an unwonted degree; anorexia, &c. 1st April: Miss — experienced considerable difficulty in opening the right eye, accompanied with the sensation of a foreign body under the lids, and spots of blood were soon after observed on the corresponding cheek. During the day, at different times, hæmorrhage took place from the inner canthus, the blood being of a bright red, flowing, tear-like, drop by drop. On the succeeding days, it transuded, not only from the conjunctiva, but likewise from the skin covering the right cheek, the nose, chin, and back of the hand; once only from the meatus auditorius externus, the scalp, and the tongue. No precursory symptoms were manifested, except those already mentioned. The parts from which the blood escaped, may be classed as follows:—chin and nose; inner

canthus; back of the hand; meatus auditorius; scalp, and tongue. The hæmorrhage ceased as soon as the patient went out, and the whole time it lasted, its consistence, colour and temperature of the skin, were in their normal condition. On the 15th April, violent colics declared themselves, which ceased as soon as the patient had evacuated a tumblerful of liquid, florid, blood. Finally, in the beginning of May, the catamenia appeared as usual. The treatment employed consisted in mustard foot baths, fumigations of an infusion of artemisia vulgaris; fourteen enemas of warm water, and, internally, an infusion of artemisia vulgaris.

Extra-Uterine Pregnancy: *factus*, after attaining its normal size at nine months, remained in the abdominal cavity; birth of two living children afterwards: by Dr. Barchetti.—Cases have been recorded of extra-uterine pregnancies, in which the fœtuses developed themselves as when contained in the cavity of the uterus, and in which the different phenomena of parturition existed; in others, on the contrary, the embryo perished at a period more or less distant from conception. In these different cases, the fœtuses were petrified, or converted into a fatty substance, remaining thus for years without giving rise to any accident; or else they underwent putrefaction, and produced the death of the mother, by causing peritonitis or purulent absorption. There are also other instances, in which the fœtus, after the rupture of the kyst, has been eliminated through the abdominal parietes, the intestines,* the bladder, or the vagina; but it is very uncommon to observe its normal development, and its sojourn in the peritonæum for several years, during which period two living children were brought into the world.—*Case*. Mary Petrucci, of Boscolungo (Tuscany), ætat 30, strong and hale; married at 17; the mother of six children. In Dec. 1836, the catamenia were suppressed, followed by all the other symptoms indicative of pregnancy; three months after, a circumscribed tumour, which increased gradually in size, appeared above the pubis, accompanied by intestinal pains and the symptoms of quickening. The colics augmented to such a degree, that Dr. Franceschi was consulted, who prescribed gentle purgatives and enemas, by means of which the patient attained her ninth month, when all the phenomena of parturition appeared: such as, intermittent pains, contractions in the tumour, secretion of milk; and, after lasting a fortnight, they disappeared, leaving no unpleasant symptom, save the weight caused by the size of the tumour. In January 1838, and July 1841, she became *enceinte*, and was delivered of two living children; while suckling the latter, she was taken with pain in the tumour, followed by fluctuation, disturbances of the digestive functions, fever, colliquative diarrhoea, and died on the 11th Feb. 1842, five years and three months after the extra-uterine pregnancy.—*Post-mortem examination*. Slight effusion of a sero-purulent liquid in the abdomen; adhesions between the omentum and the intestines, these last being pushed towards the left side; spheroidal kyst on the right side, adhering to the intestines, the stomach, the anterior edge of the liver, and the bladder; small abscess between the kyst and the inferior surface of the liver, containing a very fetid, semi-liquid, matter, and communicating with the kyst by an opening three inches in extent; tumour formed of a male fœtus quite developed, on which the only lesions observed were the separation of the parietal bones, and the brain being changed into a purulent substance; surface of the body, and especially of the limbs, covered with a yellow layer; no traces of the funis or placenta; walls of the kyst very thick inferiorly; internal surface furrowed, and offering fibres similar to those of the uterus during gestation; remains of the right ovary on the inferior

* I witnessed, some years ago, the case of a patient of my friend and colleague, Dr. Devilliers, a distinguished practitioner near Paris, where several bones were extracted per anum. This lady had suffered for a considerable length of time from a tumour in the abdomen, for which she had been unsuccessfully treated by various physicians.—G. de B.

surface of the kyst; left ovary and uterus quite healthy.—(*Gaz. des Hop.*)

Academy of Sciences: Sitting of the 28th Oct. Baron Chas. Dupin in the chair.—Received: "Transactions of the American Philosophical Society for Promoting Useful Knowledge, held at Philadelphia," vol. 9th, new series, part I.—"Proceedings of the American Philosophical Society," April, May 1843; June to Dec. 1843; January to April 1844.

Scolopendra Voided Alive by the Nostrils; Case communicated by Dr. Decerfz, of Châtre Indre.—Miss —, ætat. 19, strong constitution, affected for the last two years with a supra-orbital cephalalgia on the left side, at first slight, but gradually increasing in intensity; all the remedies prescribed failed in giving relief. On the 31st Dec. 1842, after a violent fit of sneezing, she felt something move in the left nostril, and, on blowing her nose, a live insect escaped; the pain ceased immediately, and did not return, and the general health soon became perfect. The insect, which lived seventeen days, when examined, proved to belong to the order *Myriapodes* of Latreille; the genus *Scolopendra*; and the species *Scolopendra electrica* of Linnæus; it was of a pale red colour, with a brown ray on its back; its body was one-tenth of an inch in breadth, and one-fifth in length. The author concludes, that the ovum was accidentally deposited in the fossa nasalis, and there developed itself, undergoing its various metamorphoses, until violently expelled.

Syphilis in Animals.—Dr. Auzias, of Turenne, writes to state, that he has communicated the syphilis to several animals, by inoculation. Thus, chancres were produced on the ape, dog, cat, and rabbit. The experiment, when terminated, shall be submitted to the Academy.

On the Excess of Fibrine in the Blood, in Acute Inflammations; by Dr. R. Latour and M. Collignon.—The researches of the authors not only confirm the conclusions of Professors Andral and Gavarret, but also establish a fact overlooked by them; viz.: that the modifications which take place in the blood, during acute inflammations, exist in the venous as well as the arterial system. To illustrate this, the following experiments were performed:—1^o A dog, five or six years old, was bled from the jugular vein and brachial artery (this latter being tied immediately after.) The blood, thus obtained, was beat up separately; the fibrine was dried with blotting paper, and afterwards in a stove heated to 77° F; the quantity in the former case was: venous blood grs. xxiiss, arterial grs. xvij; in the latter: venous blood, grs. v., arterial grs. iv.—2^o Pleuro-pneumonia was produced by injecting a mixture of alcohol and water into the thorax; and, four days after, when the dyspnoea was excessive, the pulse at 190 per minute, the same quantity of venous and arterial blood was drawn from the animal; the former gave, in 100 parts: fibrine, dried with blotting paper, 3ij; in a stove, gr. x.; the latter, in 100 parts: fibrine, dried with blotting-paper, gr. xxxv.; in the stove, gr. viij.—3^o A pointer, in its normal state, yielded: venous blood,—fibrine, dried by means of blotting-paper, 0.80 per cent; in a stove, 0.15 per cent.;—arterial blood,—fibrine, dried with blotting-paper, 0.60 per cent.; in a stove, 0.10.—4^o Same dog: pneumonia produced by an injection of ammonia; venous blood,—fibrine, dried with blotting-paper, 1.75 per cent., and arterial, 1.60; both dried in a stove, 0.60.—From these experiments, the authors conclude:—1^o That the quantity of fibrine, in the venous and arterial blood, increases as soon as inflammation declares itself.—2^o That the changes, which take place in the blood, are the consequence, not the cause, of the disease. This fact, which may have been deduced from the experiments of Professors Andral and Gavarret, is established beyond a doubt, by the foregoing observations, since the disease was produced by the authors themselves.

On Keratoplasty: by Dr. Feldman.—The author relates the result of two operations, performed by him: the first, performed according to the method recommended by M. Strauch, of St. Petersburg, which consists in passing through the camera anterior a thread, and then dividing the cornea with

an instrument of the shape of two cataract knives, placed back to back; the thread, thus exposed to view, is drawn out, so as to form a ligature on each side, and fix the other portion of the cornea. The advantage of this method is: the facility with which the ligature is placed; the disadvantages: the escape of a considerable portion of the aqueous humour, and the risk of breaking the thread or wounding the other structures of the eye, especially when the cornea is opaque. The second operation, was the transplantation of the cornea of a cat into the eye of a rabbit; in this, the author followed the advice of Professor Blandin, by placing the ligature after dividing one half of the cornea; the operation was successful. Finally, a remark made by the author is, that vascularization takes place sooner, when the cornea of a rabbit is transplanted on to a rabbit, than when that of a cat is taken instead.

On a New Mode of Dressing Wounds and Ulcers: by Dr. Langier, M.A.M., Surgeon to Beaujon Hospital.—This method consists in applying, on the surface of the wound or ulcer, a solution of gum arabic, and on it a bit of goldbeaters' skin; thus dressed, a wound, an inch in diameter, was reduced in the space of eight days to one-third or one-sixth of an inch in extent. Cicatrization took place so rapidly, that the granulations, covered with a thin epidermis, were as numerous and visible as before, but could be touched without causing pain. A wound, produced by amputation of the breast, highly inflamed, about four and a half inches in length, and one and a half inch in breadth, under this treatment, healed rapidly, and purulent secretion did not take place. The author proposes applying this method to a wound left by amputation of the thigh.

Researches on the Wounds of Blood-vessels, more especially with a view of elucidating the following question:—What are the immediate Phenomena observed at the divided extremities of Arteries and Veins, in large transversal wounds? By A. Z. Amussat, M.A.M. From the facts and experiments contained in this memoir, the author concludes:—1^o That when an artery, completely divided by a large wound, ceases to bleed spontaneously, it is an erroneous opinion to suppose, that this is produced by spasm, erethism, or contraction of the artery:—2^o That the cessation of the hæmorrhage is caused by a physical obstacle, a clot of blood, closing the extremities of the divided vessel: a fact proved by experiments on animals, and by observation on man:—3^o That, on examining a divided artery, the open mouth of the vessel, from which the blood escapes by jerks, is perceived, but soon a red conical clot appears, and with it a diminution in the flow of blood; finally, it ceases entirely, and then a small, red, nipple-like eminence is seen, which is raised at each throb of the heart, and which forms in man, and in animals, the spontaneous or obturating clot:—4^o That the spontaneous clot is not merely a mechanical obstruction, but rather a sort of hood, or hollow cone, soldered and identified with the edges of the wounded artery, and especially with the cellular membrane; consequently, the arterial tube is prolonged into the clot, and ends in a *cul-de-sac*. If this conical clot is divided at different spots, between its summit and the extremity of the divided artery, a central canal is discovered, whose diameter decreases as the distance from the wounded vessel increases. This fact, demonstrated by the plates accompanying the memoir, explains why the flow of blood ceases gradually, until the artery is completely obliterated:—5^o That the formation of the spontaneous obturating clot is important, and surgeons, instead of seeking for the open mouth of the divided artery (as on the corpse), ought to look for the clot:—6^o That the difficulty of discovering an artery, closed by a clot, and the serious accidents which may result, ought to induce surgeons to study this subject, neither in books, nor on the corpse, nor even on the living subject, but only by having recourse to vivisections:—7^o Finally, that these experiments and facts, observed on man, prove that the surgeon must not be over hasty in abandoning his search for a vessel, apparently obliterated, since hæmorrhage may take place, although pressure be employed, or the wound be

filled with charpie. Numerous unfortunate cases come to the support of this opinion.

On the Copper and Lead found in the Human Body.—In this memoir, the author, Dr. A. Devergie, brings forward arguments tending to prove:—1^o That this fact was established by M. Hervey and himself;—2^o That, if MM. Danger and Flandin deny the existence of these metals, it is because they make use of a process incapable of setting them free;—3^o That the existence of these metals in our organs coincides with his researches on a great number of plants;—4^o That his process is always sufficient to discover the copper or lead;—5^o That the expression, *normal*, was not employed by him.

On the same subject.—Messrs. J. Barse, Lanaux, and Follin addressed a reply to the last letter of MM. Danger and Flandin, in which they state having discovered copper in the liver of a man, who died in one of the hospitals, and that they consider it possible to discover whether the copper or lead be the result of a crime, or, that contained in the natural state of the human body.

On the Treatment of Gastralgia and Neuralgia, by Dr. Ducros, of Marseilles.—This memoir is to shew, that the most efficacious remedy, in this disease, is the application of ammonia on the pharynx, the effect produced acting principally on the pharyngeal plexus, and subsequently on the par vagum.

Academy of Medicine. Sitting of the 29th Oct. Dr. Ferrus in the Chair.—The chairman requested the different prize-commissioners to abridge their duty as much as possible, as the annual sitting of the Academy would take place before the end of the year. At the same time, he stated that, from the deaths of three members—MM. Double, Pelletier, and Edwards—a place was vacant, and, therefore, a committee of eleven members would be named in the next sitting, to decide in which section the nomination should take place.

On a Sulphurous Spring discovered in Paris.—M. Henri, in the name of the Commission of Mineral Waters, and at the request of the Minister of Agriculture and Commerce, read a report on the suitability of according, to M. Lacarriere, the permission of establishing public baths of sulphurous water in the Rue Vendome. The commission not having been able to obtain the water in a pure condition, on account of the infiltration of the neighbouring cloacæ, and the proprietor having refused to make the necessary reparations, conclude by answering, that, at present, permission ought not to be given.—Dr. Nacquart: Two landholders in the same street, having dug some depth, discovered a sulphurous spring; this circumstance seems to prove, that a stream of this species flows under the street.—M. Caventou: In a house, situated opposite to that belonging to M. La Carriere, sulphurous water was found, but, on examination, it was soon discovered to proceed from the infiltrations of the neighbouring cloacæ. In order to explain the sulphurous nature of the water in this street, historical facts ought not to be neglected. Thus, it is well known that this part of the Marais was filled with the rubbish thrown there; now, might not the sulphur be the result of the decomposition of the sulphate of lime by the animal and vegetable substances. In my opinion, I consider the sulphurous qualities of the spring discovered, as purely accidental; besides which, France possesses numerous other similar sources, one at Enghien near Paris. Now, who would employ the water of the Rue Vendome, when they are aware that it may contain liquids infiltrated from the neighbouring cloacæ.—M. Chevallier stated, that the cause could not be owing to the presence of the cloacæ, otherwise, the water would be sulphurous in every part of Paris, which is not the case. As to the historical facts mentioned, nothing proves their exactitude.—Dr. Nacquart approved of the conclusions, as they did not say that permission may not be granted at a future period, the which may, perhaps, be useful; the more so, as he is convinced that a sulphurous stream flows under this street.—After some further remarks from M. Bouley, who stated that the water escaped from a stratum of fine sand, after one of clay had been pierced,

and from Messrs. Henri and Caventou, the conclusions were adopted.

On the Saline Mineral Waters of the Bas Rhin.—M. Henri read a report on these waters. The conclusions, in their favour, were adopted.

Discussion on the Case of Hydrocephalus.—Professor Blandin: In the preceding Sitting, Professor Velpeau stated, that he had been mistaken; such an avowal does not at all astonish me, and reflects the greatest honour on our colleague; I regret, however, that my approbation cannot be entire, since he said, likewise, that his opponents were equally mistaken. As far as I am concerned, I affirm, and will prove, that I was not so. Thus, for the diagnosis and pathology: I said, that a part of the cerebral substance protruded through an opening in the bones of the skull, and that the tumour was not simply a cyst, containing a liquid;—that the meninges formed the walls of the cyst, this being denied by Professor Velpeau;—I also stated that, if the liquid existed exteriorly to the dura mater, it was because this membrane had given way, and permitted the water to escape. The *post mortem* examination proved, that my first opinion was correct; and when I stated the protruded part to be the cerebellum, it was on the faith of Professor Velpeau's assertion, not having examined the part myself. But a far more important question remains, viz.: the necessity of operating. I was against it, on account of the presence of a part of the encephalon; of death being almost inevitably the result; and of the age of the patient. Professor Velpeau combatted this opinion, and said,—the tumour could be removed; doubtless, it could; but it is not the possibility of removing it, but the probability in favour of a cure, which ought to be considered;—the child would inevitably die, if nothing were done; but this is no reason why the event should be hastened by an operation. A patient may live without a cerebellum, and cases are recorded in which a part of the brain has been removed with impunity; true life is compatible with absence of the cerebellum, when this is congenital; but I cannot admit, that such may be the case, when this takes place rapidly, by operations. As to those performed on the brain, there is no comparison between the cases recorded and the present one; for all the patients were adults, and the portion of the brain very minute. These were the remarks made by me before the operation, and many members of the Academy, though silent, were of the same opinion. Since then, the operation has been performed, and the result is known to us all. I was, therefore, not a little surprised to hear Professor Velpeau assert, that such a step was rational; indeed, I would have doubted it, had I not been present at the Sitting in which the opinion was emitted. I will add nothing more to the reflections already made as to the operation; but I thought it necessary to mention these, in order that it might not be supposed, that the Academy approved of such an operation.—Dr. Begin regretted, that the discussion appeared to become personal. A child was presented to the Academy; it was affected with an enormous tumour on the head, for which an operation was performed. Now, it matters little, whether Dr. Such or Such-a-one was mistaken or not; but, on a similar occasion, what ought to be done? Our object is scientific, not personal.—Professor Blandin protested against the interpretation given to what he said, his object being in no wise personal; and if any phrase could be thus construed, he retracted it.—Professor Velpeau: I do not think the case as important as Professor Blandin seems to admit. When the child was presented to the Academy, a discussion arose as to the necessity of the operation, and several members, as well as myself, opined for its being performed. Professor Blandin, however, appears to consider it of importance to prove, that he was not mistaken; but, let me ask, has not such a thing happened to himself more than once? For my part, in confessing my error, it was not with the intention of seeking approbation; and, as to the operation, I admit that the case was serious, and stated so; still, I cannot consider the objections raised by Professor B. as valid; the tumour was voluminous, but nine-tenths of it were fluid; the portion of the brain was small, and I

persist in saying, that it might have been removed without endangering life; besides which, it could not be reduced, and, therefore, could not perform any of the functions devolved on the brain. I, therefore, cannot admit, that the operation shortened the life of the patient; and as to its being repeated, our opinions will be known, and consequently appreciated by surgeons. Those who partake of his convictions will not operate, and those who are of my advice will operate; that is all; we may discuss the question eternally, without coming to the same conclusion. I leave the members of the Academy to judge between us.—After a short reply from Professor Blandin, the discussion was closed.

On Pests.—M. Hamont continued his memoir on this subject.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the action of Narcotics.—Watery extracts may be prepared, by the aid of the air-pump, in two ways: 1st. From the expressed juice: *extracta pneumatica à succo*; and 2nd. in the common mode: *extracta spirituosopneumatica*. These extracts possess a beautiful green colour, a powerful narcotic smell, and great resemblance to the fresh juice of the plants; they are, therefore, considered as more efficient than the usual extracts. But Meurer's experiments would seem to show, that the odour of remedies does not stand in any connexion with their efficacy, and that the pneumatic are far from being superior to the common official extracts. As regards the efficacy of the odoriferous principle, it cannot be so independent of the power of the remedy, as asserted; for we know that the smell is only a reaction upon the organism of the substance administered, and thus the smell and taste of medicines must be considered as part of the remedial efficacy itself, manifested on these two senses. It is shown, by experience, that the smell of food operates as a nutriment; the vapour of wine causes intoxication; the smell of vinegar exerts a cooling, that of ammonia an enlivening, and that of valerian an antispasmodic, effect, &c. The smell of narcotics produces vertigo, heaviness of the head, coma. The distilled waters of several narcotics, as: *aq. led. pallustr., pulsatill., lactuc., cicut., nicotian., quass., nuc. vom.*, have been thought efficacious by ancient and modern physicians. It is true, chemistry has not yet succeeded in isolating the odoriferous principle, but this ought not to be a ground for depreciating its importance. For chemistry has been enabled to discover only the same constituents in different etherial oils, though these vary greatly in efficacy, taste, and smell. Those etherial oils and waters, which contain prussic acid, preserve their smell of bitter almonds even when deprived of their hydrocyanic acid. It is not improbable, that hydrocyanic acid is reproduced, after some time, in the oil of bitter almonds. According to the author's experiments with the distilled water of opium (exhibited on cats, rabbits, &c.), it produces a momentary state of intoxication, but no continuous coma or narcotic poisoning. The comparative experiments, which the author performed on animals, as regards the official and pneumatic extracts, distinctly showed that the pneumatic are more powerful than the usual official extracts. The spirituosopneumatic extracts seem particularly efficacious. The *post-mortem* examinations gave similar results, whether the animals were poisoned by official, or by pneumatic, extracts. *Essences of Narcotics*, prepared out of equal quantities of expressed juice and spirits of wine, are, likewise, found very powerful: from three to eight drops being sufficient to produce strong narcotic symptoms.—Professor Richter in *Schmidt's Jahrbücher*.

Astringent remedies.—The following are the results of Dr. Gottschalk's experiments, as regards the astringent power of the sulphates of copper, zinc, and iron; acetate of lead; alum;

sulphuric, muriatic, and nitric acids; creosote, &c. 1. The strongest astringents, as alum, acetate of lead, sulphate of iron, lose much of their constrictive powers, if employed in a liquid form. 2. The liquid form, counteracting astringency on the one hand, causes, on the other, a relaxation of the animal tissues, and thus affords an easier ingress to foreign matters. 3. The acids (muriatic and sulphuric) possess no constrictive power, beyond making the tissues a little denser. The vegetable astringents, according to the author's experiments, do not merit this designation. His experiments, performed with decoct. querc., ratan., tormentill., gall. turcic., &c., prove: 1. That the above remedies display no constrictive effects, if used in a form, in which they are prevented withdrawing the water from the tissues with which they come in contact. 2. They are the less constrictive, as they are received with greater facility into the organs (as in a liquid form), thereby increasing the density and bulk, but without constricting the parts. 3. If we except substances, which cause contraction by their action on the nervous system (as strychnine), we possess no vegetable constrictive agents, but merely desiccatives and refrigerants.—Dr. Gottschalk; *Ibidem*.

On the use of Chloride of Zinc in Syphilitic Diseases.—Hecker reports some cases which occurred under Stromeyer, in which the chloride of zinc was tried in primary syphilitic ulcers. When the inflammatory character of the disease was removed, the remedy was administered internally, in the dose of three grains, and gradually increased to eight grains, a day. It was employed locally at the same time. No unpleasant phenomena occurred from the use of the remedy, which was always well borne by the digestive organs. During the treatment, the patients were restricted to milk-diet; and enjoined to keep their beds. According to the result obtained, in the above cases, chloride of zinc is decidedly a powerful remedy against primary syphilitic ulcers. In some cases, it produced amelioration at first, but had no favourable result in the subsequent periods of the disease. If no tendency to cicatrization was manifested, after six weeks' use of the remedy, or if the former cicatrices began to ulcerate anew, the chloride of zinc alone did not effect a cure.—Dr. Hecker in *Roser's Archiv*.

Tincture of Cantharides in Eczema and Psoriasis.—Dr. Siek, of Weile, cured, with the above remedy, several cases of eczema and psoriasis, which had resisted all other medicines. Some patients, after having suffered with these eruptions for one, three, or four, years, were cured in from three to seven weeks, by taking three drops of the tincture several times a day, and increasing the dose by one drop daily.

Symptoms of Poisoning by a Copper Coin.—Dr. Bing, of Dettelbach, reports the following case:—A boy, of about three years of age, swallowed a copper coin. After some days, he became restless, sallow, complained of pain in the abdomen, great thirst, and sleeplessness. The author found the abdomen much distended and sensible to pressure, the tongue dry, want of appetite, obstruction of the bowels, pulse small, hard, and contracted; from these symptoms, he diagnosticated poisoning by copper. Thinking the chance of spontaneous expulsion of the coin to be somewhat doubtful, he preferred attempting to bring about its solution, and ordered, for this purpose, a powder, consisting of five grains of jalap, three grains of liver of sulphur, five grains of starch, and the same quantity of sugar, to be taken every three hours; he, also, recommended a beverage composed of milk and water, with sugar and white egg; and prohibited all fat, salted, spiced, and acedent, food. After the patient had evacuated several times, his excrements were incinerated in a crucible, then mixed with a sufficient quantity of dilute nitric acid, and digested in the sand-bath. The liquid was then filtered, and tested by a solution of ferrocyanate of potass, and liquor ammon. caust. The former re-agent occasioned a reddish brown precipitate, the latter gave the liquid a blue colour. A piece of polished steel, dipped into the liquid, was quickly covered with a strong coating of copper. Thus, the presence of copper was clearly shown. When the patient had

continued the above powders for some time, he gained a better appearance; his appetite returned; his evacuations became regular: and now he enjoys his former good health.—*Dr. Bing im Baier. Medic. Correspondenzblatt.*

On the use of combinations of Iodine in inflammatory affections of the Brain, particularly when occurring in Children.—The happy results, obtained by some physicians, of Riga, from the use of iodide of mercury, in acute hydrocephalus, induced the author to try this remedy in some similar cases; but, though he occasionally met with favourable results, he soon discontinued administering that composition (iodine gr. j., calomel gr. viij., and sugar q. s., divided into 16 powders), as he found that it exerted quite as injurious an influence on the salivary glands, and the whole organism, as uncombined mercury, and, besides this, the iodine caused direct congestions of the head. The patients, to whom iodine was administered, not unfrequently complained of headache, with increased heat of skin, for a short time after taking it, whether it had been administered alone, or combined with mercury or potass. Patients, suffering under mental diseases, seemed to exhibit more restlessness and violence, immediately after the use of this remedy. The successes, above-mentioned, consequent on the employment of iodide of mercury in some cases of acute hydrocephalus, our author ascribes to the action of the iodine only, and he, therefore, recommends the substitution in such cases of iodide of potassium, instead of mercury, and endeavours to show the excellent effect of the latter remedy by the following case: A strong and lively boy, æt. 3½, who had often suffered with eruptions of the skin, (*crusta serpigiosa*), and scrophulous inflammation of the eyes, was seized, towards the middle of June, 1833, with head-ache, fever, disposition to vomiting, costiveness, somnolency, &c. The author learnt, subsequently, that the boy had fallen on his head, a fortnight previously, upon a stone-staircase, and that he appeared since then to have lost his usual spirits and appetite. On the 17th of June, the author was called in, and prescribed calomel, gr. 2½, *pro dosi*; and cold embrocations to the head. The boy had several evacuations, but without any evident amelioration. On the 19th, a nitrous mixture was given, and a blister applied to the neck. On the 20th and 21st, diarrhœa manifested itself, with somnolency, dilatation of the pupils, and almost constant screaming. Leeches were applied to the head, the cold fomentations continued, and ¼ of a grain of calomel administered frequently. On the 24th and 25th, the diarrhœa diminished, but the patient discharged no urine for the space of 12 hours. The skin was dry, the somnolence continued, and the patient was very restless, and inclined to convulsions. The prepuce was swollen, and painful; leeches were again applied to the head, with fomentations of turpentine and hyoscyamus, and lotions of goulard-water to the prepuce; internally, a decoction of lycopodium was administered. On the 25th, a warm bath was employed, when a moderate quantity of dark-brown urine was evacuated. On the 26th, all the symptoms of commencing effusion on the brain appeared, as: complete unconsciousness; automatic movements, resembling those in opisthotonos; constant screaming; spasmodic motion of the eye-ball towards the upper part of the orbit; pupils greatly dilated, and insensible to light; features pale and shrunken; mouth open, and drawn to one side; grinding of teeth; slow pulse; dry skin; thirst, but the tongue somewhat moist; constipation; urinary secretion almost suppressed. The author, under these circumstances, ordered the following mixture:—℞ Potass. hydriod. ʒss., aq. distill. ʒiij., syr. simpl. ʒj., mix; one table-spoonful to be taken every 2 hours. On the 27th, the head felt hot to the touch; thirst still greater; but the child appeared more quiet. The spasmodic motions were a little diminished; intestinal and urinary excretions reappeared, and the skin became somewhat moist. The medicine was continued uninterruptedly, and leeches again applied to the head. From that period, the patient gradually improved. The immediate effects of the iodide of potassium were: an abundant se-

cretion of urine (dark at first, but gradually becoming clearer and clearer); some semi-liquid stools, and a great increase in the secretion of the skin. For, not only was a state of perspiration induced, but furuncles and boils made their appearance on the fore-head, face, and neck, and passed into a state of suppuration and ulceration. The author promoted these decidedly critical ulcers, by ordering inunction with the *unguent. tartar. stibiat.*, and increasing the dose of iodide of potassium to ʒij (from the 7th of July). All the functions now became more and more regular, the consciousness having previously returned; the appetite increased; the limbs became free in their movements; but the child did not recover the entire use of his speech, till some weeks afterwards, when the author found him lively, playing in the yard, in his former health and spirits. As regards the dose of the remedy: at first 3 grains, and subsequently 5 grains, were required, *pro dosi*, to produce a rapid effect, and altogether half an ounce was administered, within a period of 18 days. The author disagrees, therefore, with Dr. Röser, who recommends eight grains, *pro dosi*, from the beginning.—*Dr. Amelung in Hufeland's Journal.*

[The author then reports another case, to show that the stimulant action of iodine might operate injuriously, where active congestion towards the head, or inflammatory tendency of the system, generally, are found to prevail; but, since the case does not seem fully to bear out the statement based upon it, I thought it more advisable not to fill up uselessly the valuable pages of the *Medical Times*. [Note of Dr. Sutro.]

MESMERISM.

(To the Editor of the 'Medical Times.')

SIR,—With reference to the article *clairvoyance*, in your paper of the 26th instant, and to the letter signed "Bernardo Eagle, Wizard of the South," I think it will not be uninteresting to such of your readers as are inclined to believe in the reality of mesmeric phenomena, to be informed that we had in Edinburgh, some years ago, an old soldier, who exhibited his son as "the Highland youth, with the second sight," and who made him go through exactly the same performances, as the *Wizard of the South* states, that he has taught to his little daughter. The grand distinction between the feats of the Highland youth and the Southern maid, and those reported in your pages, of Alexis, is this, that Alexis could tell what was contained in a sealed packet, or read words, of which his exhibitor M. Marcillet was ignorant, whereas in the case of the Highland youth, (and I presume it is the same with Miss Eagle,) it was necessary that the lad's father should see the things or words, and ask the questions. In this, no doubt, lay the secret. In putting the question to the boy, the father, by some ingenious method of commencing with a particular letter, of giving a particular caution as "come attend, sir"—"now mind what you are about sir," or of making some signal, gave the necessary information to enable the boy to answer correctly. But nothing could be more curious than the readiness and accuracy with which the boy answered all such questions, as those mentioned by Bernardo Eagle. Like Mrs. Maxony, the lad must have had a most powerful memory.

If you will refer to page 339, vol. 2, of Mr. Colquhoun's work on Animal Magnetism you will find, in a note, a curious account of this boy's performance at Bow-street. Mr. Colquhoun makes the following remark, "I know nothing more of the history of this boy or of his family, nor am I aware whether any investigation into his case has been made by professional men—as I would strongly recommend. That the phenomena exhibited are of possible occurrence, I think I have sufficiently proved; at the same time, it is evident that in cases of this description there is much room for deception."

Mr Eagle could now tell us how such deception is managed. The old soldier would not reveal his secret, for which he said he had been offered a large sum. He acknowledged that he had many

years ago, exhibited dogs in Edinburgh, which he had taught to perform similar tricks, such as picking out of a heap of cards, the particular card wished for by one of the spectators. From dogs he had risen to human beings, and his feats were accordingly still more surprising. But, be it remembered that the boy was *clairvoyant* only when *en rapport*, as the mesmerizers say, with his father, that is he could tell nothing unless his father asked him, and the father always took care to examine the article which the boy, blindfolded, was required to describe.

I remain, Sir,

Your obedient Servant.

AN AMATEUR.

(We may as well notice here, that there is some little evidence in favour of the opinion, that Mr. B. Eagle's letter is a hoax. M. Marcillet never was in Manchester, nor was Alexis; Mr. Eagle, therefore, could not have learned his tricks from them, as he intimates.)—ED.

SPONTANEOUS EVOLUTION OF THE FÆTUS.

By A. W. CLOSE, ESQ. SURGEON.

In the month of Oct., 1840, I had the opportunity of witnessing a most interesting obstetric phenomenon, called by Dr. Denman "the spontaneous evolution of the fœtus."

I was sent for, to attend upon a female in labour with her fourth child. On arriving at the house, I learnt that she had had violent pains for upwards of twenty-four hours; but, as her previous labours were protracted, she had deferred sending for me as long as she thought she safely could.

On making an examination, I found the right hand and arm of the fœtus, as far as the axilla, external to the vagina. After attempting to subdue the excessive uterine action by the ordinary measures, I made repeated and careful attempts to perform the operation of version; but failing, I sent for a neighbouring practitioner; he unsuccessfully attempted the same operation, and we then resolved to eviscerate the chest. Before attempting this, I made another examination, and ascertained that the shoulder, as well as the arm, entirely protruded—the right side of the thorax also presented at the os externum. The succeeding uterine pains, and bearing down efforts of the patient, brought the parts lower and lower, and in a very short time the breech was expelled—the arm throughout the whole process being outside the vagina, and not retroceding as was supposed by Denman. Of this fact I am quite confident, and the medical gentleman, in attendance with me, will bear his testimony to it. The head was easily extracted, and the labour concluded. The fœtus died during the process of expulsion.

We should, *à priori*, have anticipated that there must have been considerable relative disproportion between the fœtus and the pelvis; but most assuredly it was not so. The patient herself was diminutive; the pelvis not larger than the standard, and the fœtus of full size. She recovered well.

My impression was, that the fœtus was expelled sideways, curved upon itself, the right hip being protruded together with the right side of the thorax; but, I have since become acquainted with the observations of Dr. Douglass, of Dublin, who I think gives the true explanation of the process. He describes it thus:—"Before the expulsion of the fœtus, its situation resembles the larger segment of a circle; the head rests on the pubis internally; the clavicle presses against the pubis externally, with the acromion stretching towards the *mons veneris*; the arm and shoulders are entirely protruded, with one side of the thorax, not only appearing at the os externum, but partly without it: the lower part of the same side of the trunk presses on the perinæum, with the breech either in the hollow of the sacrum, or at the brim of the pelvis, ready to descend into it; and, by a few further uterine efforts, the remainder of the trunk, with the lower extremities, is expelled. And to be more minutely explanatory of this ultimate stage of the process, I have to state, that the breech is not expelled exactly sideways, as the upper part of

the trunk had previously been; for, during the progress of that pain by which the evolution is completed, there is a twist made, about the centre of the curve, at the lumbar vertebra, when both buttocks, instead of the side of one of them, are thrown against the perinæum, distending it very much; and, immediately after, the breech with the lower extremities issues forth; the upper and back part of it appearing first, as if the back of the child had originally formed the convex, and its front the concave, side of the curve."

I had not the opportunity of noticing the evolution of the buttocks Dr. D. here mentions,—for their expulsion was rapid and unexpected, and the inquiry was: Is the perinæum lacerated?

Dr. Gooch and others have confirmed Dr. Douglass' explanation.

Dr. Churchill mentions that he has had the opportunity of witnessing the process, and observes: "The head and shoulder being depressed and fixed in the pelvis, and the remainder of the body doubled up, is inch by inch forced into the pelvis, and through the external parts, until all below the arms is expelled, leaving the ease to be terminated as a breech or foot presentation." "At no part of the process, is the arm retracted; but, if moved at all, it is still further protruded." The name of "spontaneous expulsion," given by Dr. Douglass, is therefore more suitable than that of "spontaneous evolution."

The practical lesson to be deduced from such cases is,—a just and legitimate confidence in the powers and efforts of nature. Not that we should at any time neglect to use those moderate, careful, but decisive, measures with which every thoughtful practitioner is acquainted. In most instances, it is possible by the employment of venesection, antimony, or opium, as the case may be, so to subdue the uterine action as to make the operation of turning safe and practicable. But when these fail, I am persuaded it is better to wait and see what nature can, and will, do, rather than to make repeated efforts to introduce the hand, so exciting increased uterine action, and fearfully risking laceration of the uterus—a result which I fear has sometimes, and not seldom, followed.

Dr. Blundell's favourite saying, "meddlesome midwifery is bad," often echoes in my mental ear. Not only is it bad in ordinary and natural cases, in the frequent vaginal examinations which are made, when a few would be sufficient; in the untimely rupture of the membranes; in the careless administration of ergot;—but, in extraordinary and preternatural cases, it is equally bad to persevere in ineffectual attempts to turn, when the uterine action is antagonistic and unsubdued; better to wait until the uterus expels the fœtus, or becomes so fatigued as to be submissive to manual interference. It is to be recollected, that the presenting parts are cushioned by muscle, soft, yielding, and compressible; there is, therefore, less danger of injury to the vagina, and the adjacent parts, than when the head is impacted.

There is one circumstance in the management of the case I have detailed, as in the practice of midwifery generally, which I conceive to be of the utmost importance; that is: the position of the patient during the parturient process. Writers on midwifery do not lay much stress on this, "provided a proper position be assumed before the head presses upon the perinæum." Now, I hold it to be essential, to place the patient in a proper position, so soon as there is a decided tendency to "bearing down pains," or, when the presenting part is brought expulsively to bear on the brim of the pelvis. The patient ought to lie on her left side, close upon the edge of the bed, with her feet against the bed post; the shoulders should be thrown forward, and the loins backward, and the spine a little incurvated; the knees should fall towards the bosom, or the bosom towards the knees, and the abdomen towards the bed. The uterine force is thus brought to act in the axis of the pelvis, downwards, backwards, and forwards. The standing and horizontal postures, inasmuch as they interfere with such physiological arrangement, ought not to be permitted. During the interval of the pains, the legs may be stretched out, and a more easy position be allowed, but I am always careful that the patient resume her

former posture, previously to the commencement of a pain. When difficulty is apprehended, such a matter is attended to by all accoucheurs. I recommend its use, in all cases of natural labour; not only will it facilitate the process, and economize time, but, in the aggregate, it will make the practitioners' success much greater than it otherwise would be.

I am anxious not to be understood to disapprove of manual interference. This may and ought to be judiciously employed. But, I am persuaded, the display of obstetric instruments and apparatus, which have arrived at such perfection in the present day, begets in the mind of the young practitioner (*haud ignota loquor*) a hankering to show his tact in their use, and leads to a dangerous disregard of the "*lex et vis natura*." My own experience in midwifery, which has been somewhat considerable, convinces me that this ought to be guarded against; as do analogical facts, derived from the consideration of the parturient results of savage life, and of domesticated animals, compared with woman in civilized life. In both conditions, death to the mother seldom occurs; and this is the point chiefly to be regarded; for, in such extreme cases, the death of the offspring is certain.

ON THE BARK OF THE POMEGRANATE.

(To the Editor of the "Medical Times.")

SIR,—I observe in Dr. Williams's last lecture, published in your journal, that he has fallen into the same mistake, respecting the use of the bark of the pomegranate, that others have done (see Brande's *Mat. Med. Art. Granatum*). The bark or rind of the pomegranate, although extremely useful as an astringent in simple diarrhœa, and in cases of debility of the intestines after severe dysentery, is not of the slightest use in tœnia. It is the fresh bark of the root of the pomegranate tree, that is so beneficial in this disease. I have used it for many years in our hospitals in India, both among Europeans and natives, with great success, and I observe it is now much used in the Continental hospitals. Dr. Ainslie says, in his excellent work: "The efficacy of the bark of the root of the pomegranate tree, as a remedy for tape-worm in India, is now well established." The mode of administering it, is as follows:—

R Corticis rad. recent. } Dr. Williams
punic. granati ꝯiiss. } says: ꝯss.
Aq. o.j.

Coque lente per horam dimidiam et cola.

A wine-glassful of this decoction, every second hour, till four doses are taken.

The effect of the second dose, and sometimes of the first, is to produce sickness, faintness, and considerable prostration of strength; when the worm is voided, it rarely requires more than three or four doses to produce the desired effect. Dr. Williams, also, says: "it does not produce any remarkable disturbance of the human frame." I think this is also a mistake, as I have never seen the bark of the root of the pomegranate tree used, without producing considerable constitutional disturbance, as above described. The bark of the pomegranate produces none.

I remain, Sir,

Your very obedient servant,

P. LESLIE, M.D.

Wilton-place, Belgrave-square.

HOSPITAL REPORTS.

KING'S COLLEGE.

Scirrhus of the Uterus.—Mary Franklin, æt. 35, was admitted into King's College Hospital, on the 14th of August, under the care of Mr. Partridge. She is married; has had six children, the youngest of whom is two years of age; states that she had always enjoyed good health till her last confinement. All her confinements have, however, been natural; since her last, she has been subject to very severe attacks of "bearing down pains," frequently followed by discharge of coagulated blood from the vagina; she suckled her last child for three months, until, in fact, she was compelled to wean it, on account of becoming weaker daily, and has not menstruated regularly since; during the

last three or four months, she has not been able to do her house work, on account of the violent, acute, darting pain, resembling a sharp instrument piercing the pelvis in different parts, depriving her of all quiet by day and by night.

At the time of her admission, the countenance was blanched and very thin; auscultation and percussion of the chest, healthy; appetite poor; is thirsty; tongue clean; pulse weak and rapid; there is no distension of the belly; complains of the same kind of pain in the back, and pelvis; there is a good deal of tenderness and dullness on percussion in the hypogastric region; she has had no fetid or puriform discharge from the vagina; there is a little scalding in making water, but never complete retention of urine; bowels relaxed. Upon making an examination, *per vaginam*, a large hard tumour was perceived to occupy the anterior lip of the os uteri, having a broad thick root (base), the os itself gaping unequally and admitting the tip of the forefinger; it was painful and tender when touched; the whole of the cervix was hardened; no ulceration, or fistulous communication, could be perceived between the vagina and the adjacent parts. Ordered:—

To rest quiet in bed; to have middle diet, and a pint of porter.

R Morphine gr. ½ in pil. sumend. nocte maneque.

August 20. Has been in the same state since her admission into the hospital; has passed some clots of blood from the vagina. Was made an out patient. Ordered:—

R Pil. saponis c. opio. gr. v. ter die sumend. si opus sit.

R. Pil. rhei. co. gr. x pro re nata.

R Opii ꝯss. Aq. bullient. ꝯviij.—Misce: solve et cola.

R Hujus liquoris, Liq. plumbi dil. aa ꝯviij.

Ft. injectio—ter quotidie injiciend.

30th. Was seen to day by the house-surgeon, at her own home; the tumour (described as arising from the os and cervix uteri) was larger, and more tender when touched; the mucous membrane over the tumour is quite entire; has not had a minute's ease during day or night, since she left the hospital, though she has been taking one grain of opium, in soap pill, three times a day; the abdomen is very large, and resonant on percussion; bowels confined; has neglected to take the compound rhubarb pills. Ordered:—

Hot fomentations to the belly, and to sit over warm water; one of the rhubarb pills three times a day.

September 3rd. Died this morning, worn out by the continual pains she experienced in the pelvis.—*Sectio cadaveris*, 24 hours after death: head not examined; body extremely emaciated; belly, very large, and tympanitic, was opened in the usual way; through this opening, the small and large intestine bulged out, all much distended with air; the calibre of the three portions of the colon was as large as a distended stomach, and that of the small intestine, about that of the large intestines in their healthy state; the peritonæum in several places was more injected than naturally; there was a good deal of fluid in the peritoneal cavity; on tracing the sigmoid flexure of the colon into the pelvis, it was found firmly matted and bound down by false membranes to the uterus, and to an encysted ovary; it was found quite impossible to trace the rectum in the pelvis, on account of the firm adhesions between it and the surrounding parts; a very large cancerous tumour was found between the posterior surface of the uterus and the rectum, upon which it pressed; the uterus was about twice its natural size, very hard, and of a whitish colour, about two inches in thickness; amongst its fibres there was an abundant scirrhus deposit; from the neck of the uterus, arose a large scirrhus tumour, which pressed upon the neck of the bladder; the mucous surface of the latter was entire, and very vascular; the mucous follicles very prominent; there was no deposit beneath the mucous membrane of the vagina; but beneath the mucous membrane of the middle third of the rectum, there was a very extensive scirrhus deposit, which, together with a large scirrhus tumor, between it and the uterus, produced a permanent obstruction to the passage of feces. There were no tumours found in the liver, kidneys, spleen, heart, or lungs; there were no

deposits beneath the mucous membrane of the small intestines; in the stomach, about two drachms of quicksilver were found unchanged; there were no secondary abscesses in any of the parenchymatous organs. It appears that the patient had taken about two drachms of quicksilver, recommended by a relation as a laxative, four days before her death; the patient had urgent vomiting and purging for two days before her death; still, it appears that she had not passed any quicksilver, by the mouth, or by the bowels.

NOTICES TO CORRESPONDENTS.

A handsome Portfolio for holding the "Medical Times,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

Gentlemen who subscribe to the office, and have not yet remitted the amounts of their account, are requested to oblige Mr. Carfrae by their early transmission. The rule with all London newspapers is to pay in advance.

We have received the reports of two extremely important meetings held at Nottingham and Bath. Our crowded columns oblige us to defer further notice of them till next week.

Several correspondents have written to us on the assumption, in the case of Mr. Deshon, of surgical judgeship by the Poor-Law Commissioners, who admonished him that he should have attended the fracture daily—yet had no ground for their admonition, save an irresponsible opinion of somebody unknown, who, in differing with Mr. Hancock, and condemning Mr. Deshon, may either not have known the facts, or been under improper prepossessions. Mr. Deshon also—as one of our correspondents suggests—did attend daily for three days, a fact neither the Commissioners, nor their private instructors, seem to have been unaware of.

Honour among Thieves, writes us a very slashing article on the numerous essays lately made in the Times, by certain M.D.'s, equivocally circumstanced, to pass themselves into notoriety. As one of them—the most unblushing delinquent—"a Dr. Henry Bennet," as the Times described him, is the editor of a medical contemporary—the insertion of our correspondent's philippic would be a cruelty which would look like the gratification of a feeling we are not acquainted with—jealous rivalry.

A Surgeon.—We think a surgeon may prescribe in such cases without any apprehension of the Hall. Perhaps a few years ago the Corporate Apothecaries would have contested the point; such a result is most unlikely now.

We have received again some communications on the Spleen. We regret to say that we cannot contribute our space to the prolongation of the controversy.

A. R. C. will find such recipes in the Pharmaceutical numbers of the Medical Times.

Mr. Foster.—We quite agree in the importance of good folding for binding. But in London each book-binder refolds all journals before binding them. The hurry of publication enforces such a precaution.

Mr. Higgs.—No notices of the German cure have appeared, except in the general papers, and those looked very empirical.

An almost incredible mass of communications are lying before us. We can only promise that we shall select the best of them for our readers' profit.

Medicus, (Worcester).—We invariably decline to give opinions in all medical cases under practice. If the customary remedies have failed, a query in our pages for others, would probably be useless.

Mr. Radkin.—Sizes of books are much matter of fashion. The quarto we use, cannot be changed, without great inconvenience, or without circumscribing our utility. It has too the best of recommendations—the prestige of success. The quotation was not unknown to us.

Mr. Daniel sends us a case in which a large tablespoonful of common salt, given in a teacup full of warm water, expelled a tænia, measuring thirteen feet. The salt produced, for a short time, violent sickness, and severe spasm in the stomach, which were partially allayed by a dose of castor oil. The case is sent to elucidate a recommendation by Professor Williams, in one of our recent lectures.

T. P.—The subject is all in doubt. The Bill says neither yes nor no. The Bill in truth seems only a very general sketch of the future law. There is complete obscurity on several smaller points of practice.

Medicus.—The same as before. The Bill is silent as to the difference that is to be between a licentiate of the Hall, and a gentleman with the College diploma, and Hall license.

A. Z.—On the earliest opportunity.

Other Correspondents unavoidably postponed.

THE MEDICAL TIMES.

SATURDAY, NOV. 9, 1844.

Nunc agilis fio, et mensor civilibus undis,
Virtutis vere custos, rigidus que satellus.

WE have a fancy that the thing which vulgar people (Heaven forgive them!) call "a lie," and which hardly ceases to be disrespectful when politely named "a misapprehension," is, under ordinary treatment, the least romantic and least elevated of terrestrial entities. In the hands, however, of our gigantic contemporary, who is never at his ease except when talking to his civic readers in the style of a cataract, or moving their heavy sensibilities after the fashion of an earthquake, the contemptible "mis-statement" (the humblest use of language) undergoes a startling transformation. Like the toad touched by Ithuriel's spear, its customary, hesitating, sneaking, cowardly characteristics disappear, as if by enchantment, and we have the lie bold and bullying, celestial in altitude as world-wide in width, asseverating itself into a sublimity unknown to Longinus, with that high and insolent heedlessness of truth which, throwing the mind topsy-turvy, flings even first principles under suspicion. Yes! rare as, in our days, is Genius—it may always be found in a lie of the Times.

One of its recent—albeit smallest—efforts in this way, is contained in a recent article on the New Medical Bill; and, the subject-matter considered, we question if even our contemporary, in so short a space, ever did "the sublime" after a handsomer manner.

The first daring affirmation, off-handedly thrown to us, is, "that the English medical profession numbers at least thirty thousand members, six hundred of whom may possibly, by a stretch of liberality, be allowed to be physicians or pure surgeons." Of course, this free-and-easy asser-tion has a purpose to serve: the more numerous the medical profession, the less weight will the many gentlemen have, who, much to our contemporary's surprise, support the Bill: and the piquancy of our contemporary's "fact" is, that a tolerably well-known census exists, of no long standing, which gives us, of all grades, less than twenty-four thousand medical men for the three divisions of the empire, of whom it distinctly classifies three thousand as physicians! We escape the temptation of exclaiming, with the plain-spoken Prince Hal, "O, monstrous! eleven buckram men grown out of two! these lies are like the father that begets them—gross as a mountain, open, palpable," in our admiration of the masterly ease with which our contemporary proceeds—act of supererogation—to further establish his position. In a beautiful unconsciousness that the census needs an answer, he settles any possible doubt on his statistics by a conclusive reference to the congenial authority of—Mr. Wakley! If the census be against thirty thousand, the honourable member for Finsbury is for it; and, as the Tower Hamlets' gentleman had it,

"Nil desperandum Wakley duce, et auspice Wakley!"

The representative, as the Times says, of a learned profession, the mirror and exact image, as we admit, of its wants—if he and the census differ, so much the worse for the census!

To the other sweeping assurance of our contemporary, that, with the exception of a portion of six hundred physicians and pure surgeons, the whole profession is against the Bill, we answer with the ready declaration, that the respectable majority of medical men—and we might go even further—give the measure in the words of the more disinterested Chronicle, a cordial though modified support. Meetings have been held in Leeds, Bedford, Birmingham, Chester, Devonport, Sheffield, Bradford, Worcester, Gloucester, York, Newcastle, and Liverpool, and in all these important agricultural or commercial towns, which may so well claim to represent the general feeling of the country, resolutions in modified approval of the bill were passed. Though at each meeting objections, not unimportant, were taken to parts of the Bill—and we were the first to suggest them—it was yet constantly kept in view that the draught offered the skeleton of what might be made an excellent and useful law. The gentlemen present evidently felt that they had been kept too long in suspense about the promised remedy for some of their incontestible grievances, to factiously or needlessly peril the loss of an obvious improvement; and in this they were wiser than some of their so-called leaders, one of whom has been compelled—as we have noticed—to publicly implore them not to mention their approval of parts of the new bill, lest the Home Secretary should positively re-introduce the measure with the "objectionable" clauses withdrawn!

We own that we are not indifferently gratified at a result which was as little to be expected as it was much to be desired. We know enough of medical reform to be convinced, that while its concession is required for some of the highest of our social interests, it offers the most intractable and dangerous question which a public man—meaning well—can touch. Taking into account the variety of persons who must be parties to any satisfactory settlement, such a measure—especially if good in general principle—will appear one of the last for which we could anticipate any very general or warm support. While the many for whose good it is intended, from the small personal advantage they can individually derive from it, will possibly never take the trouble to see, or seeing, never take the trouble to clutch, the benefits offered them, or may be cajoled by some irate or mercenary authority of the day to confound differences, and make the fairer look the fouler side; the extensive manner in which it must affect—and it cannot be for the better—the interests, or expectations of interests, of a ruling few, gifted ordinarily with wealth and influence, and therefore unfortunately with talent at command, must provoke an activity of opposition, which like that of the Apothecaries' Society at the present hour, clever as sordid, cannot, even in the worst of causes, but produce some effect. The medical corporations also may not only have interests against the bill, but such different interests, that to get the zealous support of any particular one, a bill must have been aimed against all the rest; and as the four or five classes of which the profession is formed have, or fancy they have, personal or grade interests of a special kind, and as the profession, as a whole, asks what society will not give, and as society demands what the profession will reject if it can, to please all, much more to please all equally, would be a task no scheme could accomplish. Then, too,

our medical brethren are as great remedy-men, morally as physically, and are blessed (or cursed) with more system-mongers than, perhaps, any other portion of the community. Some are lawgivers for *crotchet sake*, and he rides no hobby who will not feel some little intolerance for the hobby of every body else. Others are lawgivers through a sense of injury or unsuccessful rivalry; and as their theories of what should be, are burnt into their souls by the hot iron of hate and disappointment, whatever falls below the mark of their day-dreams is a lukewarmness their stomach rejects. The measure which does not, therefore, raise *them*, or depress a *rival*, must be a delusion; and these are just the sort of men that will go to the expense of a pamphlet to tell us so. Indeed, the difficulties of all kinds which meet the statesman who tries his hand at medical legislation are so well recognized, that we are told that a medical journalist has deliberately professed, as his maxim, that "to please most, he must oppose most;" a circumstance which will probably explain why a formerly well-known periodical, which exhibited to the world twenty years' systematic and felicitous opposition of everything that existed, and of everything proposed to exist, is now closing its career with direct support of what it had for years denominated, as "the meanest, the most atrocious, the vilest, the most plundering act" (that of 1815), that ever passed the Legislature—a support given on no ground, save that the "loathing, the sickening, the disgusting old hags," are about to have their privileges somewhat limited by a Parliamentary measure, which must of course be "opposed" also. In truth, the history of the Medical Profession, during the last twenty years, has been a history of one continuous attitude of antagonism—an antagonism aimless in *most*, as it has been fruitless in *all* cases, and deviating into even the occasional inconsistency of a support—if support on one side would allow it to "oppose" more fiercely on another.

This brief and rapid review of the difficulties inseparable from all Parliamentary efforts after medical amelioration, must fail of its due effect, if while it awaken some little astonishment at the fortunate way in which the new Bill, in its general principles, has commended itself to the good opinion, and active support of the Profession, it do not also powerfully impress on us the folly of hazard-ing the loss of a measure which, however faulty negatively, offers us so many improvements positively. We have already lost partly by our own supineness, partly by the same mercenary opposition we have now again to recognise without surprise, two Bills, the one by Mr. Hawes, the other by Mr. Warburton, either of which, if carried, would by this time have done incalculable good to our science. Let Sir James Graham's law share their shipwreck, and the present generation will fail to give us one member of Parliament, of decent standing, who will peril his character by lending us his assistance. We are not, either, in a condition at this moment so securely to enforce our own measure, as to be justified in being fastidiously nice about those that in some small degree may differ from it; and infinitely wiser, as infinitely more suited to our position will it be, honestly to restrain our combative tendencies, and to use wisely the opportunity of the moment, and negotiate ourselves, as we best may, into our own terms. If we are weak and divided, we have a minister not too strong, the object of a persecution almost unparalleled in newspaper records; and it is his best interest, as well as duty, to give us a good

and satisfactory measure of Medical Reform, for ruin to him, and his position as a statesman—as the *Times* well knows—would be his failure on the important question he has pledged himself to settle.

Multa senem circumveniunt incommoda;
Dilator, spe longus, iners, pavidusque futuri,
* * * laudator temporis acti,
* * * censor, castigatque minorum.

THE New Bill has already achieved something towards giving our Profession a more literary turn; under its potent influence, even the incorporated Apothecaries have turned authors, and if the benign influence continue, we shall not despair of yet seeing a book or two from these chieftains of our Profession, contributing, at length, some little to the science which, whether they were active or idle, has been for twenty years so profitable to *them*. Their first book, published against the Bill before it existed, has now been followed by a second, positively *not* inferior to it in the character of its information, or reasoning value; and this fact, it is just to admit, offers important evidence, that the interval—whatever may be said of the old gentlemen or "old ladies'" age and feebleness—has produced no remarkable increase of mental decrepitude.

The present pamphlet labours under the small defect that vitiated the arguments of the former. Whatever the good or evil of the Bill to other people, it is, beyond a doubt, very bad to them, and the sagacious who know anything, even by report, of the comforts and luxuries of corporate life, are apt (suspicious folks as they are!) to think that the worthy apothecaries offer a very sufficient explanation of all their costly activity against the Bill, apart from any of those arguments arising from single-minded kindness to us, which they—as superfluously, as ingenuously—hunt out for our benefit. The hunchback recommending humps for universal use, or the tailless monkey excogitating proofs of the mischiefs of all such appendages, are types of the Corporate Apothecaries, in this rather ridiculous farce of theirs—begging us to be, like them, *dissatisfied*.

They take some pains to prove that the Bill, in enforcing qualified men on public Institutions, and leaving the rest of the public to choose for themselves, is guilty of some huge inconsistency. Though admitting there is impolicy in not restraining private empiricism further—aye, much further, it is easy enough to see that a government, which will allow every man to do with his own health and life what he pleases—and a free-born Briton must not lose the liberty of cutting his own throat,—may yet not very inconsistently deny men the same privilege over the health and lives of those that depend on him. The law which may not sorrow much, because a man kills himself, has some very active duties to perform if a man kill another. The identity of the reasons, therefore, by which a State is bound to act, in reference to public institutions and private individuals, is not as complete as our corporate rulers seem to imagine, and it is devoutly to be wished, that in dealing with their patients, if they have any, their treatment of different maladies, is somewhat more discriminating than their argument here gives, them credit for.

If we understand the feeling of the Company they have a very just conviction, that all chance of a warm support of them must depend, not on their own merits, but on an adroit use of other people's failings! Unable to say to their licentiates—from eleven thousand of whom they have

received enormous fees,—“the colossal fortunes you have given us have been wholly devoted to your benefit; we have established with them a magnificent benevolent fund, which will secure your families and yourselves from those dire visitations of calamity which may reach the most worthy; we have founded a noble library, to which every one of you has access; appointed distinguished lectureships for your improvement, and paid for costly premiums and rewards to excite and increase scientific zeal and industry; and not content with thus returning your own funds, with increase, to your own bosoms, we have frankly opened to you our corporate deliberations; allowed you to watch our examinations; invoked you to participate in our important decisions!” Unable, we say, to speak in this noble-minded and honest language to the thousands of worthy men, whom an unkind Parliament submitted to their ignoble care, and painfully aware, that they had governed for themselves, and not for those they had under them; that one generous act to their licentiates, one worthy contribution to our august science, has not marked their whole thirty years' existence; like unjust stewards, they come now, in their hour of pressing need, to us, all alienated as we are, expressing humbly (oh, how humbly!) their willingness to *co-operate* with their brethren—no longer "*licentiates*"—stooping to receive—aye, with craven humility, the dregs of the profession, sent to them as a deputation by some tap-room protection assembly, and meanly intrigue to have all their sordid and contemptible misgovernment overlooked, by joining, with furious zeal, in the cry—"No Quackery! No Quackery!"—a cry which they push to the absurd length, of allowing no one to advise, even gratuitously, a dose of the rhubarb they sell by drachms in their open shops, unless he has bought a diploma! We tell them that they have counted without their host; that no such low tactics will do with men who have received an enlightened education, and that in the deep conviction that the very best thing they have done since their installation, has been but a small performance of their *duty* (which surely calls for no thanks) we shall give them not one atom's support, which our *own* interests—not theirs—do not imperiously recommend. And here we leave their second book, to return to it with the kindred pamphlet from our Marylebone friends—which we have this week, against our will, pretermitted.

DR. COSTELLO AND HIS ASSAILANTS.

Mr. Eccles, and Mr. Gay of the pavement, have been publishing remarks on the biting and gentlemanly letter of Dr. Costello, inserted in our pages a fortnight since. Mr. Eccles confines himself mainly, to asseverating his statements previously made—and opposing himself, not only to Dr. Costello's statements, but those of Mr. Sherwood. Mr. Gay, in a letter which exceeds that already published in our pages, for impertinence and puppyism, endeavours to argue his squabble into a matter of the greatest significance—charges on Dr. Costello that *he*, and not *we*, wrote the notice on Dr. Costello's appointment—forces on him, of course without any proof, the responsibility of the term, "Surgeon-Lithotritist," which *we* prefixed to Dr. C.'s papers, as designating, not very amiss, (as we and Mr. Gay privately happen to know) the nature of his present and intended position in the hospital—quotes a letter from Dr. Marsden, that was *dictated*, but apparently not *written*, and which *would have been sent* if the hospital secretary had really not been out of town!—and this "*dictated*" letter expressed, among other things suppressed, the fact that "Surgeon-Lithotritist" was a name not adopted in the hospital, and finally, he

concludes with this flippant answer to the very heavy charge of unprofessional conduct made against him:—

"I am, Sir, most obediently yours,
"JOHN GAY, F.R.C.S.E.,

"Surgeon to the Royal Free Hospital, &c.

"12, Pavement, Oct. 30, 1844.

"P.S.—It is not true that I commenced a conversation with Dr. Costello's friend," (the patient!) "Waldron, or that I used the term 'humbugging him.' The poor fellow certainly complained to me that he had come into the hospital under Dr. C.'s care, with a stone in his bladder, and was likely to carry it out with him. The terms above, are not unlikely, under these circumstances, to have been a figment of his own brain."

With this short explanation, we now present Dr. Costello's reply:—

It may answer the purpose of Mr. Gay (who assures us that he is a F.R.C.S.E., and really an hospital surgeon of many years' standing) to play the Thersites of the Free Hospital, and to squabble himself into some kind of celebrity,—but neither my tastes nor interests will allow me to indulge him with one minute's more notice than a delicate regard for my brethren's good opinion may seem imperatively to require.

Mr. Gay avows, in his letter, that his object is, "to get it believed that I have no connection with the hospital." Yet he, *himself*, curiously enough, admits that, many months since, Dr. Marsden intimated to him that Dr. Costello would be permitted—as he phrases it—"the use of two beds in the Royal Free Hospital: he does not deny that the service of the beds actually was confided to me: he acknowledges to have witnessed one of the operations: he confesses to have entertained a complaint against me, made by "a person who had come into the hospital under my care:" nay, he uses my own language to affirm that he rests his charges on the single circumstance that my "de facto appointment had not yet received its formal confirmation by the committee."

This might suffice: but, perhaps, to illustrate further the humble nature of the quibble on which "something of the utmost consequence to myself is staked," it is fit to be known that, in the language of one of the Institution's highest authorities, "it has been the practice at the hospital to associate a colleague by a private nomination of a friend; to have that act sanctioned at a Quarterly Meeting; and, finally, to have the whole proceeding confirmed at an anniversary meeting of the Governors:" and it is not the least singular part of this drama of surgical ill-feeling, that Mr. Eccles, your correspondent, has himself not yet had his *de facto* appointment formally recognized by the Annual Meeting!

So much for the small arrogance of speaking of Mr. Gay as a colleague. For the more offensive term, "Surgeon-Lithotritist" which Dr. Marsden considerably objected to—and very properly—for it, perhaps, needlessly implied deficiencies elsewhere—it was subjoined as a not inapt appendage to my name, by the spontaneous kindness of a gentleman to whom both I and the scientific portion of the Profession are not a little indebted—the Editor of the MEDICAL TIMES; and so little did Mr. Gay deem it censurable, on the score of inaccuracy, that though he wrote to Dr. Marsden, suggesting a request to me for its discontinuance, he alleged no objection, save that to "publish" the title might imply that "the ordinary surgeons," *ex. gr.*, Mr. Gay, could not lithotritize, and left the whole matter *in statu quo*, should not Dr. Marsden happen to agree in opinion with him.

But I leave grave charges, hatched out of very miserable equivocations, to exhibit in the briefest manner a few less circuitous instances of the kind of worship my opponents pay to truth.

First. Mr. Gay professes to give a letter from Dr. Marsden. It is not his letter; but an unfair and foul mutilation of his letter—a mutilation necessarily made to give countenance to a slander.

Secondly. Mr. Gay, without a particle of evidence—save a very congenial suspicion—as coolly

as falsely accuses me of inserting, in the MEDICAL TIMES, a panegyric, lauding my personal qualities in a very flattering manner. It is enough for me to affirm that the responsibility of that very huge sin rests wholly on the Editor.

Thirdly. It is affirmed that my patient had been previously lithotritized by me in private lodgings, a few days before the operation. This is another groundless calumny; a gratuitous fabrication: and that it is so, I pledge my professional character.

Fourthly. It is re-asserted that Dr. Weatherhead was not present at the operation. Yet that accomplished physician writes to me, affirming that he was present, and that he did time the operation; and candidly adding his acknowledgment, in opposition to their statements, that it was performed with "consummate skill and marvellous rapidity!" These gentlemen seem to have a fatality for not recognizing a colleague!

Fifthly. In a flimsy postscript, Mr. Gay meets, with a blunt denial, my serious charge of disparaging, by the use of low terms, a surgeon to his patient, in a public institution. The disgraceful conversation with the patient occurred before a witness: Mr. Gay would not confront either before me, when so solicited: and both the patient and witness have subscribed the following document, to the truth of which they are ready to testify on oath:—

"It was on the Thursday that Mr. Gay came into the ward, and, entering into conversation, asked me what was the matter? I told him I was suffering from stone in the bladder. 'Oh! you are under Mr. Costello,' said he. 'You had much better put yourself under a respectable man. He is only humbugging you.'

"(Signed) GEORGE WALDRON.

"Witness, R. PICKERING."

Mr. Gay evidently belongs to a class, in dealing with whose recollections documentary evidence, to an honest man, is of the first importance. His veracity seems to be of that elastic texture which adapts itself to every emergency of his condition. Truly was it said, though by himself, "Clear and round dealing is the honour of man's nature:" and equally well was it said, by perhaps as high an authority:—

"Worth makes the man—want of it the fellow,
All the rest is but LEATHER," &c.

I am, Sir,

Your obedient servant,

W. B. COSTELLO.

Golden Square, Nov. 5.

[Dr. Costello briefly adds an assurance, that the post has failed to convey him the communication which the Editor of the *Lancet* was to have sent him immediately.—ED.]

PROFESSOR DICK'S AUTOBIOGRAPHY AND DEFENCE.

To the Editor of the "Medical Times."

SIR,—My attention has been directed to a paper in your Journal of the 31st August, entitled, "Edinburgh Veterinary College—Professor Dick":—in which you give, what you allege to be, a sketch of the affairs of this Institution, or, rather, of me. My not having much spare time, and scarcely considering it necessary to reply to the paper alluded to, have been the reasons for this delay; but having been urged by some of my friends, and as your information is, somewhat, erroneous, I have no doubt you will readily allow me to correct these errors, by giving this letter a place in your Journal.

First, then, I must tell you, that as I have not the honour to be an Aberdonian, all your witticisms about Aberdeen and its keen air go for nothing. But if it will be of any use to your readers to know the place of my nativity, I may state, that I was born in the court end of Auld Reekie, at least, so my parents have told me, and I am, therefore, a Canogotian, as the natives of that suburban burgh have been called; but whether they or I be of Celtic origin, I have never thought it worth while to inquire.

You go on to state, that of my early career but little is known, further, than that I was a pupil of

a blacksmith. I may add, that I was not only a pupil, but the eldest son of a blacksmith and farrier, and was, as is not unusual, naturally, led to learn my father's trade or profession; but, finding that I could not get all the information I wanted, regarding the diseases and treatment of animals, which, in the way of business, frequently came under my care, and as the London Veterinary College was, in those days, almost unknown here, I entered and attended such of the medical classes as I thought were likely to forward my knowledge. At the end of three years, having obtained some information regarding the London Veterinary College, I repaired thither, 27 years ago; when, after attending three months, I presented myself for examination and obtained a diploma. At that Institution I found a professor, an assistant and a clerk, which arrangement of office bearers continued till about the time of Mr. Coleman's death, when Mr. Morton, I believe, in addition to his other duties, was appointed to teach chemistry.

In the winter following my return from London, I proceeded to carry into effect a resolution, which I made soon after commencing to attend medical lectures, by beginning a course of lectures on the veterinary art.

For the first five years I met with small encouragement; some praise, but little pay.

In the following summer the Highland and Agricultural Society took up the subject, and conferred their patronage on the school; a gradual and regular increase of the number of students took place, and has continued until, as your informant states, thirty or forty present themselves at the end of each session, as candidates for diplomas.

For nine years I followed the plan your informant says I should have done—that of simply granting certificates, gratis, to those who had attended my school: but as the numbers increased, and with them my responsibility, I was glad, when, in 1827, it was proposed by the convener of the committee of the Highland and Agricultural Society, which superintended the school, that a public examination should take place at the end of each session, by gentlemen most likely to be able to judge of the qualifications of those students who wished to present themselves, and whose certificates would be satisfactory to the agricultural body, which the Highland and Agricultural Society will be allowed pretty fully to represent. A committee of examiners was accordingly appointed by the society, consisting of a number of gentleman, most eminent in the medical profession in Edinburgh, each distinguished in some of its particular branches: in anatomy, Dr. Knox, Dr. Mercer, Dr. Handyside, &c.; in physiology, Professor Reid, &c.; in surgery, Sir George Ballingall, Sir W. Newbiggin, Dr. Robertson, Mr. Liston, Professor Fergusson, &c.; in medicine, Professor Graham, Dr. Gillespie, Dr. Wood, &c.; also, veterinary surgeons, Castley, Black, Hallen Wilkinson, Gray, Brown, &c.; and when I acted with such a board, I think your informant might have reserved his sneers: first, because it has been the practice in longer established "Colleges," for professors to act as examiners; and secondly, because no facts have been shewn why I should not examine; no one, not even your informant, having ever dared to charge me with one act of partiality. On the contrary, I fearlessly assert, that all who have ever been present when I examined must allow, that the examinations I conducted were, on all occasions, fully more severe than those of other examiners present. Your informant finds fault with the "signing of diplomas by men of whom the public knows nothing, and who may know just as little of the art for proficiency in which they certify." I have given the names of a number of gentlemen who have acted here as examiners, and I simply ask you, and your informant, whether their names are not known to the public? And when I state, that three of the number have done me the honour of attending a course of my lectures, I think their qualifications to act as examiners can scarcely be questioned. Nay, I will go further, and ask, where is a gentleman to be found better qualified to examine in comparative anatomy and physiology than Dr. Knox, who is alike distinguished for

his eloquence as a lecturer on human anatomy and physiology, and for his scientific researches on these subjects.

Your informant asserts, that diplomas are granted somewhat in the manner they were done in the Universities of Aberdeen and St. Andrew's, and in some of the German Universities by which they have been disgraced, but I fearlessly assert, that if the lectures were delivered regularly, as it is admitted they have been done here, and if all the examinations in all the Colleges and Universities were conducted in the same open and public manner as they have always been done here, there would be little danger of the abuses he fears, and with which he seems to be so well acquainted; there is an old adage in this country, "that the greatest thief cries first, fie!" So much for the examinations; now for my keenness and cupidity.

I have stated, that for nine years I granted certificates gratis, and when a board of examiners was appointed, and diplomas granted, what was the "quantity of grist" which was "brought to the professor's mill?" Certainly, not ten guineas a-piece—no, not ten pence; they were furnished by the Highland and Agricultural Society, to the graduate, gratis, and this continued until 1840, when the students having petitioned the society for a larger and more ornamental diploma, with the term "College, instead of School," inserted, and seeing we were as well entitled to call this a college, both in respect to its being equally as much a public institution as the London College, which is, in reality, only a joint-stock company; and seeing that there was, then, only one professor in it, the petition was granted, on condition of the expense being paid by the students; one guinea was, therefore, charged to meet this and other expenses attending the examinations; after doing which, the fees have not, hitherto, put anything in my pocket. So much for the lucrative manufacture of diplomas and solid puddings; surely, in the absence of these, your informant will not grudge me the "vote of thanks." But your informant ought not to have made these assertions, because he knew better. It has long been known that the whole fees charged here for perpetual admission, and attendance upon lectures, theoretical and clinical, and practice, have only been ten guineas, while those at London have been twenty.

I have often been told by members of the profession, that I charged too small fees, but I have never, till now, been charged with keenness and cupidity, and as in this case I think I have fully refuted the charge, I will go further, and state that I challenge any one to bring a single instance of any kind, during my life, either in public or private, to support such a charge against me; let him, or them, put their names to their statements, and I will undertake to rebut the charge, or suffer the odium of not doing so.

Your informant goes on with a long story about my having excited the apprehensions of the London Veterinary College, and about their having invited me to become a member of their board, but of which I have never before heard, and, therefore, can only say, that I was not aware of having had that honour. He goes on, however, with something about the Highland and Agricultural Society, connected with this correspondence, which, to me, is unintelligible as connected with his statements, and after having a fling at the foul system of vending degrees at the Universities of Aberdeen, St. Andrew's, and at some of the German Universities, winds up with insinuating what he knows to be false; because I have not the power, even if I had the will, to sell a church or a chair as readily as a diploma.

The object of your informant, it is stated, is to direct public attention to the manner in which such establishments are formed and conducted. "Such establishments!" Where is there such another establishment? He states I am the projector, founder, professor, examiner, and sole proprietor of the Edinburgh Veterinary College: true—but is there any thing discreditable in this? Oh, yes! I appointed *myself* professor:—no, I only commenced 26 years ago to teach, and called myself a lecturer;—but the public, and

those who I think had the right, denominated me professor. But I am also an examiner; yes, I have been in the habit of examining my pupils weekly for many years, and I believe few of them will ever forget some of those examinations; but whether I have acted as examiner, privately, during the course, or publicly, at the conclusion, the relative efficiency of these examinations will not be doubted, when I state that, on a recent occasion, when an examination of candidates, for army veterinary surgeon, ordered by the commander-in-chief, took place before the principal veterinary surgeon to the army, and a board of army veterinary surgeons, three presented themselves, two of whom had obtained their diplomas at the London, and one at this school;—the two who had received their professional education at London were rejected, and the one who had been educated here passed in the most creditable manner. The prize of £25 offered by the Farmers Mutual Cattle Insurance Association for the best essay on the present epizootic pleuro-pneumonia has been gained by one of the students of this school, who only passed last session.

But it appears your informant objects more to my establishment being foisted upon the world as a "public institution" than to me. He does not however, explain what he means by a public institution, although he evidently insinuates that the London Veterinary College is one. Let me then inquire, in what respect that establishment has a better right to be called a public institution than mine? How is it constituted, and what has it done for the public? It is supported by a great many noblemen and gentlemen, who pay an annual or life subscription, amounting, I believe, to several thousand pounds per annum, and, for which, in return, they have their horses treated by the professor, while lame or diseased, when they are sent to the hospital without any thing further charged than £1 1s. per week for their keep and grooming. The affairs are managed by governors appointed from the body of subscribers; so far it is a joint stock company. Twenty guineas are paid for an entrance fee into the institution, by each student, and three guineas for the diploma. The Royal Agricultural Society of England gives £200 per annum to support a lecturer on the diseases of cattle, and by the influence of its governors, for a number of years, £1000, and for two years, £1,500 a year was granted out of the public purse, by Government, for its support; in this respect, it has been recognised as a public institution: but what has the institution done to entitle it to be called a public institution? Why, it has taught, according to a published list, 794 students, who have been granted diplomas during the 52 years it has existed, which is at the rate of fifteen 14-52 per annum. I am not aware of its having done any other public service, although, I believe, it has received about £30,000 of the public money,—such seems to me to be all its title to be called a public institution.

I have delivered 26 courses of lectures during 26 consecutive winters, which have been attended by upwards of 800 individuals, of which number 250 have been examined and received diplomas, since the practice was adopted in 1827, being at the rate of fourteen 12-17 per annum, and the average is rapidly increasing. The highest fee hitherto charged has been 10 guineas only for the pupil's whole education; a suitable lecture-room, museum, hospital, dissecting-rooms, forge, &c., have been provided; advice and medicine have been given to thousands of dispensary patients gratis; the senior and advanced students have cases regularly entrusted to their care, under my advice and directions; the student is required to perform all the necessary operations; clinical instructions are daily given in connection with these cases, and the students examined regarding them. I have had assistants to aid them in their studies, although I have mostly taught them on the monitorial plan, and the only pecuniary assistance I have received, besides the fees of the pupils, has been £26 5s. per annum from the Highland and Agricultural Society. With these means, scanty as they are, and my own exertions to forward the interests and knowledge of my pupils, more than with a view to my own pecuniary advantage, I

have been able to raise a school which has collected students from the most distant parts of the three kingdoms; and, for this session, I can already reckon a pupil from the capital of all the Russians;—but, I suppose, as I have received nothing from Government in the shape of money, I am, therefore, not entitled to call this a public institution. It matters not what is the number of students who flock to it, nor what are the advantages they enjoy;—it is of no consequence what is the efficiency of the instructions given, or whether the students in public or private competition are found superior to those of the London school; it is enough that your Ishmaelish Monops of an informant should say that he objects to foisting it upon the world as a public institution.

I regret to have been obliged to allude to the London Veterinary College as I have now done, but let them choose more wary champions in future. I have never attacked them, but if they, or any one for them, choose to attack me, they will find me always ready to endeavour to defend myself, whatever may be the result of the struggle.

I am, Sir,

Your obedient servant,
WILLIAM DICK.

Edinburgh, Veterinary College,
29th, October, 1844.

SUPPRESSION OF QUACKERY.

To the Editor of the "Medical Times."

SIR,—The accompanying letter was written several weeks ago, and I now transmit it to you for insertion in the next number of the MEDICAL TIMES, to show Mr. Hacker, whose letter I read in your last number, that he is not alone in his opinions. The only point in which I disagree with that gentleman, has reference to his proposition, that the Physician should pay a £2 registration fee, the Surgeon and Apothecary £1. I am of opinion that *no person* should be admitted to practice *any branch* of the profession until he had passed a certain standard examination in all its branches; after which, if he wishes to practice, either medicine or surgery exclusively, he may take a degree or licence in either, and be registered accordingly. On the same ground, I think, all medical men, in practice, should pay the same registration fee; as there should be no tax upon a man who takes a higher position in his profession, which, according to this system, he could neither arrive at, nor sustain, but by merit.

I am, Sir,

Your obedient servant,
WILLIAM RODEN, M.D., A.M.
Fellow of the Linnean and Royal
Medical and Chirurgical Societies,
and Member of the Royal College
of Surgeons, London.

Kidderminster, Nov. 4th, 1844.

(To the Editor of the Medical Times.)

SIR,—There can be little doubt I think from the general movement now going on, and the unanimity which is almost generally prevalent in the medical world, on the all-absorbing question of Medical Reform, but that the profession will be able to secure some other, and it is to be hoped more protective, measure against illegal practice, should it please the government to repeal the apothecaries' Act of 1815; but it must be obvious to every member of the profession, that that is only a very partial protection to the medical man and the community, which promises only to defend the former from the inroads of unqualified men. The worst form of quackery doubtless exists in the boundless sale of nostrums; and it is my humble opinion that if the axe is to be laid at the root of the evil at all, the present is the time or perhaps never; at the least, it may be a very very long time before the profession will have another such opportunity of speaking out for itself. It would be folly to occupy your valuable space, by asking the profession, whether it is satisfied with Sir James Graham's notion "that quackery cannot be put down by legislation, and that it is better to hold out inducements rather than proceed by penalties." All will at once disagree with such a milk-and-water proposition. I do not for a moment imagine

that quackery can be *entirely* destroyed by any legislative measure, for the public will always physic themselves sub rosa to a certain extent, and every old woman will still have her remedy; but I perfectly agree with Dr. Cowan's remarks in his speech at the Reading meeting, "that to assert it could not be lessened and controlled by firm and consistent enactments, was at variance with all known experience, and contrary to the example of every other civilized community."

But to the object of this letter, which is to propose a remedy, a remedy which if I recollect right has been broached before, but not perhaps at so eligible an opportunity. And what is the reason why Sir James Graham tells us that quackery (including of course the sale of quack medicines,) cannot be put down by the legislature? The reason I think is sufficiently obvious to every one who has thought upon the subject—so long as the revenue is receiving from £25,000, to £30,000, per annum, from the sale of stamps upon quack medicines, it is not likely the government can or will let go this sum of money, unless it is returned to its coffers in some other way. It is probably true that the government would not allow such a sum as this to prevent their legislating for the public good, but certain it is the money must be returned in some other way. This I believe to be the great stumbling block. Remove this, and doubtless we shall be listened to. Sir James evidently means well towards the profession, or why would he have introduced his measure in order that its opinion might be given upon it during the vacation, but it is very possible he may have been wrongly advised in the matter. I trust it will be seen that the remedy for this evil, which it is the object of this communication to propose, will not throw any further onus on our shoulders, but rather prove an emolument in the end, besides benefitting the public health. I think then, that if the profession would consent to the imposition of a small annual registration fee, say one guinea per head for every member in practice, to be transmitted with the name annually, according to Sir James Graham's proposed clause for registration; if the profession, in their various petitions to Parliament, and in their various conferences with members of Parliament, would enter into and propose such a scheme for the amelioration of so great an evil to this country, I firmly believe the government would alter its opinion as to the possibility of putting down quackery by law.

Of course, the profession would only yield to such a measure, on condition that a clause should be introduced into the bill for the total suppression of the sale of nostrums. Really useful discoveries in medicine, proved as such by the examination and to the satisfaction of the "Council of Health," might, nevertheless, be registered for the inventor in the same way that other inventions, designs, &c., are registered, and subject to similar payments. It may be said by many of my brother practitioners that the sale of quack medicines is rather a benefit to us than otherwise. I would answer, does it not mostly happen, that although patients are very frequently obliged to apply to us to remedy the mischief brought on by such a course, that their pockets have been completely emptied by their purchase? The profession must then suffer by attending these persons gratuitously, in addition to the immense liberality which it already evinces to the public, and which is altogether unequalled by that of any other professional body or class of persons whatever; and it is equally evident that the public suffer also, both in health and in pocket. On the other hand, if the law of the land prevented the sale of such rubbish, or made it punishable, would not the public derive the advantage of sound medical advice and treatment, at the very onset of their ailments, instead of applying in the latter stages of disease; and would not the necessary increase of patients more than cover the expense of this registration fee?

Doubtless it would, and into the bargain, not only remove a national disgrace (for it is well known, that in no European country has the quack, the ignorant pretender, and the nostrum-monger, so wide a latitude), but it would save the lives of thousands.

It may be said, again, it would be a death-blow

to the chemists and druggists—I think not; for although some of the profession have been greatly injured by their illegal practice, it is not the wish of the profession to prevent the druggist earning his bread in his own proper sphere, and, I believe, if the sale of quack medicines were made an offence, in the eyes of the law, that they would necessarily sell a greater amount of medicines in another and more legitimate way. If the views above stated, are thought worthy of notice by the profession, I trust they will be directed at once to the proper channel; or, if any of my professional brethren can suggest a better remedy, I trust it will be done boldly and unreservedly, for assuredly we have only now to be true to our own interests, which are at the same time the interests of our fellow creatures, to succeed in obtaining a good and a just measure of medical reform.

I am, Sir,
Yours, &c.
W. R.

SIR JAMES GRAHAM'S MEDICAL REFORM BILL.

(To the Editor of the "Medical Times.")

SIR,—By the same post you will receive a Sheffield Independent Newspaper, containing at page 8. a copy of a petition in course of signature at this place.

As this petition differs very considerably from another, which has emanated from the alarmists in Sheffield, you will probably give it a place in your Journal. It is already signed by the Senior Physician, and the Senior Surgeon, of the General Infirmary, and by half the staff of the Sheffield Public Dispensary, as also several other influential medical gentlemen of Sheffield, and its neighbourhood.

I am Sir, yours respectfully,
HENRY BOULTBER,
F.L.S., F.R.C.S., Eng., &c.

Sheffield, Nov. 2nd, 1844.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the undersigned Medical Practitioners of Sheffield and its neighbourhood.

HUMBLY SHEWETH,—That your petitioners are legally qualified members of the Medical Professions, residents in Sheffield and its neighbourhood.

That they desire to express their high approbation of the general principle of the Bill lately introduced into your Honourable House by Sir James Graham, for the better regulation of medical practice throughout the United Kingdom.

That for themselves, they utterly disclaim, as impracticable, any attempt to suppress quackery by law; and ask for no protection to their profession further than what the said Bill guarantees.

That as to the public welfare, this they are thoroughly convinced cannot be consulted in any better or surer way, than by promoting the education, and consequent elevation, of the Medical Practitioner.

This important end, they are of opinion, will be effectually accomplished by the said Bill; and therefore humbly pray your Honourable House that the same may pass into law, with such modifications in the constitution of the "Council of Health and Medical Education," as your Honourable House may deem proper, in order more completely to identify the said Council with the interests of the general body of Medical Practitioners.

And your Petitioners will ever pray, &c. &c.

THE BILE.—Dr. Kemp is of opinion that during the progress of digestion, the bile changes its character from the action of oxygen, and, with starch, is converted into the non-nitrogenized portion of the chyle, and he hopes at the next meeting of the British Association to be able to prove from observation the exact period of digestion at which the bile changes its character. Healthy bile is always neutral, but if left in contact with the mucus of the gall bladder, the latter, a proteine-compound, becomes decomposed, carbonate of ammonia is formed, and the bile is rendered alkaline.

STATE OF PROFESSIONAL FEELING.

A number of meetings continue to be held in all parts of the country on the new Bill. With a few exceptions—and these not important—the universal impression appears to be that, which we ventured to express the day after Sir James Graham introduced his measure, viz., that with a more popularly constructed Council of Health, and more stringent dealing with the monstrous evils of quackery, the measure was one which the profession would derive infinite advantage from, and that, therefore, our efforts should tend more to the improvement, than defeat, of the Bill, particularly as even the proposed Council would be better than our present state without one, and as quackery under the Bill cannot possibly be more rife than at present. The exceptions to which we have referred are, principally, some of the hospital authorities of Sheffield, who have been the first publicly to receive the present Bill as a faultless measure, and the students of Birmingham—it is not said how many of them—who have been the only gentlemen who seem to agree in the now forlorn opinion, that the Bill should be opposed by all the forms of the House. Among the moderate meetings are, the Edinburgh College of Physicians, Hertford, York, and the West Riding; Dover, Whitby, Nottingham, Hertford, Hull, Wolverhampton, Newcastle under Lyne, Bath and Bristol Branch Association. Notices of other meetings, either held, or shortly to be held, are daily reaching us.

OPERATION UNDER THE MESMERIC CONDITION.

(To the Editor of the "Medical Times.")

SIR.—I beg to acquaint you with the result of the second operation, under the Mesmeric condition, in which I have been engaged, and to furnish you with copies of the certificates of those who were present.

I am, Sir,
Your obedient Servant,
J. H. TOSSWILL.

November 5th, 1844.

Martha Clarke, aged 10 years, was brought by her mother to my house, on the 30th of October, to know if I would consent to operate upon the child for strabismus. I desired them to call again on the following morning. On explaining the difficulty which attended such operations, from the inability to keep so young a person quiet, and upon suggesting that mesmerism should be tried, in order that this indispensable end should be obtained, the mother readily acceded to my request. I, therefore, immediately commenced the usual manipulations, and at the expiration of 16 minutes succeeded in inducing the mesmeric insensibility. On being awakened, my little patient's astonishment was expressed by her look of extreme wonder and surprise. Having daily continued the induction of the mesmeric coma, until I had produced perfect insensibility to powerful impressions applied as tests, and induced the most beautiful manifestations of a cataleptic condition of the limbs, I determined upon operating this day. Having given no intimation of my intention either to the mother or the child, I placed the latter in a chair, and succeeded in rendering her mesmeric in a few minutes. I then induced a cataleptic condition of both arms, and extended them at right angles from the body. Having obtained the assistance of Mr. Spencer, that gentleman raised the upper lid with the elevator, whilst he depressed the under eyelid with the hand, in doing which he caused the patient to fall backwards against the back of the chair, traction being used in that direction. With the forceps, I then seized the conjunctiva of the right eye, and divided it with the scissors, subsequently introducing the hook and cutting through the internal rectus muscle; the operation occupied two minutes and a half, there being much condensed cellular tissue to clear away, but, during the whole time, I saw but one indication which might lead to the supposition of pain, which was, that, upon pinching the conjunctiva with the forceps, there was one spasmodic contraction of the orbicularis muscle; the sound

eye was uncovered, and remained closed during the whole time, the lips motionless, and the entire body free from the slightest movement. The arms, which had been rendered cataleptic, gradually and slowly fell, in the same manner as is usual when no pain has been experienced. On being awakened, and informed that the operation had taken place, her reply was, "has it." On being questioned if she had felt anything, she asserted, and has repeated the assertion, that she had felt nothing. On being asked, had she dreamed, and what was the nature of her dream, her answer was: "That she thought she was at Hannah Colton's, a-blowing the fire to make the pan boil." This dream would at first appear unconnected with her actual condition, but it is in reality an instance confirmatory of it. It is well known that irritation, applied to the organs of sense, produces in each the sense peculiar to it; that whilst the electric shock, applied to the ear, will produce the idea of sound, applied to the mouth the sense of taste is excited, whilst, acting upon the eye, a vivid flash of light is the result: so, in this instance, I conceive the irritation of the operation may have given rise to the idea of fire, and have originated the train of ideas embodied in the dream.

(CERTIFICATES.)

I. Nov. 5th, 1844. Having witnessed an operation for strabismus, performed upon Martha Clarke by Mr. Fosswill, while in the mesmeric state, we consider that she evinced *no consciousness* of pain; there was a painful expression in the features, and, as it seemed to us, a quickened breathing, but we feel certain there was entire want of consciousness; upon being awakened, she had clearly no knowledge that the operation had been performed.

(Signed) JOSEPH BIGGS.
JOHN JACKSON.
P. DOWNEY, M.R.C.S.I.

II. I believe the child, Martha Clarke, was not rendered so comatose by mesmerism, as to be insensible to the pain of the operation; that the muscles of the face were contracted; that she used considerable muscular exertion, to recede from the operator; and that the breathing was indicative of suffering.

(Signed) J. H. SPENCER.

III. I believe this to have been a beautiful case of mesmeric cataleptic sleep. The arms were extended, but very gradually fell during the operation, but not entirely so, one remaining without support to the end; I observed a slight receding and flushing of the face, on commencing the operation, but I cannot say if such arose from consciousness, or from an involuntary effort, such as occurs continually in patients under the mesmeric influence, and which is likely to have been the case, as the sense of pain, or consciousness of an operation being performed, would certainly have influenced the dream. There was no sound uttered, or other expression of pain whatsoever; at all events, the anticipation of a painful operation and the after consequences, with much of the actual pain, were clearly saved by the mesmeric sleep. It should be known, that the eye is the last part to lose sensibility under mesmerism, and even the whole face often continues sensitive when the rest of the body is unimpressible. The operation occupied two minutes and a half.

(Signed,) HENRY G. ATKINSON.

THE MEDICAL TIMES.—The MEDICAL TIMES though of recent origin, is one of the best medical journals we possess, and has perhaps the largest circulation of any similar periodical in the kingdom. It was brought out boldly, and at a venture—was made to traverse ground that had been well canvassed and courted—and, like every other new comer, with determination and defiance in its face, was met with a look of fear and ferocity by every old fashioned predecessor. Two great principles stamped the fate and fortune of the MEDICAL TIMES from the hour of its birth—these were a lavish expenditure of money, and the services of a first-rate set of contributors. It commenced by giving a greater amount, and a better quality, of *bona fide* reading matter, for the weekly sum of sixpence, than any other journal in exist-

ence. In fact, it set a fashion which the *Lancet* was speedily glad to imitate, and which many of its cotemporaries must follow, if they wish for a continuation of existence. Nothing but an immense circulation could remunerate the spirited proprietors of the MEDICAL TIMES; but this circulation they may safely calculate upon, so long as they give so much and so good matter, for so trifling a sum. Every month they publish a pharmaceutical number, five of which are now lying before us. These are specially upon matters of pharmacy, and its collateral sciences; and it would appear that the continent, the colonies, America, nay every habitable spot that has a tale to tell of chemistry, materia-medica, botany, and pharmacy, is made to yield its choicest truths. All the most recent improvements and discoveries in connection with pharmaceutical science are scrupulously registered, with copious formulæ, constituting a work both of immediate information and of valuable practical reference. To the general practitioner in medicine, and to the dispensing chemist, this work will prove of invaluable service. We greet it cordially, and express our best wishes for its continued success.—*Birmingham Journal*.

REMOVAL OF PART OF THE BASE OF THE TONGUE.—M. Sédillot operated in the following manner in a case in which the left half of the tongue was involved in cancerous ulceration, extending back, nearly to the epiglottis. After extracting the first left incisor tooth, a vertical incision was made to the left of the median line, through the lower lip, the integuments of the chin and neck, down to the os hyoides. A narrow bistoury was then passed behind the corresponding portion of the maxilla, after which the bone was divided by a single stroke of the saw. Two assistants having then separated the branches of the maxilla, the soft parts of the left side were divided as far back as the palate by means of a straight bistoury, and then the diseased portion of the tongue was removed by an incision through the median line, carried out behind with a sweep, parallel with the epiglottis. The lingual artery was tied: the dressing consisted in placing the portions of the maxilla in apposition, and so retaining them by means of a plate of gold, retained in front of the teeth by means of a silk thread. The lip was brought together by means of the twisted suture, and an opening was left in the integuments of the neck, for the passage of pus and mucus. In nine days after the operation, the lip became united, the jaw-bone consolidated, the wounds of the tongue and mouth healed, and everything in fact indicated complete success. There was no tendency to retraction of the tongue, as the *genio-glossus* muscle was uninjured.

TREATMENT OF CHANCRES.—Mr. T. Bartlett, an army surgeon, treats chancre in the following manner, his object being to obtain cicatrization as speedily as possible, in order to prevent absorption of the venereal virus, and consequent secondary symptoms:—He applies a dry stick of lunar caustic lightly over the whole surface of the chancre, and then dry lint; on the falling off of the slough, which sometimes takes place in twenty-four, but more generally in forty-eight hours, dry calomel, is generally sprinkled over every part of the sore, previously well-washed; after which a strip of lint, sufficiently long to surround the penis, is applied, after it has been wetted with cold water. The further treatment consists in applying calomel and wet lint once a day in this way, after the sore has been thoroughly cleansed from all the discharge by lukewarm water. When there is a short prepuce, strips of sticking-plaster are required to approximate its extremities to prevent the lint falling off. Whenever the chancre affects any portion of the frænum, division by the knife is necessary, to prevent the cure being retarded. No constitutional treatment is necessary. Mr. Bartlett states that he has had only one case of secondary symptoms since he adopted this plan of treatment, and in that case it appears to have been owing to neglect on the part of the patient. In another case, that of a man of weakly habit and sickly appearance, sloughing of the cellular membrane of the prepuce supervened, and was successfully treated with poultices, warm fomentations, &c.

GOSSIP AND NEWS OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, November 1, 1844; R. F. Freeborn, F. J. Brown, J. Millard, H. H. Snell, S. M. Mac Swiney, G. Ashdown, R. Fletcher, B. L. Jemmett, F. Brittan, G. Krane.

APOTHECARIES HALL.—Gentlemen admitted members on Thursday, October 31st Oct. 1844.—Frederick James Brown, William Finer, Joseph Williamson, Robert Ellis, John Harry Gale, William Stevens, Cavendish Wall, George Rodwell.

NOTTINGHAM.—Mr. W. I. Hugoe has been elected surgeon to the Nottingham Union Hospital, and District No. 2, vacant by the appointment of Mr. Phillimore Stiff, to District No. 1, and Senior Surgeon to the Hospital, vice W. Jalland, Esq., resigned.

The Poor Law Medical Relief evidence is at length printed, and is now selling in one volume, for eleven shillings, at Mr. Hansards, 6, Great Turnstile.

BIBLIOGRAPHICAL RECORD.

FROM OCT. 26TH TO NOV. 9TH.

Kretschmar, (Dr. E.) Die Naturautokratie im Menschen und die allopathischen Arzneidosen, gr. 8, 22½ Ngr.—Neuberth, (J.) Originalbeiträge zur Geschichte des Somnambulismus, gr. 8, 22½ Ngr.—Petzholdt, (Dr. Alex.) Die Pockenkrankheit mit besonderer Rücksicht auf die pathologische Anatomie, 4to. 2 Thlr. 20 Ngr.—Pfeiffer, (Dr. Louis) Versuch über die Phlegmasia alba dolens (weisse schmerzhaft Glieder-Geschwulst), gr. 8, 1 Thlr.—Schneider, (J.) Die Neuralgien in der Zeit der Pubertätsentwicklung oder des mannlichen Alters, gr. 8, 4 Thlr.—Stilling, (Dr. B.) Physiologische, pathologische, und medicinisch-praktische Untersuchungen über die Spinal-Irritation. Mit vier eingedruckten Holzschnitten, gr. 8, 3 Thlr.—Stilling, (Dr. B.) Untersuchungen über die Functionen des Rückenmarks und der Nerven, gr. 8, 2 Thlr.—Hocken (E. O., M.D.) A Practical Enquiry into the value of Medicinal Naphtha in Tubercular Phthisis, 8vo. sewed, 3s.—Walker (C. E.) A Complete Course of Meteorology, by Kämtz, with Notes by C. Martins and Lalanne, Translation, 8vo. 12s. 6d. bds.—Bell's (Thos.) History of British Crustacea, Part 1, 8vo, sewed, 2s. 6d.—Cooper's (Sam.) Introductory Address to the Students at the opening of the Winter Session in the Faculty of Medicine, 8vo. stitched, 1s.—Graham's (J.) Facts and Observations in Medicine and Surgery, the Gleanings of Ten Years' active General Practice, and having particular reference to Fractures and Dislocations, Gun-shot Wounds, Calculus, Insanity, Epilepsy, Hydrocephalus, the Therapeutic Application of Galvanism, and Fibrinous Diarrhoea, 8vo. cloth, 7s. 6d.—Guy's (W. A.) Principles of Forensic Medicine, Part 4, 8vo. 4s.; the same complete, 8vo. cloth, 10s. 6d.—Miller (J.) The Principles of Surgery, 12mo. cloth, 9s.—Wright's (S.) Lecture on Physical and Intellectual Life, delivered before the Educational Society of St. Mary's, Birmingham, 8vo. sewed, 1s.—Hacker (Dr.) and Professor Hohl, Medicinischer Argos, 1—5 Band. a 2 Thlr.—Schmidt (C. C.) Encyclopædie der gesammten Medicin, 6 Bände. gr. Lex. 8vo. 18 Thlr.—Huter (K. C.) Die Embryothlasie oder Zusammendruckung und Ausziehung der toten Liebesfrucht, gr. 8vo. 1 Thlr. 15 Ngr.—Durand-Fardel, Gekrönte Abhandlung über die Hirn Erweichung, Uebersetzt und mit Zusätzen versehen von Dr. Eisenmann, gr. 8vo. 2 Thlr. 20 Ngr.—Clark (Sir James) Die Lungenschwindsucht; nebst einer Untersuchung über Ursachen, Wesen, Verhütung und Behandlung tuberculöser und scrophulöser Krankheiten im Allgemeinen, Von Dr. Aug. Vettar, gr. 8vo. 2 Thlr.—Grant (R. E.) Umriss der vergleichenden Anatomie, Von Dr. C. C. Schmidt, 1 Band. gr. 8vo. 6 Thlr.—Meissner (F. L.) Ueber Schwammig Auswuchs der weiblichen Geschlechtsorgane, 7 Tafeln. 20 Ngr.—Meissner (F. L.) Die Frauenzimmerkrankheiten nach den neuesten Ansichten und Erfahrungen, zum Unterricht für praktische Aerzte bearbeitet, 1 Band. gr. 8vo. 4 Thlr. 15 Ngr.—Hall (Marshall) Von den Krankheiten des Nervensystems, Von J. Wallach, 8 Tafeln. gr. 8vo. 2 Thlr. 15 Ngr.—D'Alnoucourt (F. L. C.) Der practische Rathgeber in Wochen Kinder, und Krankstuben, gr. 8vo. 2 Thlr.—Blumrodes (G.) Ueber das Irresein, oder anthropologisch-psychiatriische Grundsatze, gr. 8vo. 2 Thlr. 7½ Ngr.—Weatherhead (G. Hume) Ueber das Kopfweh, Von Dr. Louis Pfeiffer, 8vo. 18 Ngr.—Weber (A.) Die Nervenfiabr Pathologisch gewürdigt, nebst therapeutischem Anhang, gr. 8vo. 1 Thlr.—Thielmann (Dr. H.) Der Darmtyphus, gr. 8vo. 10 Ngr.—Dieterich (L.) Die Mercurialkrankheit in allen ihren Formen geschichtlich, pathologisch, diagnostisch und therapeutisch dargestellt, gr. 8vo. 2 Thlr. 15 Ngr.—Eriedreich, (J. B.) Historisch-kritische Darstellung der Theorien, über des Wesen und den Sitz der psychischen Krankheiten, gr. 8vo. 1 Thlr. 25 Ngr.—Hacker (H. A.) Neueste Literatur der syphilitischen Krankheiten (von 1830-38) nebst Nachträgen zu früheren Jahren, gr. 8vo. 1 Thlr. 10 Ngr.—Weitbrecht (J.) Lyndes-mologia, or a Description of the Ligaments of the Human Body, translated by Robt. Harrison, M.D. 8vo. 1s. 6d.—Adams' (H. G.) Flowers; their Moral, Language, and Poetry, edited by H. G. Adams, 24mo. sewed, 2s.—Adcock's Engineer's Pocket-Book for the year 1845, containing Tables of Weights and Measures, Squares and Cubes, and their Roots, Areas of Circles, Segments and Zones, Steam Engines, Steam Vessel Propellers, Railways, Wind and Water Mills, Mensuration, the Mechanical Powers, Hydraulics, Heat and Light, Strength and Weight of Materials, &c., together with an Almanack, &c. 12mo. roan tuck, 6s.—Alison's (W. P.) Remarks on the Report of H. M. Commis-

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Diseases of the Lungs, and of the other Organs of Respiration	237	312	286
Diseases of the Heart, and Blood-vessels	30	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	61	66	69
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CLINICAL LECTURES ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDINER GUTHRIE, Esq., Junr.
November 13th, 1844.

LECTURE V.

A soft, gelatinous or flocculent lens is sometimes, although rarely, seen without any affection of the capsule, especially in the latter species; but, in general, the capsule partakes of the opacity, and often in a manner sufficiently remarkable to give a name to the peculiarity. When the capsule is little affected, the lens is generally of a dead white colour and flocculent in appearance, conveying to the eye the idea of softness, in opposition to that of density or solidity, which is entertained from the examination of a hard lens. There is a fine polish on the surface, instead of the membranous shining appearance of a semi-opaque capsule. When the lens is of a gelatinous substance, it often assumes a semi-transparent grey colour, or the bluish green appearance of deep sea water: the capsule has the membranous appearance I have described as resembling thin silk stretched over it, and is occasionally semi-transparent, or partly unaffected, in spots or lines.

When the capsule of the lens has undergone a further change, as it frequently does, and has become thicker either wholly or in parts, and the lens has obtained greater consistency, the difference of colour between them can often be perceived. The chalky yellowish white of the lens may be seen covered in parts, by the mother-of-pearl colour of the capsule. This appearance of the capsule again often covers a lens of a whiter colour; and sometimes whilst the white circumference of the lens marks its softness, the darker centre indicates a hardened nucleus. The sensation of light is very obscure, the lens is always large, presses against the iris, nearly obliterates the posterior chamber of the aqueous humour, renders the iris convex, and causes the black ring round the pupillary edge, to be very evident. The motions of the iris are slow, and the pupil, after having been dilated by belladonna, returns to its former size with great difficulty, and sometimes, although rarely, never becomes as small as before.

The alteration on the surface, and the thickness of certain parts of the capsule, have given rise to appellations, which it may be considered necessary to know, although they are of no utility in practice; provided it be understood, that whenever these appearances originate from, or have been dependant upon, inflammation, as indicated by alteration in the form of the pupil, and attachment of the iris to the capsule, the disease becomes a false cataract, and the operation by extraction would be improper.

When the chalk white depositions, or thickening of the capsule, assume the variegated appearance of marble, it has been termed *cataracta marmoracea*. This name would, however, be more useful if it were commonly intended to designate

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also a hardened state of the capsule, which often accompanies the marmoraceous appearance, and in which calcareous matter is deposited, in spots or scales, amounting, as has been sometimes supposed, to the formation of bone. When these striæ in the capsule happen to cross each other in a particular manner, something resembling the bars of a window, the term *cataracta fenestrata*, or window or lattice capsulo-lenticular cataract is applied to it; but it yet remains to be settled by the learned, whether it be the cross bars alone, that are entitled to this appellation, or whether lines, running in parallelograms, or lozenges, are to be included in it or not: it having been decided that when they run in a radiated direction, the proper name is *cataracta stellata*, or stellated, and when the striæ are so incompletely formed as only to appear in dots, it should be called *cataracta punctata*; but if they happen to run into each other, and form a white spot on one half of the capsule, whether to one side or the other, it ought to be called *cataracta dimidiata*. Here, however, another difficulty remains for consideration; it being evident, although a spot occurring in the centre of the capsule, whilst the rest of it remains probably clear, may entitle it to the appellation of *cataracta centralis*; that if one fourth of the capsule only is affected, neither *punctata*, nor *dimidiata*, will apply to it; and it appears to me, unless one be forthwith coined, such as *quadrata*, it will, like many other parts of the body similarly situated, be obliged to take that of *imminata*, all of which is unworthy of men of sense.

Cataracts, accompanied by any marked alterations of the capsule, such as are, or may be hereafter described, will, for the most part, be found to be soft; and the practical rule to recollect is, that in whatever way the operation is performed, the destruction of the capsule must be a principal object of attention.

When the capsule of the lens is wounded or ruptured in such a manner as to prevent union of the divided edges from taking place, the lens is gradually absorbed, the capsule thickens, resembles white leather or parchment, is frequently as tough, shrinks, and the anterior, in uniting to the posterior capsule, often in the adult encloses a small piece, or remaining nucleus of the lens, which renders the central part of it thicker, and more dense in appearance. This, which is called *cataracta arida siliquosa*, or dry hulled, pea-shell, or coriaceous cataract, generally takes place after an accidental injury, although it may occur after the operation of puncturing the cornea. In the former case, the cicatrix will be visible; the pupil is for the most part irregular, and the edge of it attached to the capsule. I have never known it occur in the adult, unless in consequence of an operation, or from injury; but so far from the capsule being loosened from its connections, or any diminution of adhesion having taken place between them, as Beer would seem to imply, there is generally a much firmer attachment between the thickened capsule and the zona ciliaris or Zinnii, than is met with in health, the surrounding parts appearing to partake of the opacity and toughness to nearly the

same extent as the capsule, and rendering a separation of them very difficult of accomplishment. In children, as well as in adults, the opacity is always situated at a distance from the iris, even if it be attached to it at a particular point, which it frequently is; the motions of the rest of the pupil are perfectly free, and the depth of the posterior chamber of the aqueous humor can be readily estimated, by looking at it from the side at which the iris is attached. The cataract is of a decided white colour, shining like the smooth surface of a kid glove, exhibiting a more dense appearance in some parts than in others; it is always irregular, uneven, or flat, but never convex on its surface; and only after operation is frequently separated in parts from its natural attachments. In some cases of adults, when the bright white of the capsule is intermixed with spots of a dirty yellow colour, it has obtained the name of *cataracta gypsea*, or gypsum cataract, from its supposed resemblance to that substance. Schmidt conceived that when this cataract took place in infants, it occurred from rupture of the capsule, or a separation or loosening of its cohesion from its vital connection, in consequence of convulsions—an opinion which cannot be relied upon. When it takes place in consequence of a blow on, or a concussion of, the head, vision is generally very defective, although in many cases occurring from direct injury, it is as perfect as in any other case of cataract after the operation has been successfully performed.

On the Diagnosis of Cataracts of the second Class, or false or spurious Cataracts.

A false or spurious cataract is said to have occurred when inflammation of the surrounding parts has given rise to an effusion of coagulable lymph, or fibrine adhering to the iris, or edge of the pupil and to the capsule of the lens; to obliteration of the posterior chamber, accompanied by discoloration of the iris, thickening of the capsule and deposition upon its surface. A slight adhesion of a point, or part of the edge of the pupil does not render a true cataract a false one; it only requires peculiar attention in the method of operating. Under the head of false, or spurious cataracts, I include the *adherent*, or *concrete cataract*, the *cataracta lenticulo-capsularis lymphatica*, *spuria purulenta*; *pyramidata*, *grumosa* or *sanguineous*, *trabecularis*, or *cum zonâ*, or *balkenstaar*, of Beer and Schmidt, the *cataracta barré* of the French, the *cataracta capsulo-lenticularis cum bursâ ichorem continente* of Schmidt, the *putrida* of Scheferli, the *cataracta lenticulo-capsularis arborescens* or *dendritica* of Schmidt, the *choroidalis* of Richter, the *pigmentosa* and the *cartilaginosa*, and *stony*, or *earthy* cataracts of others.

The history of a case of false cataract is very important, as it will frequently point out its nature, and with the appearances of the part itself, indicate what probability there will be of success attending an operation for its removal—the great point, after all, for consideration. A false cataract is a consequence of inflammation, or injury of the surrounding parts, including the

iris, the choroid coat, and the retina, and the symptoms will be, at the time, dependent on the extent of mischief which has been done to them, and which may remain permanently, shewing the value of the history of the case; although, to a very experienced person, the appearances and the present symptoms will be sufficient to mark the complications of disease. Glaucoma, amaurosis, a varicose state of the vessels of the choroid coat, may, for instance, be readily distinguished by the diagnostic signs I have given between them.

The *adherent or concrete cataract* is essentially marked by the adhesion of the iris, either wholly or in part to the capsule of the lens, its pupillary edge being irregular, the pupil contracted, and generally, if not altogether, destitute of motion; and even, if the capsule should not be perfectly opaque behind the opening in the pupil, it would be too small for correct vision. These cases, therefore, and indeed all those of false cataracts, with diminished or adherent pupil, forbid altogether the operation by extraction, or by any other of the ordinary modes, except those which are included under the head of operations for closed or artificial pupil, the cataractous or capsular opacity being, in instances of this nature, a secondary consideration.

The *cataracta lenticulo-capsularis lymphatica* and the *cataracta purulenta*, are only consequences of inflammation of the iris, and of the capsule of the lens, followed by the symptoms enumerated in adherent cataract. When the lymph, effused into and behind the pupil, forms a delicate net-work, deviating from a snow-white to a straw colour, it has been called *membranous*. It is called *spuria purulenta*, when a greater quantity of fibrine, or lymph, is thrown out, intermingled with points resembling pus, and giving it an irregular appearance—a distinction not worthy of consideration. It is called *cataracta capsulo-lenticularis pyramidata* by Schmidt and Beer, when the substance takes on a pyramidal form, and projects through the pupil, to which it adheres, and which, in a very irregular, contracted and immovable state, it may carry forward with it against the cornea, constituting generally, a very complicated and, oftentimes, an incurable disease.

The *cataracta grumosa*, or sanguineous cataract, obtains its name from the addition of a small quantity or various spots of blood, giving to the surface of the capsule not covered by the iris, the appearance of a red net, with silvery-white strings passing through it. Unless the red spots be large, they can only be seen through a good magnifying glass, when a distinction can be made between the *cataracta grumosa*, and the *cataracta spuria purulenta*.—a distinction which, when made, is of no real or practical utility, and only tends to render that confused, which is otherwise very simple.

The *cataracta capsulo-lenticularis trabecularis*, or *cum zonâ*, the *balkenstaar* of Schmidt and Beer, is similar in its causes and nature to the preceding ones, except that a perpendicular, horizontal or diagonal bar, or some such mark, generally of a whiter colour than the rest of the capsule, being its distinguishing feature, is usually thicker in substance and has been found almost *cartilaginous*.

The *cataracta capsulo-lenticularis cum bursâ ichorem continente*, and *putrida* of Schefferli, do not deserve the least attention, being more imaginary than real, and at best differing but little in the manner in which lymph, or pus, has been deposited. They are said by Schmidt and Beer, the inventors of the names, to consist essentially in a small cyst or bag of purulent matter, formed after inflammation, accompanied by all the other symptoms alluded to, and situated behind the lens according to Beer, before according to Schmidt, which part, however, has been generally, if not entirely, removed by absorption. The Germans fancy this cataract is distinguishable by its deep lemon colour, by the extinction of the posterior chamber of the aqueous humour, by that heavy motion of the iris if the pupil is not immovable, by its convexity, and by the trivial perception of light. These cases are instances of a disease, which may more properly be called complicated; the distinction is of no value, and any opera-

tion to be done for its relief, should be attempted only by the needle or very small iris knife.

The *cataracta capsulo-lenticularis arborescens, dendritica or choroidalis*, means that a portion of the pigmentum nigrum, or the dark covering of the uvea, or posterior part of the iris, is separated from it usually by a severe blow on the eye, and remains attached to the capsule of the lens, giving rise to the arborescent appearance seen in the stone called *dendritis*. The patient, immediately after the accident, complains of a sensible diminution and indistinctness of vision, although no change can be observed on a casual inspection of the eye, except a dilatation of the pupil to a greater or less extent. The detachment, however, of the portion of the pigmentum nigrum alluded to, will readily be distinguished by the aid of a magnifying glass. Inflammation usually follows an injury of this kind, and is oftentimes destructive of sight under the best treatment, which, under ordinary circumstances, is frequently somewhat impaired. A disease, more truly deserving of the name, occurs in a very different manner, in consequence of a rheumatic or anomalous inflammation of the iris, which is followed by a gradual closure of the pupil nearly to a point, at which point the part of the capsule behind remains more or less transparent, and is seldom so opaque as to prevent the person ultimately from seeing objects with the aid of spectacles. On the application of atropine, the pupil is apparently enlarged, but the uvea or posterior part of the iris, in retracting, does not keep pace with its anterior part, and is attached to the capsule of the lens by irregular points through which the rays of light cannot pass, and a minute inspection by the short focal, or a magnifying glass, shows that a very small point of capsule alone remains transparent, although the whole of the lens behind may be pellucid.

Cartilaginous and stony Cataracts are rarely met with; they are generally capsular, and partake of the nature of those that are denominated *siliquose*; of which they are generally only peculiarities.

When in false or spurious cataracts, or, indeed, any other kind of cataract, the pupil is dilated and fixed, and the patient cannot distinguish light from darkness, although the cataract may be otherwise distinct, an operation is contra-indicated; if the iris should adhere to the capsule of the lens, the complicated nature of the case is more distinct, and the addition of the other appearances I have described, only shew that the inflammation has been more general. It is in these cases that the value of experience, founded on observation, is best estimated by the student, and is of most importance to the patient.

On the cure, or removal of Cataract without Operation.

The cure of cataract, in its incipient stage, has been often considered practicable, and the methods or means of doing it, have been often recommended by different persons, who, whilst they impose upon the public, lead medical men to place some confidence in the methods proposed, which have I believe, hitherto, under proper observation, always ended in disappointment. It may, therefore, be supposed, that the cases in which success has been said to follow each, or any particular treatment, were not incipient cataracts, but other complaints which were mistaken for them.

There cannot be a doubt that persons who have had opacities behind the iris, perceptible to the eye of an observer, have been cured under a course of medicine of various kinds. It is also indisputable that these recoveries are very rare, and should only be considered as exceptions to the general rule. The opacity in such cases may have arisen from slight depositions in the capsule, the result of simple inflammation, rather than from any affection of the lens itself, for an opacity, or rather a haziness of the capsule, caused by an inflammation extending to it, as in iritis, may almost always be relieved under the treatment proper for the cure of iritis; and when after inflammation of some months' standing, the appearances I have lately described, as following a rheumatic attack, and giving rise to the *cataracta capsularis*

choroidea, dependant on the attachment of the pigmentum nigrum of the uvea, accompanied by contracted pupil, and what is often called an incipient cataract, may be relieved by proper treatment. I have one very marked case under my care at this moment, of a gentleman who, after having nearly lost his sight for the last eight months in this way, has nearly recovered it, and would, without the least hesitation declare publicly from what had been before told him, that I had cured him of cataract.

Opacities in the capsule are well known to remain stationary for a series of years. Cases in which the pupils were dilated, and cataract was supposed to exist, from the haziness at a particular point caused by the refraction of light, have been much relieved since remedies have been discovered capable of causing a contraction of the pupil, by which sight has been much improved, as in ordinary cases of mydriasis, whilst from the contraction of the pupil, the hazy spot was rendered invisible. The gentleman I mentioned in one of my previous lectures, who has a cataract from an injury he received in jumping through a hedge whilst hunting, is aware that it may be removed by being dissolved in the aqueous humour, which if I had not told him, and had continued to apply some drop to his forehead or eye,—and the harder the name I gave to it the better,—would not hesitate to declare that he had been cured by it if the lens should disappear. It is well known, that a poor man, some two hundred years ago, having met with accidents of this nature, which rendered him blind, was advised at the end of many months, to say many hundred prayers, at the shrine of a saint, celebrated for her skill in restoring sight in cases of blindness. At the end of several weeks the poor man was rendered happy by discovering a glimmer of light. After a few more Pater-nosters and Ave Marias, and a certain number of masses paid for to the priests, the bystanders actually saw the opaque spot breaking into pieces. The miracle was now complete, and no one afterwards doubted the capability of the saint to restore sight to blind people, who could afford to pay and to be prayed for, for a sufficient length of time, and who were not wanting in a proper degree of faith; a loop-hole to escape by, when the skill of the saint was not supported by the operations of nature.

I have alluded to the cure of false or spurious cataracts by antiphlogistic, alterative, and other measures. Stimulants and counterstimulants have been said to be successful in the removal of incipient cataracts; many charlatans, and some respectable, but I would fain believe inexperienced practitioners, have entertained similar opinions, and some acute literary persons have been ready to swear to it, not knowing anything about the matter, and not thinking it worth their while to understand the subject, on the principle, perhaps, that where "ignorance is bliss, 'tis folly to be wise." Mr. Guthrie admits, however, that he has seen in the course of his long experience in diseases of the eye, some very few cases in which incipient cataracts or commencing opacities disappeared in one eye, after operating on the other, and in two cases after suppuration of the eyeball of the other eye from accidental causes. In the first of these cases, the right eye was lost after the division of a soft cataract, in consequence of a stranger having improperly examined the eye, and given the woman great pain. There were some opaque spots observable around, and on the circumference of the lens of the other eye, when the pupil was dilated, but which were not perceived seven months after the accident, and did not return for years, whilst she was in the habit of calling on him. In the second case, the woman lost her left eye by suppuration after operation, in consequence of inflammation supervening after a hard day's employment as a washerwoman, which duty she was obliged to undertake, having left the hospital in a fair state of recovery, on account of a family of young children she had to provide for, and she did not return to the hospital till the eye was nearly lost. On her recovery, after the subsidence of the eye-ball, the right eye was again examined, after thoroughly dilating the

when no vestiges of the opaque triangular point previously seen in it could be perceived. The completion of cataract, in this man's eye, was certainly prevented, and the commencement was removed, and she remained free from the complaint for, at least, three or four years, whilst under his observation. He says, that he is obliged to say, that in three or four instances of incipient cataract in one eye, in which the other was so far disorganised as to prevent his trying what the effect would be of attempting that eye to sink, he entirely failed in arresting the progress of the cataract in the other.

In some few instances, the extraction of the cataract from one eye seemed to have caused the removal of the commencing opacity in the other; but in all these instances the opacity was not central, but was commencing from the circumference. Dr. Bowen, who practised in Italy, describes the ease, in his work, of Padre Bora of Padua, 71 years of age, on whom he operated for cataract of the left eye, with an incipient one in the right. The operation was successful, and followed by the disappearance of the opacity in the other.

The result of my father's observations on all the cases he has seen, is, that no dependence can be placed on either the destruction of the eye, or the operation on one eye for the removal of a cataract in the other; and he is inclined to suspect, that the removal of the opacity, whenever it has occurred, is not dependent on the loss of the other eye, but on the operation performed upon it.

It is a fact, however, which may be relied upon, that cures have been completed by the operations performed, whatever may have been the cause or causes employed, but he believes that no reliance can ever be placed, up to the present moment, on anything that has been recommended, either as internal remedies, or external applications. He had a visit three or four days ago from a gentleman, on whom he had successfully operated for soft cataract in one eye, in order to enable him to continue in his occupation, which he could otherwise have lost. Having ascertained that the utmost the Allopaths could do for him, he has committed himself under the care of the Homœopaths, and assures him that, under the use of a sufficient number of infinitesimal doses, the increase of opacity, which is perceptible in the other eye, will be prevented. My father asked him how much it cost him for advice, and on being informed that it cost him nothing, being given to him by a friend, congratulated him on the prospect of being humbugged, and not cheated into the bargain. In one instance, my father has seen a formation of the lens. The young woman in whom it took place, Ann Whalley, aged 23, came under his care in the year 1825, when fourteen years old, having congenital cataracts of both eyes, on which he operated with success. Some circumstance induced the mother to go out of the country suddenly, before the eyes were quite clear, and he did not see her again until the 11th March, 1844, when a small portion of capsule appeared to impede vision at the lower part of the pupil of the left eye, the left being quite free. Supposing that the removal of this portion of capsule would prove her sight, he proposed it to her, and on doing it he found to his great surprise, that the cataract had been reproduced, and was quite transparent. It became of course opaque, and was removed in the usual manner.

The possibility of the recovery of the transparency of the lens, after it has become partially opaque, must be admitted, but that it cannot be effected at present, by any known means, must be generally admitted by all practitioners of honour and honesty. That the means of effecting this desirable object may yet be discovered, must be desired of all good men.

After the lecture, Mr. C. Guthrie performed three operations for cataract by extraction, and one for the removal of a hard nucleus, which had been several months after the operation of depression; this was done by first making an opening in the under-part of the cornea, and then introducing a small hook, with which the hard portion of

lens was transfixed, and brought out. He afterwards broke up a soft lens, and Mr. Dasent operated on another.

In one case (of extraction), Mr. C. Guthrie showed the striæ in the substance of the lens running from the circumference towards the centre on the posterior part, to which he had alluded in his previous lecture. The lens itself having a central amber-coloured nucleus quite hard, with a softer and lighter coloured surface and exterior part.

J. F.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

At the conclusion of the last lecture, I was about to consider the particular appearances of chronic peritonitis; but it is not necessary to go minutely into the history of these appearances, as the history of chronic pleurisy will serve to give an idea of them. Chronic peritonitis occurs especially in scrofulous children, and, in fact, it may be pretty generally considered as a scrofulous, or tuberculous, form of disease, whether occurring in children, or in adults. When it takes place in children, there is fever, and gastric, or enteric, derangement, or diarrhoea: there is slight tenderness of the abdomen; but this is often very little complained of. Structural changes sometimes take place, without any marked symptoms occurring. It is occasionally observed to follow measles and whooping cough, and, in some instances, to be accompanied by liquid effusions into the abdomen. A slight degree of fever remains, and the patient loses strength, whilst the belly gets larger. I have known the same thing occur in a child, who had suffered from ascarides, and, owing to these symptoms, the latter disease had escaped attention. On examination after death, it was found that the peritonæum was very extensively tuberculated. Chronic peritonitis is generally tuberculous; Louis says it is always so; but there are forms of chronic peritonitis, in which granular tubercles are not present. I have met with cases of the disease, in which all the intestines have been agglutinated together; yet there were no distinct tubercles present. The reason why chronic peritonitis is more constantly tuberculous than chronic pleurisy, I believe to be, that, in the case of chronic peritonitis, there is less motion of the intestines, or less compression, so that the low products of inflammation assume the natural rounded character which slow effusions are apt to take, if unmolested. The effusion of lymph is first of all granular.

The treatment of this affection is, for the most part, palliative. When once the disease has reached to a considerable extent, as exhibited by a knotty state of the abdomen, with more or less distention from liquid or solid effusions, and great emaciation, little is to be done but to palliate the symptoms. But, if detected, or suspected, in the early stage, there is then reason to believe that a well-adapted treatment will remove it. I had several cases, under my own observation, of incipient symptoms of chronic peritonitis, with liquid effusion in the abdomen, tenderness on pressure in those parts, and all the symptoms I have mentioned, and they subsided under persevering treatment. Fomentations, followed by blisters, and, subsequently, the use of mercurial ointment, or mercury combined with iodine and iodide of potassium, exerted a very powerful influence. This treatment, persevered in, with mild aperients, succeeded in dispelling the symptoms of this affection. However, while in one patient all these symptoms subsided, the brother of the same child died under exactly similar symptoms, and the peritonæum was found to be extensively diseased. In case of more extensive liquid effusion, it is useful, if mercury has not been administered previously, to affect the gums with this medicine, giving diuretics in small doses, but taking care to guard against violent sickness and vomiting. The diet should be of a mild character in these chronic

affections of the abdomen, but not too spare. Chronic inflammation is combined with derangement of the whole system, and the extreme reduction, that answers in acute inflammation, becomes, in many cases of chronic disease, injurious. With the diet, there should be a small allowance of animal food frequently given. Healthy air is of the greatest consequence in these cases.

Tabes mesenterica is closely allied with this disease. It consists of an undue development, or enlargement, of the mesenteric glands, and is very often combined with tuberculous peritonitis.

Sometimes, it consists of a slight enlargement and disease of the glands, without any affection of the peritonæum itself. Where it occurs without peritonitis, it is frequently connected with disease of the mucous membrane of the intestines. Remittent fever, in children, is apt to pass into this disease. The fever is accompanied by inflammation of the mucous membrane of the intestines, which passes on to ulceration, and, connected with that ulceration, there is commonly enlargement and disease of the mesenteric glands. Sometimes, it is dependant on irritating matters absorbed from the intestines. This disease is common in children, from the age of two years to puberty, when the growth is rapid, and the nutritive and digestive organs are apt to be disordered. It is very insidious in its advances: sometimes coming on after febrile diseases, and sometimes as a sequela of the exanthemata,—measles, whooping-cough, small-pox, and scarlatina; and is commonly attended with remittent fever, and the sub-acute form of gastro-enteritis, in children. The chief symptoms are: some degree of pain in the abdomen, but of a slight character; tenderness on pressure; generally, enlargement of the abdomen; some febrile accession in the evening, and, sometimes, quite a hectic flush is found on the cheeks; the pulse is gradually quickened, and there is progressive emaciation. Hence, its name—*tabes mesenterica*. No doubt, it is connected with obstruction in the lymphatic glands. The appetite is disproportionate to the state of the nutritive function; it is voracious, but all that is taken is not converted into nourishment. The symptoms are not unlike those I described in worms; but their permanency, and the increasing emaciation, induce a suspicion of the disease. Pain of the abdomen is sometimes present; and, sometimes, there is no heat in the abdomen except at night. The enlargement of the glands can be felt in the middle region of the abdomen, more particularly when the stomach and bowels are empty, as after the operation of a purgative, or before food is taken. The knotty state of the glands can frequently be felt, when the patient is lying on his back. The constitutional symptoms are exceedingly like those of phthisis pulmonalis, although the seat of the lesion is different in the two cases. If the disease goes on, very frequently it terminates in pulmonary consumption. In five-sixths of the children, affected with *tabes mesenterica*, tubercles are found in the lungs: in adults this is more unusual. On examination of those who have died in the more recent stages of the disease, the glands have been found enlarged and loaded with granular deposit, or a collection of opaque and cheesy matter. This condition is found particularly after fever. In the advanced forms of the disease, the enlargement of the glands is more extensive, and consists of a plastic kind of tuberculous matter. It is rarely, however, that you find it here in the same state as in the lungs: the reason of which I believe to be, chiefly, the smaller amount of vascular communication in these glands than in the lungs. In older subjects, where the disease has gone on longer, the glands are found to contain some cretaceous or calcareous concretions, some portions being quite osseous. The presence of these is a proof of age. In other cases, instead of the cheesy form of tubercles, there is more of a consolidation of the glands, and, sometimes, enlargement to a considerable extent—a sort of hypertrophy, with much less tendency to the tuberculous deposit. Sometimes, disease is found in other glands of the body; in the lymphatic glands in the cervical and the inguinal regions, &c. The lymphatic glands are affected more than any others in the system.

of money, and become entangled in the stices, or mesh-work of the fibrin; whilst the minous and saline matters dissolved in the r, and constituting, with the latter, the serum, expressed by the double contraction of the n and of the "sponge-work" formed by the mnarily-arranged discs.

he liquor sanguinis (the fluid in which the s naturally float), therefore, separates during process into the coagulating fibrin and the m.

Although coagulation is essentially owing to gulation of the fibrin, yet the red discs, in con- cence of their tendency to assume a columnar ngement, are not considered as entirely passive. he aggregation of the discs occurs in half a ute after healthy human blood has been drawn from the body; but if the plasma be idly inspissated, (as in inflammation) it takes e even before the blood can be transferred to microscope. Some re-agents promote, — rs prevent it. Those that promote, if any thing, rise to exosmose in the corpuscles; of those prevent, some, it is said, occasion exosmose, hers, endosmose. Viscidity of suspending l (with certain proportion of salts dissolved) notes aggregation.

lood corpuscles of a frog do not coagulate in ular columnar masses, but partially overlap a other like coins of a roll loosely thrown n. Mucilage of gum, with a little common r, or white of egg, slightly increases in the frog tendency of red corpuscles to aggregate.

hough red corpuscles in the frog have a less ency to aggregate than in human blood, the urless corpuscles are considered to have a ater.

has been already observed, that the nuclei of red corpuscles in a frog, whilst circulating, not so distinctly seen, nor are the corpuscles ed as when withdrawn from the body, owing, supposed, to collapse of red corpuscles in the r case; this change, it is said, is in coincidence a their tendency to aggregate.

few minutes after the columnar arrangement he discs, an oscillatory motion is described to r amongst them (Jones,) whereby the rolls r become broken up, and may unite again; corpuscles generally separate on a slight im- e, and may unite again. The nature of this action between corpuscles is not known. This mnar aggregation will take place, it is said, in d that has stood for some hours; also, when corpuscles are mixed in serum only, without ph. G. D. compares the oscillatory motion to hich is observable in the process of crystal- tion, and thinks it may depend upon electric, ous influence.

coagulation of the fibrin is no proof of the death he blood; it is an *act of its vitality*—the inci- at step in the process of its organization, which r condition is soon detected in an ordinary

. If the fibrin remains on a living surface, coagulation is the first stage of its conversion o organised tissues, and it progresses in its anization in consequence of the affinity of life t up between it and the contiguous tissue. On other hand, if the blood or fibrin is withdrawn n the body, and is no longer under the vital uence of the living surface which has produced its coagulation is the last act of its life,—is, in , the *dying act of its vitality*, and it soon after- ds passes into a state of decomposition.

n consequence of the red discs being the viest part of the blood, they are always most ndant in the lower part of the crassamentum.

he length of time which the blood takes in gulation, and the degree in which the clot difies, is generally in inverse proportion. If a e quantity of blood is abstracted, the portions ch last flow coagulate more rapidly, but less ily than those first obtained.

he blood drawn during the inflammatory es usually coagulates slowly, but the clot is ternaturally firm, especially at the upper part, ere the buffy coat, or colourless stratum of the in, gradually contracts and produces the ped condition, which is regarded as the index a high state of inflammation.

he production of the "buffy coat" may either

depend upon the tardy coagulation of the fibrin, or upon the more speedy and closer aggregation of the red corpuscles, (for the buffed inflammatory blood is not always slow in coagulating); the corpuscles becoming more speedily and closely aggregated, the more rapidly subside in heavier masses towards the bottom of the (as yet) liquid plasma, leaving the upper part colourless. This, it is said, is occasioned by a *morbidity exalted tendency* in the discs to aggregate—(H. Nasse.)— This condition, it is affirmed, occasions a more rapid and closer contraction of the sponge-work of the discs, whereby an expulsion of a great part of the liquor sanguinis takes place from the meshes of the latter *before* the fibrin solidifies; the aggregated corpuscles sinking, and the expressed plasma being left free at the top to form the buffy coat—(Jones).

Thus, in the process of coagulation, especially of inflamed blood, a mesh-work of corpuscles is first formed; next a mesh-work of fibrin; and the contraction of the sponge-work of the discs preceding that of the fibrin.

The coagulated plasma, obtained either from buffy blood, or inflamed surfaces, presents microscopically a multitude of fine filaments, confusedly interwoven, as in a piece of felt, and more or less obscured, by the intermixture of corpuscles and fine granules; the former, of the two last named, having the characters of the pale corpuscles of the blood, whilst the filaments are formed by the solidifying fibrin.

The process of coagulation is best studied by treating the blood with any of the re-agents which retard coagulation, especially sulphate of soda, the latter producing, it is said, no alteration in the character of the elements, but simply delaying their change of state. Andral says, after a few minutes the blood separates into two parts; the lower contains the globules collected into a soft mass; the upper portion first resembles serum, but soon becomes opaque, and a number of globular white corpuscles are also seen by the microscope: this constitutes the first degree of solidification. After forty-eight hours, the lymph contains numerous flocci, like spider's webs, which are found to be composed of globular corpuscles beginning to coalesce; this constitutes the second stage of solidification. After ninety-six hours, the lymph recovers its transparency, but the flocci are more numerous, and firmer, having lost their corpuscular character, and constituting an irregular web, in which "several strings" of distinct corpuscles may be seen.

That the fibrin is the essential coagulating agent is proved

1st. By the upper part of the clot being always firmer than the lower.

2nd. By Müller's experiment. He placed the blood of a frog, diluted with water or syrup, on a paper filter, sufficiently fine in texture, to keep back the corpuscles. The liquor sanguinis having passed through the filter, unmixed with the globules, presented a distinct coagulum.

3rd, and lastly. Salt, for instance, carbonate of potash, or sulphate of soda, (unless mixed in very small proportions) have the property of retarding coagulation. If either of these be added in tolerable quantities, the corpuscles have time to sink to the lower part of the fluid before the clot is formed, the upper part of the coagulum being then colourless, and devoid of the red discs.

Some causes prevent, others retard, and others accelerate, coagulation.

Causes Retarding or Preventing.—The blood does not coagulate in some cases of sudden death, where the nervous system has suffered some violent shock, which has been supposed to destroy suddenly the vitality of both fluids and solids—instances: animals killed by lightning, or by strong electrical shocks; a blow upon the epigastrium, or those poisoned with prussic acid; also in some cases of rupture of the heart, or of a large aneurism—the caustic alkalies permanently destroy the coagulability of the blood. Acids delay, or prevent, it; and some say, opium, belladonna, and other medicinal vegetable agents. Also the salts of alkalies and earths, added to the blood, in a proportion not less than two or three per cent, or in greater quantity; but coagulation

will afterwards ensue upon diluting the mixture. Water added in greater proportion than twice the bulk of blood, retards; cold also; and at, or below, 40 Fahr., prevents; but after the blood has been frozen, thawed, and moderately heated, it will coagulate—exclusion from the air retards.

If the blood is caused to flow into a vessel containing oil, the latter forms an impervious coating upon its surface, and then blood will coagulate so slowly, that the red particles have time to subside, and the upper part of the clot is left colourless. Impeded aeration of the blood, or suffocation, retard. In cold blooded animals, the blood coagulates slowly, and less perfectly. The separation of crassamentum, or clot, from serum, will not occur, if coagulation takes place in a shallow vessel, nor if the amount of fibrine is very small, or its vitality low; a homogenous mass, deficient in firmness, then presents itself.

Causes Accelerating or Favouring Coagulation.—Rest (within the body); moderate heat; exposure to air; agitation of *exposed* blood, even *in vacuo*; when agitated in a bottle it coagulates in small portions or shreds. When the blood has been effused into the pericardium, from rupture of the heart, in many cases a portion, taken out of the body several hours afterwards, has coagulated; this is owing to exposure, the atmosphere, I conceive, acting as a stimulus to the very slight degree of vital contractility still remaining.

When the brain and spinal marrow is broken down, the blood speedily coagulates. Coagulation of blood is accelerated by: its reception into metallic vessels; water, not exceeding twice the bulk of blood; salts of alcalies and earths, if added in less proportion than two or three per cent.; faintness, though not invariably, for sometimes it produces the opposite effect; coagulation commences, also, and is sooner completed in arterial than venous blood. Women's blood coagulates nearly two minutes sooner than that of the male (Nasse); tendency of blood to coagulate is greatest in birds, which have the greatest amount of respiratory action, and the highest temperature.

The apparent proportions of clot and serum, presenting themselves after coagulation, or, in other words, the relative size of the clot, are various, and quite independent of the proportionate amount of the ingredients constituting the two parts; for where the coagulation is rapid, the clot, by subsequent contraction, expels little or no serum, and fibrin, red corpuscles and a large proportion of serum remain entangled in its substance. If the coagulation be slow, the density of the coagulum becomes greatly, but very gradually, increased by slow and firm contraction, and more serum becomes expressed.

The existence, therefore, of a large clot does not necessarily imply the presence of an increased amount of fibrin; it may depend upon retention of a large proportion of serum within the crassamentum, in consequence of a deficiency of contractile power of the clot, and this owing to diminishment in the proportion of fibrin.

The specific gravity of blood in the aggregate or mass, is no means of measuring its coagulating power, because a high specific gravity may be due to an excess of red globules, its heaviest part, whilst the quantity of fibrin, which is the coagulating element, may be in the minimum.

The continual drain of fibrine constantly taking place from the blood, or the demand made for it by the capillaries, is evident by the fact that arterial contains more of it, by one-fifth, than venous blood.

It is stated, that the agglomeration of the red corpuscles of newly abstracted blood, and those of extravasated blood, as well as the aggregation of them in inflamed parts within vessels, is owing to the nervous influence having been withdrawn from the vessels, and from the blood in those conditions.

The analysis of the blood, as conducted by Andral Gavarret, to ascertain the relative quantities of brin, red corpuscles, and watery parts, is as follows.

The blood is allowed to flow into two different vessels; and for the purpose of securing a similarity in the condition of the two quantities of

blood, into one vessel the first and last quarters of the blood are received, and into the other the second and third. Whilst the blood in one vessel is allowed to coagulate spontaneously, that in the other is beaten with a small rod, in order to separate its fibrin. The blood, in the first vessel, being completely coagulated, its serum is carefully separated from the crassamentum; then dry the latter, and weigh it, also dry and weigh the fibrin obtained by the rod. 3rdly, The serum left by the spontaneously coagulated crassamentum by the weight of the fibrin, separated by the rod, gives the quantity contained in the clot.

The weight of serum, after complete desiccation, gives the proportionate quantity of solid matter contained in its water.

The quantity of water driven off from the crassamentum in drying, gives the amount of serum which the clot contained; and from which may be estimated the proportion of solid matter of the serum, which it contained.

Lastly, by deducting from the weight of the whole dried clot, first, that of the fibrin separated by agitation; then, that of the solid elements of the serum (ascertained in the preceding stage by calculation), the precise weight of the globules will be obtained.

To ascertain the whole amount of solid matter in the serum, that which was ascertained by calculation to exist in the crassamentum, must be added to that which was obtained from the separated serum.

The proportion of organic and inorganic matter in the solid residuum is ascertained by incinerating it in a crucible, by which the whole of the former will be driven off, and the latter will be left.

The usual normal proportions of each element, in 1,000 parts of healthy blood, according to Lecanu, Andral, and Gavarret, are:—

Fibrin	3
Globules	127
Solid matter of serum ..	80
Water	790

The proportion of fibrin may probably vary, according to Andral and Gavarret, within the limits of health, from $2\frac{1}{2}$ to $3\frac{1}{2}$ parts in 1,000.

According to the late Dr. Simon, of Berlin, the natural proportions of fibrin and red corpuscles, in 1000 parts of blood, are—

Fibrin	2.1
Red Corpuscles	110,000

The amount of solid matter in the blood is greater in the male (excepting the albumen) than in the female.

The following table shews the maximum and minimum in both sexes, according to Dennis—

	MALE.		FEMALE.	
	Max.	Min.	Max.	Min.
Water	805	732	848	753
Albumen	63	48.5	68	50
Globules	186	110.5	167	71.4
Fibrin	4	2	3	2

The following is the mean proportion of crassamentum and water, according to Lecanu, not allowing for the small relative proportion of fibrin—

	MALE.	FEMALE.
Crassamentum, from 115.8 to 148 ..	68.3	129.9
Water	778	720 to 853

The following difference was found to exist, according to the temperament (Lecanu)—

	MALE.	FEMALE.
Sanguine temperament ..	136.4	126.1
Lymphatic temperament ..	116.6	117.3

The proportion of crassamentum is greatest between the ages of 30 and 40.

The vast increase of fibrin in inflammatory diseases, also in pregnancy, and its diminishment, occasioned by abstraction of blood, will be explained hereafter.

The fibrin may be obtained by stirring the blood immediately after it has been drawn from the body, or by washing the crassamentum in water, so as to free it from the red particles, or cruor. Fibrin, procured in these ways, contains pale corpuscles, and about $5\frac{1}{2}$ per cent of fat.

Recent fibrin, obtained from coagulum of venous blood, and not previously much exposed to the air, also, fibrin got by stirring, is slowly dissolvable in a slightly heated solution of nitre

(Dennis, Scherer, and Nasse). On the other hand, fibrin of arterial blood, or any fibrin that has been for some time exposed to the air, or fibrin of the buffy coat, is not soluble in nitre (Scherer).

[To be continued.]

CASE OF NATURAL SOMNAMBULISM AND CATALEPSY, TREATED BY HYPNOTISM;

WITH REMARKS ON THE PHENOMENA PRESENTED DURING THE SPONTANEOUS SOMNAMBULISM, AS WELL AS THAT INDUCED BY VARIOUS ARTIFICIAL PROCESSES.

By JAMES BRAID, M.R.C.S.E.

(Continued from page 96.)

Sunday, Aug. 4th.—She felt much better; had no fit through the day, but had one spontaneously at my house in the evening, but an hour later than usual for the evening paroxysm.

Monday and Tuesday.—Felt much better, and had no natural paroxysm, but was hypnotised both nights.

Wednesday, the 7th.—She had headache, and was sick in the course of the forenoon, and, about four o'clock in the afternoon, she had a spontaneous fit, but short of somnambulism. This evening, she evinced much obstinacy when I commenced hypnotising her. She seemed determined for some time to resist complying with my instructions. At length, she complied, when sleep was induced, although not so satisfactorily as on the two previous nights.

On the evening of Thursday, the 8th, she was reported to have been greatly relieved of headache after the operation the night before, and had been quite well all day, and without experiencing any symptom of somnambulism. She was quite docile to-night, and speedily became very decidedly hypnotised. She was more difficult to awake to-night than usual.

Friday, 9th.—Passed a good day, but could not attend in the evening.

Saturday, 10th.—Passed a good day, feeling greatly better in health, strength and spirits, and had experienced no tendency to somnambulism. Was hypnotised very decidedly, walked about, and sang during her sleep, and for the first time remembered, after being awake, that she had been doing so.

Tuesday, 13th.—I called to inquire for my patient, as I had neither seen nor heard of her from the Saturday night previous. I had the satisfaction of hearing that she had been quite well from that period; and I found her actively employed assisting her mother in her domestic duties. I hypnotised her, rendering her extremities rigid, and then reduced the rigidity. She wrote and talked to me, and was readily aroused from the sleep, but remembered nothing after the closing of her eyes, excepting my having elevated her extremities.

Thursday, 15th.—Called to see her at her father's, accompanied by my friend, Mr. Sawyer, late of the Medical Board of the Hon. East India Company's Service, at Bengal. We found her in excellent spirits, attending to the domestic duties during her mother's absence. She said she had felt quite well since I saw her on Tuesday. I hypnotised her very readily, and afterwards exhibited to Mr. Sawyer the usual phenomena described above, as manifested at my first visit. When asked the name of a book she had in her hand, for the purpose of supporting a piece of paper, on which she was writing, the answer was, "The Catechism," which was quite correct; but, on taking the book from her, and then placing it in her hand in a different position, on being desired to write the name of the book which she now held in her hand, she wrote "Ready Reckoner." There was a copy of both books on the table before she went to sleep, and nearly of the same size.

During her hypnotic sleep, several customers came in for milk: one wished a quart of buttermilk; another a small quantity of skimmed milk, and so on. On each occasion, she arose and went into the apartment where the milk was, and

Mr. Sawyer, as well as myself, had the opportunity of seeing her supply each demand properly, receiving the money and returning the change correctly. In one instance she received a penny and returned three farthings of change; and after each customer was dismissed, she returned to the sofa, where she remained quietly seated till some other customer challenged her attention, or until I aroused her to manifest some mental emotion or physical acts. On being aroused, she was quite unconscious of all she had done. It is important to keep in mind, however, that when again hypnotised, according to the well-established law of double-consciousness, she would recollect all she either did or said during the former sleep.

Aug. 16th.—I again hypnotised her; and the following day the menses appeared for the first time.

On that day she had two spontaneous fits of somnambulism, the longest of which lasted for half an hour; and on the morning of the 18th she had one also for half an hour; on Monday, the 19th one, and then remained free from them until the evening of the 24th, when she had another. On the 26th, I saw her and hypnotised her. Had not seen her for the last ten days. She had a slight attack on Wednesday, the 28th, and a longer one on the 30th; after which I hypnotized her, and she had no attack from this until the 7th of September, and from that her father aroused her quite readily. The catamenia had appeared for the second time the night previous,—being three weeks from the former period; she had no more attacks for a week after which she had a slight one. During the seizures which had taken place, spontaneously, for some time past, she could be quite readily aroused from her sleep by the means I had pointed out, and she had been so much better, in other respects, as to enable her to attend to her business—stock-making—so that I only had an opportunity of hypnotizing her twice, from the end of August till the 1st of October. Had they attended daily, as I had recommended, I have no doubt but that spontaneous attacks would have been speedily and entirely arrested; but now that they were becoming so much less frequent, and that she could be so easily aroused out of the sleep, they seemed to think it unnecessary to take the trouble of attending as directed. Every medical man knows how frequent relapses are, in many cases of convalescence, from patients abandoning prescribed regimen and treatment too soon.

Having neither seen nor heard anything of my patient for some time, I called at her father's on the 24th September, when the mother told me that she had had an attack on the Friday, Saturday, and Sunday, previous. I did not see the patient, however, as she was out at her business. I again called on Monday the 30th, wishing to know, more particularly, whether the menses had again appeared on the previous Saturday, being the same length of time from the former, as between that and their first appearance. They had not appeared; but from what the mother told me I had no doubt but they were about to do so. She had had three more attacks during the last week, one on Friday, one on Saturday, and the third on Sunday. From the latter they had experienced considerable difficulty in arousing her. She went then out attending to her business; but I urged them to send her down to my house in the afternoon, to be hypnotized, with the hope that I might thereby excite the female function, and arrest the spontaneous attacks of somnambulism. However, they neglected to do so, and were sufficiently punished for their indiscretion; for she had an attack the same evening at six o'clock, and, on being aroused from it, was found to be entirely speechless. After remaining in this state for eighteen hours (during which period she had six hours of natural sleep), the father brought her to my house for help. She had walked about a mile and a half, and was perfectly awake and intelligent; but she had not the power to utter a word even in the faintest whisper, although making strenuous efforts to do so.

Having taken the patient into my study and hypnotized her, in the presence of her father and Miss Wallace, of Cheltenham (a lady who had devoted much attention to mesmerism, and had come to Manchester for the express purpose of

ing my modes of operating), I first cataleptised the extremities, and afterwards reduced the rigidity; I then went into another room and played the organ, which soon attracted her attention, and induced her to come to me. Having now passed over the neck, jaws, and temples, in order to reduce an existing rigidity of the larynx, tongue, and jaws, I again began to play the organ, and requested her to sing, which she soon commenced doing in a very feeble voice, but which gradually increased in violence and force. After exercising her in this way for a little, I aroused her, and had the satisfaction of sending her home, able either to speak, or sing, in a clear, full-toned voice. Nor was this all; for her head-ache was relieved, and, as I had expected, the menstrual discharge commenced within three hours after she left my house.

Surely, such a case as this requires no comment, in order to recommend this agency to the favour of any rational and humane person. By whatever means could the same results have been obtained so speedily, so pleasantly, and so efficiently? For my own part, I know of none.

The following day, she called with her father, looking extremely well, and had retained the entire control of her voice from the time she left me. I hypnotized her that day, and again on the two following days, when she again discontinued her visits. On the 16th, I called at her father's to see her. She had been quite well, in every respect, since I last hypnotized her.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

M. PINEL, M.D., Member of the Academy of Medicine,

formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of physiology, Phrenology, and Moral Education.

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

FUNCTIONS OF THE BRAIN.

In the brain, as in the other nervous centres, the functions peculiar to it are to be distinguished from those which are common to itself and to its centres also; the former comprise all the intellectual and moral acts; the latter, voluntary motility and sensibility.

The relation of the brain to the intellect, and its size to the development of the intellectual faculties, had long been the subject of discussion. It was a question so much agitated since his day, that Willis was the first to affirm an opinion, which may now be said to be universal, that, in proportion as the size of the cerebral hemispheres increases, their surfaces, becoming in consequence amplified and extended, require, in order to their being contained within the skull, that they shall be folded into deep sinuosities; and that it is this development of convolutions that alone gives the measure and proportion of the intellectual faculties.

In fact, it is observed, that the convolutions of the brain are more numerous, and their furrows deeper, in proportion as the animal exhibits greater intelligence. In reference also to men, distinguished for their vast knowledge or for their elevated conceptions, this organ is still more remarkable for the amplitude, depth, and multiplicity of its convolutions, than for its whole volume considered as a mass. This observation applies with equal force to the animals that dwell with man: the surface of the brain of the dog presents more convolutions than that of the cat. The physiological parallel, therefore, as to superiority of organization and pre-eminence of the faculties, is not to be established on volume solely, but on complexity of structure and amplitude of surface.

But it is not solely at the surface, that the greater perfection of the brain is to be observed: the interior of the ventricles, new prominences,

or, to speak more correctly, new organs present themselves. It is in these centres, therefore, as well as at the periphery of the brain, that the brain of man acquires its pre-eminence; and, at the present day, the sound physiology of the brain demands that we should follow step by step this internal and external development of the organ, in regard to its consequences as to the functions of the encephalon. Now, the first, and most anciently established of these, is that the hemispheres especially are the essential organs of the intelligence: this was the belief of Vicq D'Azir, Sœmmering, and of Gall, even before the demonstration of experimenters; and this is also the opinion of Rolando; of all whose experiments bore directly on this subject. Treviranus thinks the hemispheres are the centre of the nerves of sensation and motility, the principal organs of sensitive life. Desmoulins and Magendie regard them as the organs of the will.

No physiologist, however, has devoted himself with greater success to the elucidation of this question, than M. Flourens. His patient and beautiful researches have led him to believe that the cerebral lobes are the seat of volition, sensation, and memory. He has succeeded in preserving birds alive, after complete removal of the cerebral lobes; in this state they shewed no sign of sensation, but they could still walk, fly, and leap. After this mutilation, they could also hear a little, a fact which confirms our inductions as to the participation of the cerebellum in the sense of hearing.

The cerebral hemispheres, therefore, without issuing from them, appear to be, like the cerebellum, nervous exuberances, added to the fundamental parts of the nervous centres; they are the reservoir of all the sensations, and the surfaces on which these sensations are registered, to be combined afterwards, and to excite the secondary effects of the intellectual and locomotive will.

The mechanism of the cerebral operations is, perhaps, not so complicated as might be imagined, and anatomy has already attempted to explain it. All the parts of the nervous system, says Beclard, enjoy three aptitudes in common: impression, reaction, and transmission. The organ of the sense, of touch, taste, or hearing, receives and transmits the tactile, sapid, or acoustic impressions; the nerve receives them, and transmits them again, with all their variations and all their specialities, repeating them up to its insertion in the medulla oblongata, or in the posterior cords of the spinal marrow; here a new elaboration takes place, and sometimes a direct re-action on the anterior fasciculi, and their nervous roots, which determines immediately the automatic movements: but, in the ordinary course, the impressions are transmitted to the more voluminous and perfect centres, such as the cerebellum, in which the posterior cords terminate. We, therefore, recognise with Duges, this organ as the principal receptacle of the tactile, gustatory, and acoustic sensations. Once in the cerebellum, these sensations assuredly cannot be converted into ideas, for the ideas belong exclusively to the cerebral lobes, but they become the cause of instinctive impulses which are communicated to the brain through the fasciculi of the valve of Vieussens, where they are transformed into determinations, acts, memory, &c.

Optic sensations pass from the retina and optic nerve to the anterior tubercula quadrigemina, to arrive at the hemispheres; olfactory sensations also penetrate directly into the brain. In the hemispheres, these sensations are changed into definitive determinations—judgment, volition; and all these acts are repeated in the corpora striata, the optic tracts, in the crura of the brain, in the anterior fasciculi, and in the roots of the nerves issuing from them to the muscles which they set in motion, either for the expression of sentiments which especially depend on the fasciculi of the corpus olivare, or for the expression of acts of locomotion, which must be attributed chiefly to the fasciculi of the corpus pyramidale.

We see, from this mechanism, that if the brain be the *dernier resort*, the organ of psychological unity, it is nevertheless possible to explain the isolated action of the centres that compose it: we can conceive how certain faculties may be suspended, while

others remain intact; how, after an attack of apoplexy, some patients are struck speechless, while they are able to think correctly, or how the power of motion is lost, while the will to execute movements remains. Another important fact is, that the centres and the nerves possess the remarkable property of re-producing both the sensations which they received from the senses, and the voluntary acts with which they had been impressed by the brain. The irritation of a nervous cord sends to the brain a pain, so similar to the pain that the parts would feel, in which its filaments are spread, that the illusion is sometimes complete: this pain gives rise to movements similar in all respects to those that would be produced by an act of the will. On the other hand, when a person, labouring under hallucination, hears mysterious voices, or when a person in delirium sees spectres, and speaks with them, the parts of the hemispheres which are the seat of these sensations, *without motive*, re-act then on the rest of the brain, in the same way as we have just seen to happen in the nervous part of the senses, which, in the normal state, would have perceived, and transmitted to it similar sensations.

Since the death of Gall, the localization of his fundamental faculties has been so much extended, under the inspiration of persons who imagine themselves to be his disciples, that some of the first truths, announced by this distinguished man, can scarcely now be recognized in the midst of this multiplicity of discoveries that seem to start up from day to day. The interest of science demands, that we should review the principles of a man, who had been so little understood in his own times. We shall find, in Gall's first inspirations especially, an instinct of genius which we must acknowledge.

He is struck with the form of the skull, and the inequality of its prominences, in animals that differ from each other in their instincts, and in men whose propensities are very decided: he observes this, and endeavours to discover what relations exist between the cerebral development and the force of these instincts, and propensities; he imagines that he finds conformations in the skull, which bear an almost constant relation to the predominance of certain aptitudes, and certain propensities. This was the path he opened, and in which he advanced so boldly, embracing, in the whole animal series, not only the propensities, instincts, aptitudes, but also all the intellectual operations, the entire history of the senses, with their modifications, and, in fine, all the acts, so varied, of locomotion and sensibility. The science of the brain could only be created by multiplied anatomical observations, based equally on the central, and the peripheric, portions of the brain, and not on the osseous envelope alone. It was from the brain, thus considered, that the constant relation of the faculties and propensities, with the preponderance or absence of such nervous centre, or such and such a sense, was to be deduced; and this throughout all the classes of the principal vertebrated and invertebrated animals. For, it may be affirmed, beyond all doubt, that the comparative anatomy of individuals and species, joined to the comparative study of their aptitudes, must some day become a science as curious as positive.

Instead of pursuing this extensive study with all the patience it required, Gall founded his system on observations which he had not sufficient time to mature; else, most assuredly, in the localization of the faculties, he would have extended his views beyond the portion of the skull that corresponds to the hemispheres; he would not have overlooked the internal surface of these hemispheres, nor all the inferior surface of the base of the brain, remarkable alike for convolutions, prominences, and protuberances; neither would he have confined, within such narrow limits, the physiology of the brain, which, after all, comprises the whole man, moral and intellectual. It is not, however, necessary to dwell longer on a doctrine which has been so much controverted; our object is accomplished by simply indicating that something more, and perhaps something better, remains to be done at the present day.

I. SENSATIONS.

The cerebral hemispheres being specially

destined to receive, retain, and reproduce the sensations, without which the operations consecutive to them could not take place, and without which, consequently, there could be no memory, nor will, nor language, nor even any passions, it will be right to begin by a brief exposition of the history of these sensations.

Since the time of Cabanis, physiologists have been in the habit of dividing sensations, according to their origin, into internal and external; to these, a third division may be added, that of cerebral sensations; we shall now proceed to examine, in succession, these three orders of sensations.

II.

INTERNAL SENSATIONS.

These have been most successfully investigated by Cabanis. They were for a long time confounded with the sense of tact or touch, from which, however, they differ in every respect: they are transmitted to the brain through the great sympathetic, and through the eighth part more especially. Thus, intestinal colic, uterine after-labour pains, or contusions of the testicle, become vivid impressions which provoke well characterised determinations in the encephalon: these reactions may become for a moment the motives to acts against reason. There are many other sensations, of a nature more obscure, which confusedly excite movements in the brain, which it cannot clearly define: thus, a dream, or a night-mare, may arise from derangement in the organs of digestion, or of the circulation: uterine reactions during pregnancy beget strange instincts, and inconceivable depravations, both in the ideas and in the disposition. It is, however, only in the over-excited, or diseased state, that the viscera give rise, in any sensible degree, to reaction on the brain: and these reactions are rather remarkable, for mere oddities of conduct, than for the degree of derangement of the intelligence to which they may give rise. The true hypochondriac offers a striking example of these reactions, which leave to the intellect all its lucidity, while they suggest habits of singularity, and compel it to be the sport of puerile terrors, and all the silly and ridiculous superstitions, which characterise this disease, more especially amongst the subjects most liable to be so attacked, persons moving in society.

III.

EXTERNAL SENSATIONS.

These sensations derive origin from the organs of the five senses—touch, taste, smell, hearing, and sight. In regard to the first of these senses—touch—which of all is the most generally diffused over the body, the attempt, on the part of some physiologists, to distinguish general tact from mere manual touch, is obviously wrong, as both comparative anatomy and physiology have shewn, that the structure of the nervous papillæ, the proper organs of touch, is the same in all the regions of the skin, in the soles of the feet, and tips of the fingers, as in the region of the back, or of the face, &c. It is not even where the epidermis is finest, that the touch is most delicate; for it often acquires considerable thickness at the tips of the fingers; the greater sensitiveness, in regard to the touch, depends on the greater development of the nervous papillæ, and on the greater number of the nervous filaments.

In the mammalians that are covered with hair, the hairs serve to transmit the sense of contact to the nervous papillæ themselves. Moustaches may also be regarded as special organs of touch; and, in some animals, the nose and lips may be similarly classed.

In man, the sensibility of the nervous papillæ, in certain affections of the brain, may present very singular anomalies, either of exaltation or paralysis, over the whole surface of the body, or in some regions only, such as the surface of the chest, or the front of the thighs, as shall be noticed hereafter.

The attribute of the organ of taste, which is to recognise savours, to judge of their differences, and transmit the impression to the lobes of the brain, is distinguished from the sense of touch, with which some have attempted to confound it, by a well defined demarcation. In fact,

its relations with the sense of smell are more intimate than with that of touch; thus, in the back of the mouth, the base of the tongue is close to the back part of the nostrils, and the middle branch of the fifth pair sends filaments alike to the tongue, palate, and mucous membrane of the nostrils. The tongue is the principal organ of gustation; the papillæ, with which it is studded, serve not only for perceiving, but also for retaining, the impression of savours; and in the loaded state of this organ, it is, in reality, to the imbibition of a bitter, or acid saliva, that we must attribute the bad taste in the mouth, of which so many complain: in some insane patients, the bad taste of the mouth is sometimes so strong, that they are continually complaining that they are made to eat poison. Gustatory expressions reach the cerebellum, and afterwards the brain: 1^o by the lingual branch of the fifth pair; 2^o by the branches of the glosso-pharyngeal, a portion of the eighth pair; 3^o by the hypo-glossal nerve, which, however, appears to be more especially destined for the movements of the tongue.

The sense of taste in the lower animals is, in general, very limited; but it is just the contrary in regard to the sense of smell, and, in some animals, it acquires a degree of perfection totally unknown to man. In carnivorous animals, the mucous membrane forms a thousand folds, in following the endless subdivisions of the laminae in the nostrils. Here, as in the case of the convolutions of the brain, in reference to the intellectual perceptions, it is to the augmentation of development of the surfaces, that the perfection of the function must be attributed: and hence it is, that these animals are endowed with a power of smell, that seems supernatural to persons not acquainted with the arrangement of their organs. Scarpa has observed, in his experiments, on the sense of smell in birds, that the fineness and power of this sense is graduated with the development of the olfactory nerve, and of the superior turbinated bones which alone receive its branches.

The mechanism of the sense of hearing, much more than that of smell, presents many complications, which, perhaps, in the physiology of man, have not yet been fully elucidated. In the vertebrated animals, the organ of hearing, always double, concentrates, by means of an external pavilion, more or less hollowed, the rays of sound: the middle ear is separated from it by a dry, elastic, membrane, and contains air, which it receives from the back of the mouth, by means of the Eustachian tubes; this is the cavity of the tympanum, which is still further enlarged by the mastoidian cells. In this cavity, a chain of small bones, articulating one with another, and moved by small muscles, is suspended. Beyond this cavity, is the internal ear, which forms a suite of sinuous and spiral cavities, which contain a peculiar lymph, and receive the expansions of the auditory nerve.

ON THE STATE OF MEDICINE IN ANCIENT EGYPT.

By E. CLARKSON, Esq.

(Continued from page 97, vol. x.)

In our last paper, we followed the beaten track of Egyptian medicine, and treated of its more obvious characteristics. We proved that Egypt was the cradle of medical science, however much it may have been perverted; that Hermes and Asclepius presided at its birth, and that kings were its "nursing fathers." A second large branch of the science, in Egypt, can be described under no other name than *mesmerism*. A third branch consisted of medicaments (*raguaxa*) associated with charms and incantations, whence *carmina*, poetical charms, and *carminatives*. To both of these, we propose to devote some remarks in this paper. In some of the illustrations of Rosellini, drawn from the Theban tombs, where medical treatment is exhibited, the practitioners and patients appear within the apartments attached to the public baths. In some of the neighbouring groups, individuals are subjected to the operations of the barber, which demonstrate

the same combination of the tonsorial and medical art, which in the middle ages originated the incongruous union of the BARBER-SURGEONS. In many of these groups, figures are seen employing the *passes* of the mesmerizer, in order to set their patients asleep previous to irepanning, and other surgical, and even tonsorial, operations. In one of these groups, a medical functionary stands by, as if to watch the operation, holding in his hand an instrument like a divining rod, which appears to be a symbol sacred to Suchis and Serapis; afterwards to Plutus (called the *Bident*), who, as the god of riches, was, of course, guardian of the *mines of the earth*. And here, by the way, it may be remarked that the mysterious powers, *credibly* (see *Quarterly Review*) ascribed to the divining rod, are quite akin to those alleged to wait on the tract of the mesmerizing practitioner. There is another remarkable analogy connected with the united office of BARBER-SURGEONS: that it exists to this day in China; and that no less than two recent travellers in China (which to this day, as the author has often contended, is a *stereotyped Egypt of the Pharaohs*) affirm, that the harbers resort to the *passes of mesmerism* to set their patients to sleep, previous to tonsorial or phlebotomizing operations. So true it is, that "there is nothing new under the sun."

Further enquiry will tend to shew, that mesmerism, as applied to medical treatment (and whether a partial truth or a juggle is foreign to this research), was derived from ancient Egypt.

We have shewn how medical professors swarmed in ancient Thebes. The Egyptians, according to Diodorus Siculus, regarded Isis as the author of a good part of what is known in medicine, through dreams with which she inspired such patients as had recourse to her "advice." Ælius Aristides, who lived under the Antonines, gives just such an account of his being healed by medicaments, indicated to him in a dream, in a temple of Esculapius. What is this but *clairvoyance* and mesmeric agency? Marcus Antoninus himself acknowledges, with thanks, his having been healed in the same temple, by similar means: that is, by curative means, the knowledge of which was given him in dreams. (*Marc. Antonin. lib. sec. ultim.*) This prescribing of such persons for themselves and others in dreams, or in a dream-like state, is a phenomenon by no means peculiar to modern times, or its re-appearance under the process taught us by Mesmer. While it puts into our hands a key to much of what seems enigmatical, about the oracles of the heathen world, it tells strongly for that portion of mesmeric agency as relates to *artificial sleep*, and the state into which persons so subjected are thrown. The oracles were first consulted in cases of sickness; the suffering persons slept in the temple, after they had gone through some ceremonies of preparation. In the dreams which followed (as alleged), they frequently came to the knowledge of the means proper for the cure of their diseases, and ascribed this to the inspiration of the divinity, to whom the temple they slept in was consecrated. Sometimes, instead of the patients, the priests (or priestesses) of the oracle had these dreams, and communicated them to the former. If the disease yielded to the treatment pointed out, the remedy which had been employed was inscribed on a votive tablet, and hung up in the temple. How the patients in the temples were thrown into a sleep, or other ecstatic condition, we have no positive accounts. Suffumigations, frictions, and different other processes, not without affinity to those used in mesmerising, were, as we know, employed in preparing those who came to consult the oracle. That something, very closely allied to the mesmeric state, was known among the Romans, proof is not wanting. Thus, Martial (iii. Epig. 82):—

"Percurrit agili corpus arte tractatrix
Manumque doctam spargit omnibus membris."

So also Plato (in *Amphytrio*):—

"Quid si illam tractim tangam ut dormeat."

In the sentences of Solon, collected by Stobæus, is a passage to the effect, that diseases, which have resisted all ordinary *pharmacy*, have given way very speedily to *contact with the hands*; on which the learned Brunnek remarks, "that perhaps, here, is a trace of that secret of nature which is now

beginning to be transferred to the art of healing, and which they call *le magnétisme animal*."

Many of the old writers ascribe the therapeutic art, altogether, to inspiration of the gods of the temple—sleep in dreams—in brief, to *clairvoyance*. And Passavant says: "When we consider in what manner we have come to the knowledge of such a multiplicity of medicinal agents, many of them so little obvious, many so repulsive in their nature, we cannot but feel inclined to look upon *clairvoyance* as a source—I may say, as the principal source, of the ancient art and practice of medicine." In support of these views, he speaks, also, to the fact, that everywhere the priests and seers were the earliest physicians, and that the temples and oracles of the Egyptians were the great therapeutic institutions of those nations; as well as the reference, in the names anciently borne by many of the herbs, used in medicine, to the names of different divinities. The popular names of not a few medicinal plants, in German, are derived from the personages of the old mythology; but the greater number, as in Christian countries, generally, have exchanged their Pagan designations for the names of saints, or for names holier still. A large class of cures was usually performed by certain medicated and enchanted compositions of herbs, minerals, &c., which they called *raguara*. By these, strange and wonderful things were said to be effected; some of them, taken inwardly, caused blindness, madness, love, &c.: such were the medicaments by which Circe transformed Ulysses's soldiers; others infected by a touch: such was the garment which Medea sent to Creusa; others spread their venom far off, and operated upon persons at a great distance; there was also *Raguara Sotega*, which were amulets against the former; such were the herb, *moly*, which preserved Ulysses from Circe's enchantments; the laurels, the willow tree, the rhamn or Christ thorn, fleabane, the jasper stone, and innumerable others, mentioned by Albertus Magnus and Orpheus, in his book "*De Lapillis*;" likewise certain rings, which Aristophanes, in his "*Plutus*," called *ring pharmacy*. For this art the Thessalians were most famous of all the Grecians; Democritus and Pythagoras are also said to have been skilled in it. Every story is full of the prodigious operations wrought by it; some of which I shall give you from the enchantress' own mouth in Ovid—

— Viperas rumpo verbis et carmine fauces,
Vivaque saxa sua convulsaque robora terra,
Et sylvas moveo júbiloque tremiscere montes
In quoque luna traho—

To this sort of divination, are to be referred charms and amulets against poison, venom, and diseases. Linds reports that the curing of distempers, by sacrifices and the repetition of certain words, was practised ever since the time of Minos, King of Crete; and Homer, who, by his own account, obviously derives all his extensive knowledge of medicine and surgery (in all probability, anatomy, from Egypt,* which he visited), relates how the sons of Autolycus cured the wound of Ulysses, when wounded by a boar in hunting. Snidas reports that the practice of curing distempers, by repeating certain charms,† was used since the time of the Cretan Minos; and Pliny, referring to Theophrastus, (*Nat. Hist. lib. 38, c. 2*)

* The latter Platonists and Pythagoreans, who (initiated in Egyptian mystery, as every scholar knows) pretended to miraculous medical powers, also, occasionally, arrogated to themselves the possession of that branch of the mesmerising art, which goes by the name of *clairvoyance*. They prepared themselves for it by certain decoctions. The description of Apollonius of Tyanea, then a hundred miles from Rome, of the assassination of Domitian at Rome, and his exclamation, "courage Stephanus, strike the tyrant home," was obviously *clairvoyance*. Indeed, the whole Platonic sect were nursed in the juggleries of Egypt, by which they professed to produce miraculous cures, to "*heal the incurable*," and *raise men from the dead*.

† In all probability, the "medicine" of the Central American Indians, whose interesting monuments, recently discovered, demonstrate their connection with Egypt, was derivable from the same prolific Egyptian source.

says, that charms were used for the hip gout; that Cato recommended carminatives or charms for limbs out of joint; and Marcus Varro, for the cure of gout. The great physician Chiron, the Centaur, is said, in Pindar (*Pyth., Ode 3, ver. 89*), to use the same remedy for some peculiar distempers; and it may be inferred that Orpheus, who is generally supposed to be a native of Egypt, whence he derived his "*Judgment of the Dead*," employed incantations, *i. e.*, musical charms or *carmina*, to restore his wife, Eurydice, when she was bitten by a serpent. Euripides says expressly, that Orpheus published a book concerning the remedies of distempers (*Alceste, v. 963*).—

No herb of sovereign power to save,
Whose virtues Orpheus joyed to trace,
And wrote them in the rolls of Thrace.

The charms were afterwards abused to such a degree by the Thracian women, in procuring love, hatred, or even death, that they became as famous as the Marchioness of Beauvilliers, and the female poisoners of the 17th century. Their miraculous operations were performed by philtres, which it will be seen, by the preceding paper, had their origin among the physicians and magicians of Egypt. Juvenal refers to both inventions—

Hic magicos affert Cantus, &c.

(To be continued.)

THE EVIL EFFECTS OF TIGHT-LACING.

By H. WHITFIELD, Esq., M.R.C.S., Ashford, Kent.

ALLOW me to call the attention of your readers to the enormous evil resulting from the use of stays. These instruments of torture inflict on the fair sex a great degree of suffering, and tend, moreover, to deteriorate the human race.

The chest is the seat of organs, whose functions are necessary to life, *viz.*: respiration and sanguification. For the due performance of these functions, it is essential that the chest be of full dimensions, and *free* in its motion.

By actual measurement, the waist of well formed women, of the average height, varies in circumference from twenty-seven to twenty-nine inches; and there is scarcely any difference in its proportional size between male and female. But such is the power of fashion, that the waist is seldom permitted to expand to the dimensions of twenty-five inches; the majority are within twenty-four; thousands are compressed to twenty-two; and some even to less than twenty inches;—and by the aid of wood, whale-bone, and steel, the capacity of the chest is very often reduced to less than one half. The penalties, attending this infringement of the organic law, are as follows:—shortness of breath;* palpitation and oppression of the heart; cough, and pain in the side; headache, with a feeling of weight at the vertex; neuralgia of the face, and eruptions; œdema of the ankles; dyspepsia and chlorosis. The temperature of the body partakes of the extremes: there is generally a chilliness of the whole surface; the viscera of the pelvis are liable to derangement; and, in married women especially, prolapsus uteri occurs. The lateral curvature of the spine is a consequence, not uncommon, of this pernicious practice.

The frequency of this deviation, in females, has been attributed to their sedentary habits, but without sufficient grounds. It is well known, that thousands of females in Switzerland, and even in our own country, who are occupied during the whole day in a sitting posture, but who wear no stays, remain free from this deformity. But this is not the worst effect of tight-lacing: thousands of victims are annually doomed to the tyranny of this fashion, ere they have yet passed the first years of womanhood. What is the cause of so frightful a waste of life? Simply the opposition between the laws of nature and the laws of society;

* An anecdote of a Scotch physiologist, some twenty years ago, had almost put an end to tight-lacing, from its placing in a very prominent point of view, two of its most dreaded ill effects. "Tight-lacing," said he, quaintly, "stinks the breath and reddens the nose."

the former are disregarded, while the latter are submitted to without a murmur.

It is mere empiricism, to prescribe quinine or iron, wine or porter, to relieve a general debility, with shortness of breath, palpitation of heart, and faintness, when the lungs are denied their fair play.

It is scarcely necessary to detail cases, in illustration of that which is so self-evident; but a short account of four may not be altogether useless.

C. R., æt. 23, consulted me in June, 1843. Had not been well for more than two years, and had been under medical treatment for fifteen months; her figure and countenance indicated her sufferings. The symptoms were: shortness of breath, distress in the region of the heart, cough, indigestion, great debility, cold perspirations, with a chilliness of the whole frame, and disturbed sleep; in addition to which, she had not spoken beyond a whisper for nine months. She was naturally a tall and well made woman, and her waist should have been twenty-eight and a half inches in circumference, but was reduced to twenty-three inches, though *not*, as she assured me, "*tight-laced*." She was directed to enlarge her *stays* and *dress* as much as two inches, and after a fortnight one inch more, and to abolish the busk as quickly as possible.

She recovered her voice in five weeks, and in three months she was restored to good health: no medicine was prescribed!

Mrs. B., æt. 30, naturally healthy and of good figure, has not been well for three years; is now much reduced in flesh and strength; has had a troublesome cough for many months; the appetite is small, and digestion weak; and she suffers much from palpitation of heart and pain in the side. Has been five weeks in the country without benefit. The chest was compressed to the extent of two-fifths of its natural capacity. The treatment was similar to the first case. She steadily progressed towards recovery from this period, and in a few months her health was restored.

A young lady, æt. 16, had a slight lateral curvature of the spine, accompanied with debility and general ill health; her stays were of the same dimensions as when they were first worn at seven years of age. She was directed to throw aside the stays, and to substitute flannel and other warm loose clothing; to take moderate exercise in the open air, and to divide the fatigues of the day by lying down for a couple of hours on a hard mattress. Her general health soon improved, and in five months the deformity was removed.

Mrs. B., æt. 44, has been suffering much for four months with prolapsus uteri; she was naturally of a stout, robust make, but had attempted to model herself in accordance with the laws of society. She was directed to enlarge her stays and dress as much as three inches, and to remove the whale-bone, and to lie down for three hours during the day. Her improvement was immediate, and she was quite well in six weeks.

The simplicity of treatment is the chief point of interest in these cases.

The want of due expansion of the chest in young persons, at a period when every other portion of the body is increasing in dimensions, must be attended with serious consequences. The organs of woman cannot be duly developed, if the organs within the chest are circumscribed within the proportions of infancy.

As it is ordained that punishment shall not always immediately follow the transgression, but often after an interval of years; so many having hitherto escaped, and being ignorant of natural philosophy, will oppose these views, and comfort themselves with the idea that they shall pursue the same course with impunity; this idea is, however, erroneous, and has often led to fatal consequences. For Mr. G. Combe truly remarks: that "Nature may be said to allow us to run an account current with her, in which many small transgressions seem at the time to be followed by no penalty, when, in fact, they are all charged to the debit side of the account, and after the lapse of years are summed up and closed with a fearful balance against the transgressor." Lord Bacon observes: "that it is not so safe to say, I find no offence of this, therefore I may use it; for the

strength of nature in youth passeth over many excesses which are owing a man till his age." The fondled animal, on the hearth-rug, can trace effects to their cause, so long as they are immediate, and in its wisdom avoids the heated embers. But more than this is expected from rational beings.

THE FASCINATION OF SERPENTS.

(To the Editor of the "Medical Times.")

SIR,—As you have done me the honour to have my short paper, on the "Fascination of Serpents," inserted in the *Medical Times*, of the 19th instant, perhaps, if an opportunity may at any time offer, in the absence of more interesting matter, space may be found for the following facts, in refutation of the assertion that "most animals appear perfectly ignorant of the danger which menaces them, when they find themselves in the presence of animals as cruel as serpents;" and also in confirmation of the fact, mentioned in my former paper, as witnessed, to a certain extent by myself and others, that the *cobra da capella* possessed the power of fascinating a rat, previously to the infliction of the fatal bite on that animal.

The scene of that experiment was also at Trincomalé, where it was frequently repeated about the same period, 1816-17. A cobra, of large size, having been caught and secured by some of the native Malabars, during his nocturnal depredations on eggs and chickens, was produced by a medical officer in the garrison, and confined by him on a board placed on the window-sill of an apartment in his house, and covered with a large and heavy bell-jar, carefully fastened down by a cord attached to nails in the board.

The reptile always lay in an apparently torpid state, unless when roused by being stirred up with a switch, when food, in the shape of some live animal, was presented to him once in ten days or a fortnight. When a rat was introduced into the jar, it immediately shewed signs of fear on sight of the reptile, but when, in consequence of the stimulus of the switch, the cobra raised his head and fixed his eyes on the little animal, it immediately retreated close to the side of the jar, stood on its hind legs, and, trembling in every fibre, raised the fore paws in an attitude, as it were, of supplication, and deprecation of the cruel death that speedily awaited it. The reptile, after a short delay, commonly darted its head and neck forward, and struck its prey with the poison fangs, emitting at the same instant a peculiar, short, hissing kind of sound. The rat, almost immediately after, fell convulsed, and generally died with a severe struggle in about four minutes. A larger animal, as a chicken, or a rabbit, lived rather longer, but also died in the same manner. The experiment with the rat was, however, only seen by myself. The snake then lay coiled up, in its usual semi-torpid state, for a few hours, after which it drew the dead animal to it, and, slabbering it all over with saliva or mucus, swallowed it whole; and it might, for some time, be seen distending the skin, until the digestion, or solution in the stomach, was completed. The cobra had been thus imprisoned for a considerable time, and never shewed any need or want of food, till it was offered at the intervals above mentioned.

The after history of this reptile, during the Kandian rebellion, might afford an amusing little episode, but would be too long to be entered upon at present.

The next fact, the following curious account of a combat between a monkey and a cobra da capella, was related to me by an old friend in Bengal, who heard it from a gentleman who had witnessed the fact at Patna, some thirty years ago. The monkey inhabited a large burr (*Indica*), or banyan tree (*ficus indica*), and was preparing to ascend it, when he perceived, near the root, a large cobra. On every attempt to approach the trunk, the snake reared its crest to attack him, and, as the monkey moved to the other side, the snake in like manner shifted his ground, so as always to intercept his advance to the tree. The monkey on this quickened its movements, danced from side to side, and occasionally rushing directly at the snake, as if about to seize it, kept it in a state of continual ac-

tion and alarm for nearly two hours. At length the cobra, apparently tired out, lay stretched on the ground. The monkey now walked leisurely before it, watching its motions all the while with the utmost vigilance, and gradually lessening the distance between them, till he arrived within reach by a single bound, when, springing on his enemy, before he had time to rear his head, grasped him firmly by the neck. The snake instantly enveloped him in its folds, but the monkey, retaining his hold, seized a brick-bat (part of the ruins of an old pagoda at the foot of the tree), and coolly set himself to work, to rub against it the head of the snake. This operation was continued with the most determined perseverance, till he had utterly destroyed all vestige of the head, reducing it to a confused mass, when, disengaging himself from the now inert folds, he threw it from him, and sprang up to his wonted roost in the tree. After this, it can scarcely be questioned, that the monkey was not perfectly aware of the dangerous character of the snake, and also knew well the seat of the formidable power which his enemy possessed, and could, in an instant, put forth for his destruction? It also appears to prove, that the larger animals, unlike the smaller ones, and small birds, are incapable of being acted upon by the power of fascination.

I remain Sir,

Your most humble Servant,

PHILO-F USIS.

Lisieux, Calvados, France, 27th Oct. 1844.

HOSPITAL REPORTS.

ST. THOMAS'S.

Carcinoma of the Tongue.—James Mahony, ætat 56, coalwhipper, of good constitution, and temperate habits, was admitted into St. Thomas's Hospital, July 16th, 1844, with carcinomatous disease of the tongue.

He states that, about three months' since, he was attacked with sore throat, with swelling, which appeared over the parotid gland, and extended down the neck; the soreness of the throat was slight, and at the time did not materially affect his swallowing. He did not consult a surgeon for this, but it continued gradually getting worse, until he applied for admission into this hospital.

On admission, there appeared a deep excavated ulcer at the side of the tongue, and extending backwards, implicating all the posterior part of the pharynx, tonsils, &c. His voice is hoarse and husky, and there is great difficulty in understanding him; says he has never taken mercury, but about two years ago had a bad chancre; the factor from his mouth is almost intolerable.

17th.—Was seen by Mr. Green, who ordered him:—

R Potassii iodidi gr. iij,

Syr. papav. 3ij. ex

Decoct. sarzæ, ter die,

and the mouth to be syringed, to be sure that it was properly cleansed with the gargar. acidi muriatici.

Aug. 3rd.—The pot. iodid. was ordered to be discontinued, and to have:—

R Mist. sennæ co. p. r. n.

Beef-tea and milk. oj. quotidie.

17th.—The swelling at the jaw has greatly increased in size, and is extremely painful. The tongue exhibits carcinomatous disease; this morning, while walking down the ward, he was suddenly seized with dyspnoea, from which, however, he soon recovered. Mr. Solly saw him, and opened the swelling, when an oily, glairy, fluid escaped, but no pus, to the amount of about 3viij. The mouth is rather cleaner. Ordered:—

R Gargar. sodæ chloratis.

Cataplas. lini.

19th.—Much better, but complains of lancinating pains at the jaw. Apply:—

R Hirudines xx. parti affectæ.

24th.—The man appears better; there is not so offensive a smell, and the swelling appears to be smaller.

Sept. 14.—Better. As the ward is full and beds are wanted, and the man greatly relieved, Mr. Solly presented him, being of opinion that a cure could not be effected more than it was at present; he was, therefore, sent out relieved.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Nov. 7, 1844.

The annual festival of the Faculty of Medicine took place on the 4th instant; the opening address '*On the Progress of Medicine in France, during the last Half Century*' was delivered by Professor Bouillaud. In this address, the learned Professor proved himself worthy of being the emulator and successor of Professor Royer Collard, to whom this task devolved last year, and whose absence was deeply felt by all the medical men united on this occasion. Fortunately for his friends, and for science, his disease has, of late, taken a favourable turn, so as to give hopes of a speedy recovery. This said, I will give a brief analysis of Professor B's eloquent discourse. The orator, after paying a tribute of homage to Hippocrates, Galen, and other eminent writers of antiquity, though, perhaps, in the opinion of their admirers, not to the extent he might have done, continues thus: "The first real historical monument of the useful and necessary revolution which medicine was destined to undergo, in modern days belongs to Morgagni, whose treatise, '*De sedibus et causis morborum per anatomen indagatis*,' may be considered as the commencement of a new era, and the fore-runner of the works of Bichat and Broussais, the two glorious representatives of the anatomico-pathological, or organic, doctrine in medicine. But it was not an easy matter to overthrow the edifice raised by the ancients, and Pinel himself, in his celebrated '*Nosographie Medicale*,' did not prove to be entirely free from its influence. The classification, established in this work, forms a species of Pentateuch, and is composed of five classes: 1° Febres; 2° Phlegmasiæ; 3° Hæmorrhagiæ; 4° Neuroses; 5° Organic lesions. Now, it is only in the last class, that Pinel recognises an anatomico-pathological basis; this cannot be admitted with the fourth, since he calls neuroses, *lesions of the sensibility or motility, without inflammation or structural alterations*; nor in the first, which he considers as *diseases where no changes in the solids or liquids are found*; finally, as to the second and third, the work contains no minute researches on the pathological anatomy of these lesions. It must not, however, be supposed that I conclude Pinel was wrong in not adopting pathological anatomy as the basis of his work, as, in my opinion, it is neither on the pathology, nor the symptoms, but on the nature of the disease, that a real philosophical nosology can be established. Having thus pointed out the parts in which the doctrine of Pinel is deficient, the orator indicated in what it is superior to that of Sauvages, and of his contemporaries, and continues, until he reaches a period nearly coeval with our own: stating, that Bichat may be allowed the honour of being the founder of the new medical school, which arose towards the end of the last century and the commencement of the present; and he would have accomplished, in medicine and therapeutics, what he did in anatomy and physiology, had he not been carried off prematurely.* If, through a series of ages, ancient medicine has been traced back to Hippocrates, so, in succeeding ones, it will, perhaps, be confessed, that modern medicine is the legitimate daughter of Bichat; and, as the former has been called the '*divin vieillard*,' the latter will be denominated the '*divin jeune-homme*.' Among the authors, who have contributed most to the advancement of the doctrines of Bichat, we find Proust (too little known), Dupuytren, Corvisart, Broussais, Laënnec, Marandel (*Essai sur les Irritations*), and Professor Cruveilhier (*Essai sur l'anatomie et sur la pathologie*). Since the revolution caused by the Broussaisian doctrine, the methods of observation and experimentation previously known have been improved, and new ones, drawn from the physico-chemical sciences (such as thermometers, microscopes, &c.), have been employed with considerable advantage, and

* Bichat, born in 1771, died in 1802. After several short memoirs on surgery and anatomy, he published, in 1800, his '*Traité des Membranes*,' followed by his '*Recherches sur la vie et la mort*,' and, finally, his '*Anatomie generale*.'

promise to be productive of real benefit. Thus, in comparing the works published during this period, on the nervous system—brain, spinal marrow, nerves; on the circulation—heart, arteries, veins; on the lymphatics—ganglions and vessels; on the lungs, digestive canal, kidneys and their dependencies, uterus, spleen, &c.; on the liquids, especially the blood and urine; with their predecessors on the same subject: who can deny that the diagnosis of disease has considerably advanced, so much so, that, perhaps, the work recommended by Corvisart "*De sedibus et Causis morborum per signa diagnostica indigatis, et per anatomen confirmatis*," might now be attempted. Finally, after briefly glancing at the treatment, Professor Bouillaud concludes his discourse by some remarks on Medical Instruction, expressing his hope, that, in the law about to be adopted, students would be submitted to a mode of examination, such as to give all the necessary guarantees:—that clinical instruction, that fruitful source of medical knowledge, will be freed from the shackles which embarrass it, and be confided solely to practitioners; that the *agregés* will obtain a position more in harmony with the important functions confided to them; that there shall be but one class of practitioners; that quackery be effectually repressed; and that the *concours*, surrounded by the needful guarantees, be maintained for the nomination to the places of Professor, Agrégé, &c.

Professor Piorry then proclaimed the names of the successful candidates for the Monthyon and the Corvisart prizes, and that of the *Ecole pratique*; to this last, students alone are admitted.

On the Stethoscopic Sound produced by the Tænia,—by Professor Piorry. On the 15th October, a woman was received at the Pitié, affected with tænia of which several portions had been evacuated, a day or two before her entry. At first, though auscultated frequently and attentively, nothing was heard; but two or three days after, a dose of oleum ricini having been administered, so as to produce several evacuations, in one of which was a portion of worm about four inches in length, a peculiar, characteristic sound was heard, very different from, and weaker than, that produced by borborygmi. This was heard by several persons, and all were unanimous in stating, that it was evidently produced by a slender body, moving about by jerks, which lasted several seconds. According to one, it resembled somewhat the hydræric murmur, with very minute bubbles, and was tremulous; according to another, it was like that caused by a small body moving rapidly in a liquid; to a third, like the sound of the rolling of a carriage, heard at a distance; to a fourth, like a peculiar tremor, or undulation. This noise was heard during several days, but only when the patient felt the tænia move in the intestine. Finally, more positive results were obtained by immediate, than by mediate, auscultation.

Pulmonary Fistula consecutive to Scrophulous Necrosis.—by M. Grafin. A young man, aged 17, entered Dr. Lugol's ward at St. Louis, offering all the characteristic signs of a scrophulous diathesis. Omitting those that have no reference to the lesion of the lungs, I will only mention the latter, related as observed on the 30th of July; cough with purulent sputa; dyspnoea; liquid stools from time to time; no fever; small opening (through which pus and air escaped), about six lines in circumference, on a level with the fifth rib, of the right side, below the inferior edge of the pectoralis major, 1½ inch from the chondro-sternal articulation; the air was expelled with a slight hissing, whenever the patient, after a long inspiration, closed his mouth and nostrils and made a violent expiration. This fistula appeared eight months before, and was caused by an abscess; a probe being introduced, penetrated until it reached a rib, evidently affected with necrosis; anteriorly, the thorax was sonorous in all its parts, except on a circumscribed spot, somewhat nearer the sternum than the fistula; when auscultated on this region, a slight mucous rhonchus was heard:—posteriorly, on the right side, matity in the fossa supra-spinalis; voice sonorous; left side, normal state; no symptom of liquid effusion or pneumo-thorax; death took place on the 17th August.

Autopsy.—In order to ascertain whether the

fistula communicated with the lungs, the sternum was removed, the pedicle of this organ was divided, and with it a segment of the thorax, comprising the fistula, was detached; the whole was plunged into a pail of water, with the exception of a large bronchus, into which a tube was introduced, and the lung being insufflated, bubbles soon after escaped through the opening. The slight adherences, which fixed the lung to the thoracic parietes, having been destroyed, a spacious cavity was discovered, which communicated internally with a large bronchus, and externally, by means of a fistula, oblique from behind forwards and from within outwards, and terminating at the fifth rib, which was broken and affected with necrosis; a small sequestrum was found in the cavity; grey tubercles at the summit of the lung. The cause of this disease was evidently the necrosis of the fifth rib, which produced abscess, adhesive inflammation of the costal and pulmonary pleura, and perforation of the lungs, muscles, and skin, so as to establish a permanent communication between the bronchi and the surface of the body.

Stricture of the Urethra.—In the hospitals, this affection is treated in various manners; thus, Dr. Jobert, ere he has recourse to dilatation, introduces an aluminated bougie; Professor Roux passes sounds, fixing them in the bladder, and increasing gradually their size. Dr. Lisfranc rejects small sounds, and makes use of a large one at once, pushing it slowly onwards until, after a day or two, it enters the bladder where he fixes it; he likewise recommends, to prevent relapses, that a sound be passed for some time after the cure. Professors Blandin and Gerdy increase gradually the size of the sound, leaving that, introduced daily into the bladder, only an hour or two in that organ. Dr. Chassaignac has modified this latter method; he takes a number of gum-elastic bougies, and begins with one which enters freely into the bladder; this done, holding the one, next in size to that in the urethra, in his right hand, he requests an assistant to withdraw the latter, and ere the parts have time to contract, introduces the former; this method is continued until the bougie appears to pass the stricture without difficulty; the operation is then ended, the last being kept *in situ* a longer or shorter time, according to the pain it produces, and is then removed by the patient himself. Care must be taken to avoid hæmorrhage; this accident, according to Dr. Chassaignac, may be productive of very serious consequences. This last method is mentioned in a pamphlet, published by Dr. Beniqué; and Dr. Rognetta, editor of the '*Annales de Therapeutique*,' has twice had recourse to it, once conjointly with Dr. Fournier Deschamps, eighteen months back, and a second time alone, about six months ago; both patients were cured after two months' perseverance in this method.

Hypertrophy and Pultaceous Softening of the Cervix Uteri.—The following case, which occurred in the wards of Dr. Jobert, at St. Louis, proves the utility of the actual cautery in similar affections, which method may, when the precautions recommended by that distinguished surgeon are attended to, be fearlessly employed, since the patient does not appear to suffer in the least. A young woman, ætat. twenty, entered the hospital, affected with leucorrhœa, followed by uterine pains and violent metrorrhagia; when examined with the *speculum uteri*, the cervix was found elevated, of a dark colour, considerably swollen, and of the size of a large plum; being wiped dry, it was discovered to be merely softened, not cancerous, and bleeding when touched. After eight days' rest, the actual cautery was applied three different times, without the patient complaining in the least; this is always the case, where the mucous membrane of the vagina is preserved by means of an ivory speculum. The hæmorrhage ceased immediately, and the leucorrhœa diminished considerably; eight days after, the eschar having fallen, the cervix was found better; no hæmorrhage; general health improved; a second cauterization was followed by results equally beneficial, and, after being repeated every week, the cure was obtained in the space of a month or two. The influence of the actual cautery, in preventing the hæmorrhage proceeding from the cervix uteri, is illustrated by the follow-

ing case:—A woman, upwards of fifty, of a cachectic disposition, offering the characteristic yellow tint of the cancerous diathesis, and about to fall a victim to violent menorrhagia, was relieved by its application, and though, in all probability, the disease will ultimately carry her off, still it cannot be denied that the cautery has prolonged her existence.—(*Annales de Therapeutique*).

On certain Metallic Cyanurets: by M. Ballard. —When hydrocyanic acid is added to the oxyde of copper, or a salt of the same metal is precipitated by a solution of cyanuret of potassium, a yellow compound is obtained, hitherto supposed to be a cyanuret corresponding to the binoxyde. During the reaction of these different substances on each other, cyanogen, in various proportions, is disengaged, and sometimes a white, sometimes a yellow, cyanuret is obtained, the latter intermediate between the former, or proto-cyanuret, and the cyanuret corresponding to a binoxyde, as yet undiscovered. The yellow cyanuret of copper is soluble in the cyanuret of potassium, but, whilst the dissolution takes place, another proportion of cyanuret is eliminated, and a double anhydrous cyanuret produced, composed of an equivalent of cyanuret of potassium and proto-cyanuret of copper. It resembles the double cyanuret, obtained when the cyanuret of silver is dissolved in a warm solution of cyanuret of potassium. The precipitate, formed in the solutions of the alkaline cyanurets, is not soluble in a solution of cyanuret of potassium, but when exposed to the air, it becomes coloured and is then readily soluble, and as the liquid cools, and still more so, when evaporated, long crystalline needles appear, analogous to those of the red prussiate of potass, which, when mixed with water or alcohol, are decomposed. When dissolved in the cyanuret of potassium, it gives rise to a blue precipitate with the protoxyde of iron, and to a rose precipitate with the salts of zinc.

On a New Method of Ascertaining whether Venesection be indicated or not. By M. Polli. —Whenever lipothymia is caused by venesection, the blood drawn last from the vein coagulates rapidly; when, on the contrary, the effect produced is the re-establishment of the vital functions, the coagulum is formed sooner in the blood first drawn, than in that towards the end of the operation. In order to ascertain this, receive with care a small quantity of blood at the beginning and towards the end of the venesection, and examine which becomes coagulated the soonest. If the former, it may be concluded that the operation is useful; if the latter, that it tends to weaken the patient, and consequently ought not to be performed; and, if both coagulate with rapidity, but especially the latter, bleeding is positively counter-indicated, even when the symptoms seem to require it. Finally, the author states that, to cure an inflammation, it is not necessary to bleed until the inflammatory crust disappears, but that it is indispensable to cease venesection, as soon as the blood coagulates with great rapidity, as, by a series of experiments in different inflammatory disorders, he has proved that coagulation takes place much sooner when a great deal of blood has been drawn.—(*Annali Universali di Medicina*).

On the Opium obtained at Algiers. By M. Hardy, Directeur de la Pépinière Centrale. —The quantity collected this year is about 5lbs., but M. H. estimates the loss to be one quarter, on account of the untoward weather which reigned during the crop. By pressure alone, from two and a half gallons of poppy seeds, about four and a half pounds of a highly coloured oil, of a mild and agreeable taste, were obtained; and, after heating the residue and adding one-fifth water, by a second pressure about 1½lb. of an oil, somewhat more acrid, was obtained, giving a total of 5½lbs. for 2½ gallons of poppy seeds.

On a New Classification of Cutaneous Diseases: by Dr. Duchesne Duparc. —The author, after combating the opinions of those, who, like Willan, have taken the form of the eruption, or the anatomical elements, as the basis of their classification, adopts, with slight modifications, that proposed by Alibert, whose pupil he was. The classification, here proposed, comprises eleven classes, and forty-four species. Class first—*dermites*, or *inflammations*—contains three subdivi-

sions: (a) *dermitis simplex*; erythema, erysipelas, pemphigus, zona, phlysiacia (ecthyma, rupia, Willan), urticaria, vesiculitis (herpes);—(b) *dermitis phlegmonosa*: furunculus;—(c) *dermitis gangrenosa*: anthrax, and pustula maligna. 2°. *Exanthemata*: variola; vaccinia; varicella; roseola; rubcola; scarlatina; miliaria. 3°. *Gourmes (crusta lactea)*: aches, porrigo, favus; the two first are either depurative or accidental; whereas the third is constantly parasitical. 4°. *Dartres*, divided into—(a) *herpes-furfuraceus (pythyriasis)*—*squamosus* (psoriasis, lepra vulgaris, ichthyosis)—*vesiculo-squamosus* (eczema, or herpes squamosus humidus)—*pustulo-crustaceus* (militaria or impetigo)—(b) *varus* or *acné*. 5°. *Degenerescences*, two subdivisions: (a) those of a cancerous nature; (b) those of a leprous nature; leucé or vitiligo, spiloplasia or molluscum, elephantiasis, radezyge, pellagra. 6°. *Scrofula*, comprises all the affections of a scrophulous nature, and esthiomenos or lupus. According to the author, the presence of tubercular matter is a pathognomonic sign of confirmed scrophula. 7°. *Scabies*: psora, prurigo. 8°. *Cutaneous hæmorrhages*: peliosis, petechiæ (purpura). 9°. *Lesions of the pigmentum*: albinism, lentigo, ephelides. 10°. *Hypertrophy*—(a) *simplex*: dermatolysia of Alibert;—(b) *capillary*: nævus, erectile tumours, keloides;—(c) *tubercular*: different kinds of warts;—(d) *accidental*, epidermic productions, corns:—11°. *Syphilides*, syphilis, mycosis (frambæsia).—(*Gaz. Med.*)

Luxation of the upper extremity of the Ulna. By Dr. P. Brun.—The general symptoms indicated by the author are;—1°. Slight degree of flexion of the fore-arm, with marked tendency to pronation. 2°. Movements of flexion and extension very limited; resistance and great pain when force is employed. 3°. Movements of pronation and supination preserved. 4°. Augmentation of the antero-posterior diameter of the elbow, caused by a considerable jutting out, posteriorly, of the olecranon. 5°. Olecranon about three or four lines higher than in its normal position. 6°. Cubital edge of the fore-arm, compared with that of the sound side, is somewhat shorter. 7°. Marked depression exists behind the epitrochlea. 8°. Humero-radial articulation preserves its normal shape. The treatment recommended is as follows:—1°. Counter-extension performed on the arm, kept motionless near the trunk. 2°. The extension must be made on the fore-arm in a state of supination, and in a slight degree of flexion, and directed from behind forwards, and from within outwards; the bones of the fore-arm form, thus, a lever of the first kind. 3°. To facilitate the reduction, the olecranon may be pushed forwards and downwards. 4°. When the instant seems favourable for co-aptation, the arm must be bent suddenly, and the reduction is obtained when the flexion can be carried beyond a right angle.—(*Journal de Médecine de Lyon.*)

On the presence of Silver in the Liver: by E. Petit, M.D.—At the present moment, from the researches of MM. Danger and Flandin, the existence of a poison in certain organs, in preference to others, appears fully established; and, in this respect, the following case is specially worthy of attention.—M.D. *Officier de Santé*, practising in Paris, after enduring some trouble, threatened to destroy himself, and, in order to accomplish it, he first chewed and swallowed about 3ij. of the nitrate of silver, and then, with a razor, endeavoured to open the carotid artery; being prevented so doing, he threw himself into the river, but was again saved, and brought to the hospital at Corbeil, where, at our repeated entreaty, he consented to take a little salt water and some milk. The next day, he took a bath, which appeared to agitate rather than calm him, and, during the night, having asked for his watch, he removed the glass, and having broken it, opened the left brachial artery at the fold of the arm, and, ere the circumstance was discovered, he had ceased to breathe. *Autopsy*, 28 hours after death; a wound $1\frac{1}{2}$ inch in length on the arm; another on the left side of the neck, 4 inches long; and a third on the right side of the same region, $4\frac{1}{4}$ inches in length; mucous membrane of the stomach covered by a blackish mucus, but neither red nor swollen; inferiorly it was the seat of a black eschar, about four lines in diameter; intestinal mucous membrane covered with blackish

mucosities; liver somewhat denser than usual; spleen and lungs normal; heart larger, full of spumous blood; vascularization of the brain and its membranes. The liver, stomach, lungs, and spleen were removed and analysed; silver was obtained from the two first.—(*Gazette Medicale.*)

Academy of Sciences. Sitting of the 4th Nov. Baron Charles Dupin in the Chair.—After the reading of the proceedings of the last sitting, the Academy formed itself into *Comité Secret*, to discuss the titles of the candidates for the place in the section of Chemistry, vacant since the death of D'Arcet. The favoured individuals are: MM. Fremy and Ballard; the former supported by MM. Arago, Gay Lussac, Thenard, and Pelouze; the latter by Professor Dumas.

Academy of Medicine. Sitting of the 5th Nov. Dr. Ferrus in the chair.—The president stated, that a commission of eleven members would be named in the present sitting; that seven places of *associés étrangers* were vacant, and that it would, perhaps, be advisable, were the Academy to state whether the number presented for their choice should be three or six for each place.—Dr. Cornac remarked that the committee ought to present a report.—Dr. Dubois (d'Amiens) said, that the committee should be requested to decide the number, and present the result of their deliberation to the Academy; this proposition was adopted.—The gentlemen named as members of the committee, were:—Messrs. Bricheteau, Lagneau, Villeneuve, Barthelemy, Boudet, Baffos, Louis, Ollivier d'Angers, Richard, Chevallier, Caventou.

On Displacements of the Uterus.—Dr. Villeneuve read a report on a memoir of Professor Alquié, of Montpellier; conclusion—thanks. Adopted.

On the danger attendant on Tenotomy, in deviations of the Spine.—Professor Velpeau presented a report on Dr. Malgaigne's memoir, on this subject. The readers of the *Medical Times* are already aware of the various discussions (v. vol. X. pages 30, 89, 110, 216, and 239), to which it has already given rise—discussions which, it is to be hoped, will now be brought to a close, it being sad that rivalry should exist in a profession so honorable as that of physic; the more so, as it may be concluded, that another motive than that of the advancement of science, is the chief object. The learned reporter, after analysing the memoir, informed the Academy of the result of the examination of several patients, by the members of the commission, and concluded: 1° that they were not cured; 2° that Dr. Malgaigne he thanked for his useful communication; 3° that it be published in the memoirs of the Academy.—The president remarked that, though the conclusions ought to be voted immediately, unless a member requested to be heard, still as a colleague, chiefly interested in the question, was not present, he considered that the discussion ought to be postponed to the next sitting.—Professor Dumeril: This appears to me to be necessary for two reasons; first, that suggested by the president; and, secondly, because the report ought to be examined; for, as the Academy of Sciences has also been occupied with this subject, the two learned societies might perhaps be found to be at variance.—Professor Velpeau expressed his regret that his colleague was absent, and on that account did not object to the discussion being postponed.—Dr. Nacquart regretted that the subject of each sitting was not made known previously; were this the case, the present circumstance would not have taken place.—The president, in reply, stated that this was impossible, as the *conseil* itself did not know it beforehand.—Dr. Londe: In the report, it is stated that certain interested parties prevented the facts being elucidated as completely as they otherwise might have been. To whom is this allusion made? Is it to a member or members of the Academy? If so, I request these words may be suppressed.—Professor Velpeau: Every body is aware of what I meant to say; and, whether suppressed or not, such facts did not the less exist.—Professor Moreau considered, it would be a bad precedent to postpone a discussion because a colleague was not present; however unfortunate this circumstance may be for him, still he thought the Academy would be wrong in making an exception in his behalf.—Dr. Rochoux did not consider the Academy in the least engaged

by postponing the discussion; for, what is accorded to-day, may be refused to-morrow.—Professor Roux: Such a circumstance as that under consideration never has occurred, and never will perhaps occur again; but it is, however, right that the discussion should be postponed.—Dr. Pariset: It has just been stated that a similar circumstance had never taken place; such is not the case; a report was read in which my opinions, as well as those of Drs. Bally and Francois, were attacked; being all of us absent, the Academy decided that we should be heard; and this done, they came to the conclusion that we were in the right.—Dr. Girardin and M. Barthelemy seconded the postponement.—Dr. Desportes considers that Professor Velpeau ought to state why he condemns the operations of the English, and other foreign surgeons, it not being enough to say that they are wrong, without declaring why; further, he declares that if the discussion be postponed, he will propose that a paragraph be added to the report.—Professor Velpeau, in reply, said that he mentioned his regret that the facts were not sufficiently detailed to be of use in a scientific point of view.—The postponement of the discussion was then voted.—Dr. Bousquet requested that the report might be deposited.—To this demand, Professor Velpeau refused acquiescence, stating that, until a report is adopted, it belongs to the reporters.

Inoculation of Syphilitic Virus.—Dr. Auzias, of Turenne, presented a young ape which offered ten to twelve Hunterian chancres, perfectly characterised; the first was inoculated ten days ago, the last two days. The spot chosen must be one that the animal cannot lick, and, if covered with hair, this must previously be shaved off. On the ape, especially if young, inoculation may be performed, as in man, by means of a lancet dipped in the pus of a chancre; the consecutive phenomena are similar, or nearly so, in both cases; but, if the animal is old, or if it be a dog or cat, &c., Dr. Auzias proposes the following method:—1°. With a bistoury or pair of scissors, a wound must be made, sufficient to allow a little blood to escape; the wound, or the surrounding parts, may, if necessary, be slightly irritated. 2°. The pus of the chancre, placed on the wound, soon unites with the semi-coagulated blood. 3°. The animal must be carefully watched for a few minutes, to prevent its rubbing the part. 4°. If on the first, second, or third day, a scab be formed, it must be removed so as to irritate the part. 5°. This scab, as formed, must be detached until the chancres appear. 6°. As soon as this takes place, a scab is formed, and on bursting, pus escapes abundantly, and which, by means of inoculation, reproduces the disease. From his experiments, Dr. Auzias concludes, that the chancre develops itself with greater difficulty from man to the animal, than from one animal to another of the same species; this may perhaps be, because, in the latter, as soon as collected, the pus was transmitted; whereas, in the former, some time elapsed ere it was done. Dr. A. purposes continuing his experiments on other animals.

M. Martin presented an artificial leg.

Dr. Rolle offered an apparatus destined: 1°, to consolidate the double inclined plane, employed by some practitioners in fractures of the thigh and lower limbs; 2°, to perform extension without producing any notable constraint of the patient.

The members then separated, still considerably agitated by the recent discussion.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the state of the Blood, caused by the Absorption of Urine.—This form of disease is described by Autenrieth and Schonlein, under the title of *urodialysis*, and by ancient authors, under that of *ischuria*, or *paralysis vesicalis*, *uroplania*, &c. It has been established by recent researches, that urea and uric acid are formed in the blood in consequence of defective renal secretion, and that it can be excreted from the blood by other organs than the kidneys. Urea has been found in the perspiration,

the faces, and the matters discharged by vomiting; in the air expired from the lungs, in the saliva, the tears, the milk, the fluid exhaled from the serous membranes, the secretion from ulcers, &c.; and this has commonly happened with patients who had suffered for some time with retention of urine. Numerous cases show that these vicarious secretions permit of retention of urine existing for days, and even weeks, without danger to life. In seven cases, observed by the author (two with urinary calculi, one with enlargement and induration of the prostate, two with paralytic distension of the bladder), where no such vicarious secretion appeared, the urea carried into the blood occasioned death. Dissection showed no pathological change in the organs of the head, abdomen, or chest, which could have explained the cause of death. But, on opening the abdominal and thoracic cavities, and dissecting the organs, a strong smell of urine was perceived. In the arteries and veins, no coagula were found, but the blood was entirely liquid, and of a dark colour. The characteristic symptoms of the disease had been: *paralytic state of the bladder* (of its motor and sensitive functions), in four cases through mechanical causes, urinary calculus and induration of the prostate; in one, through softening of the spinal marrow, in consequence of excessive sexual indulgence; and, in two, *urinary retention* was present, lasting from four to five days, through excessive drinking of beer, and the simultaneous presence of cold. Accordingly as this paralytic state of the bladder appeared suddenly or gradually, the following symptoms were developed, at an earlier or later period. First: want of appetite, dry and furred tongue, dryness of the mouth and throat, without great increase of thirst, general muscular weakness, complete indifference without loss of consciousness. The conjunctiva and the eyelids were injected, and the secretions were increased. There was a state of sleeplessness, or frequent waking, frightful dreams, and slight delirium, prostrate features. Diarrhoea was gradually developed, which could not be stopped by any means, there being from six to eight stools within 24 hours; the abdomen was a little inflated, but not painful; a few days before death, the alvine evacuations became involuntary. Distinct febrile exacerbations occurred in all the patients, but very irregularly. Only in one, the temperature of the skin was increased during the whole course of the disease, and the pulse was always frequent and hard. The functions of the lungs were undisturbed; in three cases only, was a slight dry cough present. With none of the patients could a smell of urine be perceived, either in the perspiration, the stools, or in the exhaled air. The somnolency, which appeared with all patients towards the close, passed into coma, on which death ensued without a struggle. The patients were of the respective ages of 50, 60, 70, and 80 years. The treatment consisted, first of all, in removing the urine from the bladder (for the condition of the blood was here caused by the urine absorbed from the bladder, and not by obstructed renal secretion); internally, the author administered, for the paralysis of the bladder, nuxvomica, with beverages containing carbonic acid, terebinth., secal. cornut., folia uvæ ursi; externally, spirituous embrocations and blisters, but without any favourable effect. By acids, quinine, and nutritious beverages, he endeavoured to correct the morbid condition of the blood; he also employed the so much lauded lactic acid (*serum lactis*, juice of cucumbers, &c.) Nothing could stop the diarrhoea. The urea, when introduced into the blood, seems to produce a morbid condition of the whole stream, and thus destruction of life. For it is proved, that urea enters very readily into combinations, even by mere change of temperature, and that it is particularly inclined to transformation into carbonate of ammonia, while the latter salt possesses the property of readily dissolving the fibrine of the blood. The symptoms, described by modern authors under the title of *urodialysis senum*, are thus different from those observed by the author; for, in the latter, there was no pronounced acidity, no ischuria urinosa, asthma urinosum, nor prurigo senilis, &c. But they were very similar with those described by Morgagni and Stoll.—(*Dr. Taksch in Prager Vierteljahrschrift.*)

On the Metastases subsequent to Itch.—Recent itch, arising from infection, may be considered and treated as a local disease; but, if of long standing, or spread over a large surface of the skin, the whole constitution is affected, and a careless treatment will often produce metastases much worse than the disease itself. The diagnosis of diseases, caused by suppressed itch, is facilitated by their resemblance to the original disease. That is to say, they generally deteriorate in cold situations, or towards evening or night; the paroxysms mostly take place after sunset. The following are the diseases in question:—1. *Psoric ulcers*, which form, as it were, a transition from the original itch into the subsequent disease, and are generally developed at the ancles, or on the legs, after the itch has lasted a long time, and either dried off spontaneously, or subsided after frequent river bathing. These cases are difficult of cure, unless treated according to their specific origin. 2. A moist, scurfy, eruption round the nipple of the breast in both sexes. In young girls, this requires particular care, since it causes swelling of the mammary glands, which may pass into induration, and even scirrhus. 3. Inclination to *furuncles and abscesses*. Riecke often observed considerable abscesses in the breasts of females, in consequence of suppressed itch. 4. *Blepharitis psorica*, exhibited by violent itching and swelling of the reddened eyelids, in consequence of numerous little pustules, which open spontaneously and form ulcers. The eyelids adhere together during the night, and sometimes so fast as to cause an *ankylo-blepharoma*. (Richter.) A girl, 13 years of age, who, on the appearance of itch, had lost a quartan ague, was rubbed four times with a mixture of sublimate and sulphur ointment, was afterwards affected with ophthalmia and became blind. Callisen says, that ophthalmia, arising from suppressed itch, will hardly be cured unless the eruption be reproduced. 5. *Cephalæa*, with disturbed digestion. 6. Affections of the ear, attended with humming noises, difficult hearing, &c. 7. *Aphonia*. A tailor, 19 years of age, otherwise quite healthy, had lost his voice three months previously, after he had rapidly cured himself of itch. The author ordered Autenrieth's ointment to be rubbed for four days into the neck, when many itch-like pustules appeared, and, after a fortnight, the voice recovered its usual tone. 8. Itch consumption (*phthisis pulmon. psor.*). Soon after the hasty suppression of itch, gastrodynia and a feeling of fulness and heaviness appear in the precordial organs; loss of appetite; feeling of oppression in the middle of the sternum; difficulty of breathing; dry cough, increased by the warmth of the bed; great lassitude in the limbs; expectoration of frothy matter; slight fever; violent lancinating pains of the chest. 9. *Psoric asthma*. One case is reported by Vogel in Rust's Magazine (B. 26, H. 2). 10. *Organic diseases of the heart*, observed by Albers and Schroff. 11. *Acute inflammation of the thyroid gland (thyroiditis)*. 12. *Cardialgy*, with obstinate vomiting, and acute pains of the stomach. 13. *Obstinate obstruction of the liver, and jaundice*. 14. *Inflammations of the abdominal organs*. Rahn saw peritonitis arise from suppressed itch. 15. A peculiar *psoric-diarrhoea*, observed by Bang. 16. *Dropsy* in different cavities of the body and under the skin. 17. A peculiar *hysterical chlorosis*. 18. *Diabetes mellitus*, in a case observed by the author. The patient had suffered, from his 5th to his 15th year, with scrophula and itch, when he was suddenly seized with uncommon voracity, general weakness, dejection, dryness of the mouth and of the skin, abundant urinary excretion. If the hunger and thirst were not quickly allayed, general trembling and vertigo appeared; a feeling of strangulation was felt in the throat, with burning in the stomach; the bowels were sometimes confined, the motions solid and black; at other times, diarrhoea was present. The urine was straw-coloured, sweetish; the quantity discharged, during twenty-four hours, amounting to upwards of twenty-two pounds. After two years' medical treatment, the symptoms of diabetes and itch improved and disappeared. 19. *Atrophia psorica*. 20. *Inflammation of the joints*, particularly the knees and loins. 21. *Convulsions*. 22. *Paralysis of the lower extremities*. It begins with different affec-

tions of the chest, and stiffness of the arms. Soon after, a feeling of stiffness appears in the back, and the feet become lame, whilst the arms, perhaps, remain free. The bladder and rectum sometimes, also, share in the paralytic affection. 23. A peculiar kind of *epilepsy* was observed by Autenrieth, in some young men. An *aura epileptica* runs from the breast to the head, occasioning vertigo, humming, dimness of the sight, and at last the patient falls senseless with convulsions. These paroxysms generally occur at night, and are of short duration at the beginning. Rieken and Eiselt, also, mention two similar cases. 24. *Psoric amblyopia and amaurosis*; the iris is unequally contracted; the enlarged and immoveable pupil thus acquires an unequal appearance; the visual power is weakened more and more, and at last is quite destroyed. 25. *Congestion of the head, and even apoplectic paroxysms*. 26. *Melancholy*; and 27. *Mania (madness)*, occurring suddenly without precursory symptoms, lasting uninterruptedly for weeks, and then reappearing after regular intermissions. Cases have been observed by Autenrieth, Wenzel, Grossman, Richter.—(*Dr. Weitenweber, of Prag, in Oesterreich. medic. Jahrbuchern.*)

On the nature of Chorea, or St. Vitus' Dance.—The external phenomenon of St. Vitus' dance consists in involuntary muscular motions, with complete integrity of all other organs. The disease is peculiarly liable to attack the female sex, from the 4th to the 16th year; thus, at the period when the second process of dentition is progressing, and the body preparing for puberty, fear, sudden fright, &c., produce these involuntary contractions. We know that the anterior roots of the spinal nerves are destined to produce voluntary movements; the circumstances under which these anterior roots lose the power of executing voluntary movements, are, therefore, deserving of investigation. Physiology gives us the laws of isolated conduction and of irradiation. We know that the brain is the seat of volition; that the destination of voluntary muscles proceeds from thence; that, by pressure of certain parts of the brain, this power ceases, and that certain motions are produced, similar to chorea, bearing within them a mixture of voluntary and involuntary motions. It seems that congestion of that part of the brain, from which the primitive fibres of the motor nerves take their origin, may cause St. Vitus' dance. The cessation of contractions, during sleep, proves, likewise, the seat of the disease to be in the brain; for only brain requires repose by sleep, not the spinal and ganglionic systems. Chorea is, according to the author, a disease of the primitive or motor nervous fibres. He rejects the treatment commonly adopted, as useless, and recommends absorbents; as magnesia, prepared oyster-shells, aq. laxativ. Vienn., tinct. rhei aqous., luke-warm baths, with some liver of sulphur, cold fomentations to the head and back, or douches, continued for one or two minutes, &c. With this treatment, the author thinks to restore the disturbed nervous functions to their normal state. (*Dr. Moos in Wiener Zeitschrift*). (Does the treatment recommended, perfectly agree with the pathological origin of chorea, or would not the same remedies equally act against the disease, if its origin were laid in some other organ?)—Note of Dr. Sutro.

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

The following are the only articles of interest to our readers in the five last numbers of the *Lancet*.

OPIATES FOR THE RELIEF OF AFTER-PAINS.—Mr. Bonney, in contradiction to the opinion of Mr. Paterson, writes in favour of the exhibition of opiates for the relief of after-pains, which, he says, may continue often after the uterus has expelled all the clots of blood which it contained, from sheer irritability of the viscus. He also found that when a moderate opiate has been exhibited at the commencement of labour, to quell troublesome and tedious pains, which do not

appear to do good, the character of the pains has, after a time, rapidly improved, and labour has thenceforth gone on steadily. Every practitioner in midwifery, we believe, can confirm this statement.

DISEASE OF THE HEART.—Under this heading, Mr. Tripc has detailed several cases, the first being one of functional derangement, occurring in a nervous, dyspeptic subject, who was very much relieved by attention to diet, &c., and the exhibition of gentian and iron. The next set of cases principally illustrate the complication of rheumatism with pericarditis, and one case of endocarditis, consequent on rheumatism, is also detailed. The patient, although improved in health, was not perfectly cured, inasmuch as there remained indications of some slight enlargement about the heart. A case of hypertrophy of the parietes of the left ventricle, the cavity being very little enlarged, is also published. The case terminated fatally by apoplexy. The last case narrated is that of a labourer, 38 years of age, who died of Bright's disease of the kidney. He had been troubled with palpitation, and occasional attacks of dyspnoea, and on examination of the body after death, the heart was found to be smaller than usual, the cavity of the left ventricle about half the normal size, and its parietes somewhat thickened. The concluding cases are instances of simple dilatation.

EXTRA-UTERINE GESTATION.—A woman, 38 years of age, consulted Mr. Hemard in November, 1841, in the belief, that she was eight months advanced in pregnancy. On examining the abdomen, which was much enlarged, a hard tumour was discovered in the epigastric region, immediately under the ensiform cartilage; it appeared to be about the size of an orange, and was perfectly moveable. By applying pressure, it receded, and upon keeping the hand upon it for some time, he felt, what he believed to be the foetus give a complete turn in the abdomen, the head passing from under the hand into the right iliac region, and the extremities rising into the situation which the head had previously occupied. On examination, *per vaginam*, the uterus was found to be perfectly natural, with its neck long and loose, and not larger than when unimpregnated. Mr. Hemard concluded the case to be one of extra-uterine pregnancy, and decided to let it take its course—a determination in which he was supported by Mr. Walker, of Walpole, a practitioner of sixty years' standing. Labour pains came on in the middle of the succeeding month, and, after a time, ceased, a membrane like the *membrana decidua* having been previously discharged. In a few days, symptoms set in, which were supposed to indicate the death of the child, and after that, the catamenia reappeared. She was then lost sight of till May, 1843, when she was suffering from severe pain in the right iliac fossa, which was swollen and inflamed, and where the bones of the foetus could be readily felt. From this state she partially recovered, and was not again seen till March, 1844, when she was evidently sinking. There was constant diarrhoea, the stools containing blood and offensive matter, and the urine also contained a considerable quantity of pus. A few days before her death, a foetal tibia, encrusted on its upper half with calcareous deposit, the lower portion of the bone having evidently been detained in a cyst, was expelled by the urethra. At the *post mortem* examination of the body, on dividing the abdominal parietes, no effusion of any kind was found in the cavity, and the peritoneum and abdominal viscera were perfectly healthy, and free from any marks of inflammation, except in the hypogastric region, where the lower edge of the omentum was found firmly connected by adhesions of long-standing to the peritoneal covering of the anterior parietes of the abdomen. On dividing the upper part of the omentum, from its attachment to the transverse arch of the colon, and reflecting it downwards, some purulent and offensive matter was observed to flow from under it, and a large cyst was laid open, with very thin and tender walls, and ragged edges, evidently made by the turning down of the omentum. The cyst contained the bones of the foetus at full time; they were perfectly clean, as if macerated, and

none of the soft parts remained, not even the cartilaginous extremities of bones; they were all compressed into the smallest possible space, and contained within the bones of the cranium, mixed with a little adipoceros matter, probably the remains of the brain. The walls of the cyst were extremely soft and thin, and had contracted adhesions anteriorly with the omentum, and through its intervention, with the peritoneal lining of the abdominal parietes, where they were thicker than any where else, as if the placenta had been attached to the lower edge of the omentum; on the right side, they were firmly adherent to the caecum coli; on the left, to the sigmoid flexure of the colon, and inferiorly, to the superior part of the bladder, with which there existed a communication, by means of two ulcerations about the size of a goose-quill; through these openings, one of the tibiae, and two or three of the smaller bones, had escaped. The cyst rested posteriorly on the rectum, into the upper part of which, two pin-hole openings penetrated, forming a communication between them, through which much of the soft parts of the foetus probably passed away during the profuse diarrhoea, from which the patient suffered so much during the latter months of her life. The urethra was much dilated, and as well as the bladder, exhibited marks of recent inflammation, the consequence of the passage of the foreign body through it during life. The uterus, vagina, and ovaries were perfectly healthy, and natural in their structure, but were pressed low down into the pelvis by the tumour, which had, more or less, occasioned the obliteration of the broad ligaments, and the condensation of the Fallopian tubes with the neighbouring tissues.

ABSORPTION OF CORROSIVE SUBLIMATE.—Dr. Glover corrects an error in Mr. Taylor's work on "Medical Jurisprudence," and after stating, that he has detected mercury in the blood of an animal poisoned by this salt, draws attention to Orfila's experiments on corrosive sublimate, which contain conclusive evidence, that it is absorbed in cases of poisoning, and may be detected in the blood and soft parts.

PUERPERAL CONVULSIONS.—Mr. Crisp narrated a case, at a meeting of the Medical Society of London, in which, during the existence of puerperal convulsions, the urine was albuminous. The co-occurrence of these two symptoms was first pointed out by Dr. Lever.

HORN GROWING FROM THE SCROTUM.—A case is recorded, from St. George's Hospital, where a horny growth was excised from the scrotum of a chimney-sweep, the part where the operation was performed becoming, afterwards, the seat of chimney-sweep's cancer. The horn was found by Mr. Toynbee to be composed of inspissated sebaceous matter.

TUMOUR CONNECTED WITH THE LOWER JAW.—A case of hard globular tumour, connected with the right ascending ramus of the lower jaw, the exact nature of which was not ascertained, has been successfully treated, in St. George's Hospital, by the application of leeches, cantharides plasters, and iodine. Sarsaparilla was also given internally.

POISONING BY ARSENIC.—Mr. Argent relates a case where preparations of iron seem to have been effectual in preventing the fatal effects of a large dose of arsenic, although not exhibited until some hours after the poison had been taken. The patient took the mineral soon after a scanty supper, and vomited, and was purged freely all night afterwards, and it is probable, therefore, that a large portion of the poison was ejected during the process of vomiting along with the ingesta.

POISONING BY OXALIC ACID.—Dr. Letheby has published a case, in which oxalic acid, taken as a poison, excited a corrosive action in the stomach. The viscus was very much blanched, excepting in two or three places, where there were black spots, as if blood had been effused, and acted upon by the poison; here and there a blood-vessel might be seen ramifying, with its contents similarly blackened. The tissue of the stomach was so softened and disorganized that it could scarcely be handled without tearing; indeed, at the cardiac end, it was reduced to a soft, pulpy, gelatinous

consistency, and had numerous perforations in consequence.

CANCER OF THE ORIS.—Dr. Risdon Bennett has derived great advantage in the treatment of this disease from the internal exhibition of the chlorate of potash.

RUPTURE OF THE LIVER.—A sailor, 29 years of age, was admitted into the London Hospital, having had a piece of beef, weighing a hundred weight and a half fall on the abdomen. He was in a state of exceeding collapse, from which he rallied to such a degree, that hopes were entertained of his recovery, and the antiphlogistic treatment was put partially in force. He died, however, ten days after the accident, and on examining the body, nearly four pounds of coagulated blood were found effused in the abdomen, proceeding from a stellated fracture or laceration of the left lobe of the liver, from which the gall-bladder was partly separated. The organ was much softened, and the spleen was reduced to a pulsatous mass, of a chocolate colour. There were also evidences of peritoneal inflammation of a sub-acute character.

QUACKERY.—Mr. Bree, of Stowmarket, narrates a case illustrating the misdeeds of a quack, of the name of Syer. His victim apparently died from the effects of a strong narcotic, and yet the shield of an ignorant jury was thrown around the quack, who it appears had physicked several of his kind friends. Mr. Bree adds, that the Apothecaries' Company had declined interfering, further than to caution the man, apparently on the absurd plea, that he is "a very illiterate person." Heaven help the unfortunate public, if such men are thus let loose upon it to go forth and slay.

ERECTILE TUMOUR OF THE UPPER JAW.—Mr. Liston mentions a case of erectile tumour of the upper jaw, occurring in a lad, on whom he operated successfully. The os maxillæ was sawn down, and the whole of the maxillary bone taken out, except the end of the nasal process. The patient perfectly recovered from the operation, and the cavity in the palate was filled up, there being only a little space, capable of receiving the point of the finger. The lad afterwards had an attack of erysipelas, from which he recovered, as also from another, and more severe, attack, but in the end died maniacal.

RUPTURE OF THE VENA CAVA.—A driver, of the Royal Horse Artillery, was thrown from his horse, and two of the wheels of the gun carriage passed over his body. He died in about twelve minutes after the accident. On examination of the body, the cartilages of the sixth, seventh, and eighth ribs, and the sternum, were found to be fractured, but very little, if at all, depressed, and the ascending vena cava was lacerated within the cavity of the pericardium, which was filled with fluid blood. The heart was small, and extremely hard, and all its cavities were empty, and contracted. The spleen was also ruptured.

CONICAL CORNEA.—Mr. Jervis has published the details of two cases of conical cornea successfully treated. In the first case, he exhibited wine and steel, blistered the temples, punctured the cornea repeatedly, and applied the nitrate of silver to the cone three times a week. An ointment compounded with the nitric oxide of mercury, was also applied daily to the eyelid. In the second case, the nitrate of silver was used, and the temple was blistered; but Dr. Pickford's plan was also had recourse to.

URIC OXIDE.—Four cases only of the uric oxide calculus have been placed upon record. Runger has, however, discovered it in guano. Its composition is expressed by the formula $C^{10}H^2N^4O^4$ containing, therefore, two atoms less oxygen than uric acid, into which, according to Dalk, it can be converted by the prolonged action of nitric acid. Uric oxide exhibits no fixed attachment to bases; the compounds of this nature that it does form are readily decomposed, and in this respect it differs greatly from uric acid. It dissolves in ammonia more readily than uric acid; the evaporation of the solution yields a yellow foliated mass, which contains only a very small quantity of ammonia; hence it is, that the addition of hydrochlorate of ammonia to a solution of uric oxide in potash, causes little or no precipitate, till the ammonia has evaporated. One important

point of distinction between uric oxide and uric acid, is founded on the difference of the precipitates which are thrown down from their potash solutions by carbonic acid. The uric oxide is thrown down as a powder, and does not contain a trace of potash; but the uric acid affords a gelatinous precipitate, composed of neutral urate of potash.

HIPPURIC ACID FROM HUMAN URINE.—An anonymous writer recommends the following process for obtaining hippuric acid from human urine, as superior to the processes of Liebig, and Dr. Golding Bird. Evaporate the urine until the salts spontaneously deposit; add strong alcohol, and place the mixture in a stoppered bottle. With the aid of gentle heat (by placing the bottle in warm water, for instance), the solution of urea, the lactates, and the hippurates in the alcohol, is insured, while uric acid, the constituent the most likely to interfere with the proceedings, remains with the insoluble constituents. When the supernatant fluid is perfectly clear, it must be decanted, evaporated very nearly to dryness, and re-dissolved in hot water. If a stream of chlorine be then passed through the aqueous solution, the urea is destroyed, and by gradual concentration, and the addition of a little free mineral acid, crystals of hippuric acid will be obtained.

MIDWIVES' MIDWIFERY.—Mr. Lichfield narrates two cases of mala-praxis on the part of midwives. In the second instance, that of a deformed woman, on whom he had induced labour at the seventh month, and even then was obliged to have recourse to craniotomy, the space being so very small, the midwife promised a living child at the full time. The consequence was, strong labour for fifty hours, and death from ruptured uterus. The first patient, also, died from proeidentia uteri, caused by the midwife's lugging at the placenta. In each case there should have been an inquiry, and a verdict of manslaughter.

HORRIBLE CASE.—Mr. Eager, of Guildford, was engaged to attend a woman in her first confinement, but as he lived at some distance, and labour progressed very rapidly, a soi-disant surgeon, residing in the village, was called in, just as the child was born. A midwife arrived soon afterwards. The doctor began fumbling under the bed clothes, and after a time, exclaimed he could not recover the after birth, and desired his female colleague to try her hand. She found a large lump between the thighs, at which she and the doctor pulled, but in vain; it was, she said, a very hard job. The doctor then called for a pair of scissors, and cut away at the lump, the midwife taking his place when his hand became tired, until at last they succeeded in excising the inverted womb, with the placenta attached; of course, the unfortunate victim was dead when Mr. Eager arrived. We gather, from this gentleman's letter, that he kept this matter concealed, instead of giving the parties into custody, as he should have done. In so far he is not free from blame. Both surgeon and midwife ought to have been transported.

DETECTION OF OXALIC ACID.—Liebig says, that a principal means of detecting oxalic acid and the oxalates is afforded by their deportment with concentrated sulphuric acid; crystallized oxalic acid, as well as its salts, dissolves in concentrated sulphuric acid at an elevated temperature, and this solution, upon the continued application of heat, evolves, with all the phenomena usually attendant upon boiling, a gas which burns with a blue flame, and produces in lime-water a precipitate of carbonate of lime; this gas consists of a mixture of equal volumes of carbonic oxide and carbonic acid gases. No charring of the oxalic acid, nor evolution of sulphurous acid, occurs during the decomposition. Other organic acids, such as citric acid, formic acid, &c. likewise evolve carbonic oxide upon being treated with sulphuric acid; but citric acid is charred during the operation, and the process, moreover, is attended with evolution of sulphurous acid; whilst the carbonic oxide evolved from formic acid—which does not undergo any charring during the operation—is free from any admixture of carbonic acid gas. This method of decomposition (heating with concentrated sulphuric acid) affords, therefore, a simple and certain

means of detecting oxalic acid, and of distinguishing it from all other organic acids.

OXALATE OF CHROMIUM AND POTASH.—Oxalic acid forms very remarkable double salts, with oxide of chromium and potash; it was discovered by Dr. Gregory. The crystals of this salt are of such a deep colour as to appear black by reflected light, but they appear of a splendid blue by transmitted light, when sufficiently thin to be transparent. Then solution is of a green colour by reflected light, and red by transmitted light.

DISEASE OF THE TIBIA.—Mr. MacLure narrates a case, where some disease of the tibia existed for forty years, and was ultimately apparently cured by a long-continued course of the iodide of potassium and sarsaparilla. Sir B. Brodie and himself regarded the case as one of chronic abscess in the cancellated structure of the bone. The injury was referred by the patient originally to a sprain of the right ancle, when he was only four years of age. Considerable inflammation followed, suppuration took place, and an abscess burst near the inner ancle. After this, pieces of bone came away from time to time, but no sequestra had appeared for the last 30 years. He was, however, occasionally subject to severe attacks of pain and inflammation affecting the whole limb, which were relieved by leeching, cold lotions, poultices, blisters, &c. Mr. MacLure is of opinion that much of the mischief might have been averted, if free incisions had been practised early in the periosteum down to the bone, so as to relieve tension, and allow the escape of any matter that might have been formed on the surface.

TREATMENT OF HYDROCELE.—Mr. Adams recommends for trial a very simple mode of treating hydrocele, which he has as yet only employed once, in a case where the operation by incision had partly effected a cure. The sac was irregularly distended, and Mr. Adams, after drawing off its contents, introduced through the canula a camel's hair brush, dipped in a strong tincture of iodine, and carefully painted the interior of the sac with it. He concluded, by observing, that there is, at present, seven weeks after the operation, every indication of success.

POISONING BY ARSENIC.—Dr. Kelso has published the particulars of a case of poisoning by arsenic in a child, where the exhibition of the hydrated peroxide of iron appears to have successfully averted the fatal termination. Beyond the mere fact which we have just recorded, the case does not offer any peculiar feature of interest to the physiologist or physician.

PLACENTA PRESENTATION.—Mr. Jordison attended a case of presentation of the placenta with considerable hæmorrhage, in which he detached the after-birth, brought down the feet, and effected delivery. Both mother and child did well. In a second case, published anonymously, a person, who was in attendance, removed the placenta, the child not being born for upwards of ten hours afterwards. The extraction of the placenta was not followed by flooding. The mother did well.

SMALLNESS OF THE HEART.—At a recent meeting of the Medical Society of London, Dr. Golding Bird related the case of a delicate married woman, 24 years of age, to whom he was called in consultation, she being labouring under mild continued fever. She was somewhat chlorotic, and suffered from palpitation and shortness of breath in going up stairs. She had several fainting fits the day before her death, and expired in one. When the body was examined, the heart was so small as, at first, to be quite overlooked. It was not larger than that of a child of eleven years of age; it was healthy in respect to its valvular apparatus, but its parietes, generally, were remarkably thin. The aorta, when laid open, measured only an inch and a half across. Several similar cases, as far as regarded the size of the heart, were mentioned by the members present.

PHLEGMASIA DOLENS FOLLOWING GONORRHEA.—Mr. Hancock narrated, at a meeting of the Westminster Medical Society, the case of a man affected with gonorrhœa, which suddenly ceased, and was followed by gonorrheal inflammation of the knee, ancle, and wrist-joints. One morning he complained of great pain in one of

the legs, and he was found to be affected with phlegmasia dolens, and the femoral vein was evidently hardened. On examining the penis, the veins of its dorsum were hard as a cord, and thickened, and Mr. Hancock enquired, might not the inflammation of the veins of the penis have spread to the pelvic veins, and thence to the veins of the leg? Phlegmasia dolens appeared to arise from inflammation of the uterine veins, and there seemed throughout this case to be something analogous, for in patients dying of inflammation of the veins, pus was often found in the joints. His patient recovered under antiphlogistic treatment. Mr. Hancock had seen pleuritis, inflammation of the joints, and peritonitis, occur as a sequence of the sudden cessation of the gonorrheal discharge.

ENLARGEMENT OF THE THYROID GLAND.—Mr. Liston, in a lecture, describes the case of an old rat-catcher, who consulted him at the Edinburgh Hospital, suffering dreadfully with a swelling in the middle of the neck; the isthmus of the gland was as large as his fist. He always had difficulty in breathing, but rather less in expiration than in inspiration; it was increasing, and he was daily and hourly threatened with suffocation. He was afraid to go to sleep at night, and when he did so, he started up, under great apprehension of being suffocated. Under these circumstances, Mr. Liston determined to make an attempt to relieve him by operation. He turned the integument back on each side freely; the veins were large, and were studiously avoided. The ligatures were passed close under the windpipe perpendicularly and across, and were then separated, and tied under the swelling. There was still venous bleeding to a considerable and alarming extent; a long slip of lint was wrapped tightly round the root of the tumour, and it came away entirely after some six or eight days. Mr. Liston met the man afterwards, and he was in perfect health, breathing freely under all circumstances, without the least appearance of any return of the tumour. This operation Mr. Liston has since performed with success.

FORMATION OF OXALIC ACID IN PLANTS.—Liebig says, with regard to the formation of oxalic acid in plants, there is no doubt but that the carbon of the oxalic acid formed previously a constituent of the atmosphere, being contained in the latter, in the form of carbonic acid. If we compare the composition of carbonic acid with that of dry oxalic acid—i. e., of oxalic acid freed from its water of crystallization—it is at once apparent that both contain an equal amount of carbon and oxygen: carbonic acid $C^2 O^4$; oxalic acid $C^2 O^4 + H$; and that oxalic acid differs from carbonic acid only inasmuch as it contains, besides the oxygen, an equivalent of hydrogen. This explains the formation of oxalic acid from carbonic acid. Plants absorb the carbonic acid of the atmosphere, yielding at the same time, with the co-operation of light, free oxygen to the atmosphere. Nothing else is requisite here but the addition of one equivalent of hydrogen to the elements of the carbonic acid, and this hydrogen can only proceed from the decomposition of water; when, upon the absorption of carbonic acid by the leaves of plants, the water becomes decomposed, and one equivalent of hydrogen combines with the elements of the carbonic acid, whilst the oxygen of the decomposed water separates in a gaseous state. If the carbonic acid be supposed to exist in plants, not in a free state, but (and this is far more probable) combined with a base—potass or soda, for instance the bicarbonate of these bases—of potass, for instance— $C^2 O^4 + K O + aq.$, must become converted into neutral oxalate of potass, by the simple separation of one equivalent of oxygen from the carbonic acid— $C^2 O^3 + K O + aq.$ The whole difference between bicarbonate of potass and neutral oxalate of potass, consists in the latter containing one atom of oxygen less than the former.

MELLITIC ACID.—The composition of this acid is, $C^4 O^4 H$; it contains, therefore, double the amount of carbon present in oxalic acid.

HÆMORRHAGE FROM LEECH-BITES.—Mr. Saxton briefly describes a case of hæmorrhage from a leech-bite, where he applied the twisted suture

with advantage. A small arterial branch had been wounded. Mr. Gossett treats these cases by applying a piece of card over the aperture. He thinks that the albumen of the blood glues the card to the surface of the skin, and thereby exercises sufficient pressure to close the orifices, and repress the bleeding.

DRUGGIST-SURGEONS.—Mr. Boyle says, he has lately seen a case of abortion succeeded by fatal inflammation of the womb, immediately following the use of medicines, procured at a druggist's. He has known in a case of retention of urine from *retroversio uteri*, in the early months of pregnancy, the catheter passed in utero, instead of into the bladder, and abortion produced, and he has also known a druggist-accoucheur sit by the bed-side of a woman with placental presentation, and allow the stream of life to ebb away, without a single well-directed effort to preserve the patient.

MIDWIVES' MIDWIFERY.—Mr. Oliver narrates two cases of midwifery conducted by women, both of which resulted in the death of both mother and child. In the first case, rupture of the vagina took place, and was undiscovered for four hours. On Mr. Oliver's arrival, he found the fœtus high up in the cavity of the abdomen; it was then living, but died prior to its extraction. The mother expired seventy-eight hours after delivery. The examination of the body showed, besides the evidences of recent inflammatory action, a laceration of the vagina, extending quite across the anterior and upper part, upwards through the right side of the os uteri, into the substance of the uterus. The peritoneum forming the cul-de-sac, between the uterus and rectum, was also lacerated in several places. In the second case, which was under the care of the same midwife as the preceding, the head of the child was impacted in the pelvis, and the mother died undelivered.

FRACTURE OF THE GREATER TUBEROSITY OF THE HUMERUS.—The following appearances were observed in a subject for dissection at the Aldersgate School. The portion of the greater tuberosity of the humerus, to which the tendons of the supra and infra-spinatus are attached, had been fractured, a portion of the bone still remained in the ends of the tendons, and the remainder had been absorbed; the tendon of the teres minor was in its natural position; the tendon of the subscapularis was partially torn, that of the biceps torn through; the capsular ligament was adherent to the inferior surface of the acromion, presenting somewhat the appearance of a fresh articular surface. The glenoid cavity was entire. There was a fracture of the clavicle, which had probably occurred at the same time.

TRACHEOTOMY.—A case of acute laryngitis is reported from the Middlesex Hospital, in which Mr. Tuson performed tracheotomy with the happiest results.

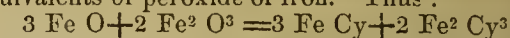
POISONING BY PRUSSIC ACID; BELANY'S CASE.—Dr. Glover, of Newcastle, has published two letters in the *Gateshead Observer*, reviewing the medical evidence given at Belany's trial, and the leading article in the *Medical Gazette* on that trial, and he concludes that the evidence was such as to leave the matter in doubt. He says, "The arguments brought forward by the *Medical Gazette*, and founded on the medical evidence, tend to show:—1. The improbability of the account given by the accused of the first manifestations of the action of the poison exhibited by his wife.—2. His culpability in neglecting the use of proper remedies. And—3. The contradiction to his account of the matter furnished by the non-detection of any smell in the room by those individuals who entered shortly after the alleged accident occurred."—The two points examined by Dr. Glover under the first head, are the statement made by Belany, that his wife spoke after he entered the room, and also that she described the poison as being "hot." The medical evidence was strongly against the probability of an articulate speech have been uttered by the unfortunate woman; but this Dr. Glover by no means regards as a settled point, and quotes a case from Christison, where a lad distinctly called for hartsborn, and muttered "prussic acid," after having taken a fatal dose. Dr. Glover also infers, that the sensation caused

by this poison in the mouth, might be such as to be termed "hot," by a person not in a condition to seek for choice expressions, from the fact that when it fails to kill speedily, it causes great irritation, and also because the allied bodies, the chloride, bromide, and iodide of cyanogen, are the most tremendous irritants known.—With regard to the second head, the treatment, Dr. G. contends, that Belany's ignorance of the use of cold affusion was excusable, he having left the schools in 1833 and 1834, and not having had opportunities of acquiring the requisite information since; and he also defends his intention to bleed her, and states that the utility of blood-letting in such cases has been more or less recognized by Orfila and Christison, and has been practised successfully from the jugular by Magendie, and also by Baumgartner. The non-perception of the peculiar odour of the poison in the room, he attributes to the continual draughts of air from the doors and windows being open; and, he observes, that the *Medical Gazette* asserts, that if the poison were previously mixed with a solution of Epsom salts, its odour would have been less easily detected, than if the mixture were with water alone. From theory, he would infer the reverse; as we know that the addition of a salt to a solution of a volatile substance, for which the salt has no affinity, in water, is used as a means of expelling the volatile substance in the form of gas, in various chemical manipulations.

ALVEOLAR EXOSTOSIS.—Mr. S. M. Shepherd records in the *American Journal of Dental Science*, the case of a lady about 25 years of age, who stated she had something growing in her mouth, which did not cause any pain, but considerable annoyance from its size. Upon examining the mouth, Mr. Shepherd found that the first molar tooth on the right side had been removed by decay, and there was a fungous growth occupying the entire space, which had risen up even with the grinding surfaces of the teeth, and would probably have been much higher but for the counter-pressure of the upper teeth. It had also spread out on each side, about half an inch, so that the outer portion gave the jaw precisely the appearance of a badly swollen gum from tooth-ache. Upon inquiry it was found that it had been growing about three years, during which time it had acquired great solidity. Pressure upon it with the finger, caused a sensation, very similar to that of a child's gum over a molar tooth just before its eruption. Its immediate removal having been determined upon, owing to its situation and size, it was thought best to divide it in the centre, upon a line with the alveolar ridge. This was done with a common gum-lancet, without meeting with any obstruction, but in attempting to cut away the inner portion, the instrument after passing through the surface met with a firm resistance, so that it required a considerable effort with the strong blade of a knife to divide it from the alveolus. This substance proved to be a new growth, cellular in its structure, and resembling the inner portion of the vertebra. This bone grew up from each edge of the alveolus in two distinct portions—each being about the size and shape of a pea. After removing the excrescence, Mr. Shepherd searched in vain for the roots of the tooth, which he supposed had produced it, but their entire destruction must have been completed previously to the excision. The operation was followed by considerable hæmorrhage, but was not attended with much pain, the fleshy portion of the protuberance being perfectly insensible. A perfect cure was the result.

A SULPHATE OF IRON, COMBINED WITH AN ALKALINE CARBONATE, AN ANTIDOTE FOR PRUSSIC ACID.—By this title, the Messrs. T. and H. Smith, of Edinburgh, have published a paper, containing the detail of certain experiments which they have made, in seeking for an antidote to prussic acid. They found that a sulphate of iron, of proper constitution, if added to a liquid containing prussic acid, with a proper proportion of an alkaline carbonate, instantaneously removed every trace of the prussic acid.—The salt of iron, which they used as the basis of the antidote, has the same constitution as Prussian blue, which contains seven equivalents of iron and nine of cyanogen, or, on the supposition that the cyanogen is replaced by

oxygen, of three equivalents of protoxide and two equivalents of peroxide of iron. Thus:



To prepare a salt so constituted, is an exceedingly simple process, and can be accomplished by any one, even with a very moderate knowledge of chemistry. For this purpose, seven parts of protosulphate of iron, say seven half-drachms, are required, four of which are to be formed into persulphate. This is done by adding to the solution (of protosulphate, or common sulphate) a quantity of sulphuric acid equal to the half of what it already contains—which, for two drachms, would be twenty-three grains of acid, of the density of 1.845—and at a boiling heat, adding, at short intervals, small quantities of nitric acid till red nitrous fumes cease to be given off. The liquid is then to be evaporated in a porcelain basin to perfect dryness, by the heat of a water-bath, stirring constantly with a glass-rod till the excess of acid is thoroughly driven off. The operation will be more quickly finished in a bath of a saturated solution of salt. The perfectly dry salt is next to be dissolved in distilled water, together with one and a half drachms of protosulphate of iron, so that the solution may amount to two ounces. This solution will not of itself precipitate prussic acid; but if a solution of an alkaline carbonate be previously added, containing a quantity just sufficient to take all the sulphuric acid from the iron salt, the prussic acid combines instantaneously with the iron, forming the very permanent and insoluble compound, Prussian blue. As the solution of the sulphate of iron contains in all nine equivalents of sulphuric acid, the same number of equivalents of carbonate of potash will be required to seize upon these and produce complete decomposition; it is therefore a very easy matter to determine the quantity of the alkaline carbonate necessary. The equivalent of the carbonate of potash is 69.27, and nine equivalents of this $69.27 \times 9 = 623.43$. The equivalent of protosulphate of iron is 130; of this, seven equivalents are needed to form a salt of the constitution indicated; therefore, seven are found by multiplying $130 \times 7 = 910$. The relative quantities are consequently 910 grains of protosulphate of iron, and 623.43 grains of carbonate of potash. Now, as the quantity of sulphate of iron, previously mentioned, was seven half drachms, or 210 grains, the correct quantity of carbonated alkali can be found by the following proportion:— $910 : 623.43 :: 210 : 144$.—144 grains is, therefore, the proper quantity for the exact decomposition of the salt of iron; and this for the sake of simplicity, is dissolved in the same quantity of water as the sulphate of iron. As each of the solutions contains exactly 960 minims, which, by calculation, should throw down 56.8 grains of real prussic acid, between 17 and 18 minims of each should separate one grain; as the hydrocyanic acid of the London pharmacopœia contains 2 per cent. of real acid, 35 minims of each would be required to precipitate 100 grains of such an acid. The acid of the Edinburgh pharmacopœia, on the other hand, containing about 3 per cent., a third more, or about 52 minims of each of the solutions, would be necessary to separate all the prussic acid from 100 grs. These are the quantities theoretically necessary, and when pure materials are used, will be found very nearly correct, as tested in an open vessel; but when given as an antidote for the poison, not less than three times the theoretical quantity should be given, as from the presence of food, mucus, &c. in the stomach, it is improbable that the antidote would mix immediately with the poison at every point; the exhibition of the antidote in a large excess, would not be attended by any evil consequences, as the only effect that could follow, would be the formation of sulphate of potash, and an insoluble mixture of protocarbonate and peroxide of iron, which, if active in any way, would, by producing sickness and vomiting, be really in the direction most to be desired.

The existence of a strong acid in the stomach, may interfere with the action of the antidote, as the alkali might be neutralized. To prevent this, Messrs. Smith advise exhibiting a large dose of caustic, or carbonate of magnesia, prior to the use of the antidote, as it will not at all interfere with its action in precipitating the prussic acid.

RESEARCHES ON GOUT.*

By ALEXANDER URE,

Fellow of the Royal College of Surgeons of England, and
Surgeon to the Westminster General Dispensary.

Persons who indulge habitually in the use of animal food and fermented drinks, and lead at the same time an irregular, sedentary, inactive life, are prone to gout. A morbid plethora supervenes, which gives rise to undue tension of the arterial system. The blood is loaded with nitrogenized principles and calcareous salts, and if the kidneys and skin fail in removing these from the system, they are sooner or later deposited upon the synovial membranes and the tendons, or within the arterial walls: in the former as urate of soda; in the latter as phosphate of lime. The renal secretion deviates from the natural standard for some time before a fit of gout; it contains no uric acid; whereas at other periods there is generally a superabundance. M. Rayer points particular attention to this fact. If uric acid be pent up, and allowed to circulate with the blood, urate of soda will undoubtedly form. This the author ascertained by his own research.

It has been conceived that many of the phenomena of gout depend upon a depraved condition of the blood induced by intermixture with the above salt. This view is strengthened by the fact, that one form of gangrene, the senile, mostly attacks persons who have previously been gouty, or who have led a life of luxury and indolence, and whose system has most likely been generating uric acid in excess; while another somewhat congenerous form of gangrene is met with in individuals, in whose body a slow but mortal poison has been at work, called *ergotine*, consequent upon the prolonged use of bread containing rye. Both of these pathological conditions, however, are connected, more or less directly, with arterial inflammation, and to that we must look as the predisposing cause.

Professor Tommasini, of Parma, has shown that many anomalous symptoms, characteristic of confirmed gout, are those of inflammation of the abdominal aorta. Thus, it is stated, that patients, who died of that disease alone, complained principally of flatulence, frequent cructations, sense of pain and uneasiness referred to the epigastrium, besides other dyspeptic and nervous symptoms, more or less akin to those of hypochondria. Might not these facts assist in elucidating some of the rapidly fatal seizures of what is called gout in the stomach, where no trace of disease has been found in that organ after death? Again, admitting with Professor Tiedemann that calcareous incrustation is a sequel of arterial inflammation, abundant evidence is to be found recorded by Stoll, Selle, Lettsom, Michaelis, Krcysig, Corvisart, Lobstein, and Hope, illustrating the formation of earthy deposits in the walls of arteries and valves of the heart in gouty subjects. In articular gout, tophaceous deposition occurs for the most part in the smaller joints, especially such as are exposed to much friction and pressure, as the metatarso-phalangeal and the distal articulation of the great toe.

The same morbid condition, which involves an increased formation of uric acid, is attended with defective secretory action of the liver. Hence it has been found, that whatever stimulates the excretory ducts of that viscus, and determines thereby a more or less free discharge from the biliary pores, checks the above formation, and exercises a most salutary influence in the gouty habit; and Mr. Ure, therefore, recommends the sulphate of manganese, a neutral salt, which he has repeatedly employed with manifest advantage.

If a drachm of sulphate of manganese be dissolved in about half-a-pint of water, and swallowed before breakfast, it will generally occasion, after the lapse of an hour or so, one or more liquid stools. On testing these, an unequivocal proof was afforded of the excretion of bile.

This salt may be therefore reckoned essentially

cholagogue, in the strict sense of the word. Its action is prompt and soon over; nor does it produce any of those distressing and lowering effects which are so apt to follow the exhibition of mercury and antimony, in certain constitutions. Sulphate of manganese has a cooling and bitter taste, resembling that of Glauber salt.

In order to abate the erethism of the vessels of the gouty articulation, to further the absorption of effused fluids, and to arrest the recurrence of attacks, which in the long run lead to distortion and ankylosis, the topical employment of acetic ether and rectified coal naphtha will be found highly serviceable. Acetic ether generally determines a speedy sedative agency in the more acute stage of the malady, when applied with gentle friction over the whole of the affected surface, to the amount of half an ounce every twelve hours, provided after each friction the patient is kept warm in bed. In the subacute form of the disease, the author has witnessed very beneficial effects from simply pencilling over the part with a camel-hair brush, dipped in naphtha. Care must be had, not to confound this with a spirit sold under the same name, used for making hatters' varnish, and lately introduced as a medicine. The properties of the two are quite dissimilar.

Coal-naphtha is a pure hydro-carbon, almost identical with the naphtha which occurs native on the shores of the Caspian Sea, in Persia, and other countries of Asia. The latter, alluded to by Herodotus, has been used from a remote period by some of the nations of the East against the very ailment in question.

Naphtha, topically applied, imparts a feeling of warmth, sometimes accompanied with slight tingling. It acts obviously upon the principle of a mild but penetrating counter-stimulant, determining contraction of the capillaries, increase in the rapidity of their circulation, and progressive absorption of liquid effusion. As such, its use is, of course, contra-indicated whenever there is general excitement of the vascular and nervous system.

Among other local applications, from which occasional advantage has been derived, may be mentioned, tincture of arnica, and an ointment, composed of one part of extract of belladonna, incorporated with eight or ten parts of cerate. Poultices are objectionable, because they relax the capillaries.

In order to get rid of the œdema which usually supervenes after a fit of articular gout, it is recommended to support the affected limb in a position, considerably elevated above the level of the body, so as to favour the ascending circulation. By this procedure absorption is facilitated.

As a remedial agent, seemingly endowed with qualities capable of counteracting and removing tophaceous deposition, silicate of potash, the *liquor of flints* of the older chemists, deserves a trial. This salt passes through the system unchanged, and can be detected in the urine of animals, to which it has been given by the mouth. It exercises a very powerful solvent action upon urate of soda. He prescribed it for one or two patients, in doses of ten and fifteen grains, twice a day, dissolved in six or eight ounces of water, with apparent benefit.

The efficacy of the benzoic preparations in controlling phosphatic deposition, to which gouty people are likewise prone, has been already shown by Mr. Ure, and if, as Professor Liebig states (*Lancet*, June 8, 1844), "the larger the amount of soda which combines with sulphuric and hippuric acid, the less comes to the share of the uric acid," it may be inferred that the administration of benzoic acid will, in consequence of the surplus production of hippurate of soda, necessarily tend to supersede any inordinate formation of urate of soda.

In reference to the surgical treatment of gouty deposition, it may be suggested, that, when this is unconnected with the articulation, has a pulpy feel, is augmenting in size, distending the cellular texture and skin, and causing inconvenience and deformity, a small subcutaneous puncture may be made with a tenotome, at a few lines distance from the tumour, and its pulsatious contents slowly pressed out. If left to itself, the concrete mass

eventually undermines and ulcerates the integuments, and is expelled amid a more or less profuse suppuration. Under such circumstances, emollient poultices ought to be assiduously applied, and the exposed surface freely touched with nitrate of silver. This salt possesses the property of decomposing and disintegrating both the urate of soda and phosphate of lime. Where, as frequently happens, the ulcerated opening remains fistulous, and gives issue at intervals to chalky-looking fragments, the nitrate of silver may be employed in solution. Sometimes, it is the articulations themselves which furnish the tophaceous matter. Here no interference is called for, since little or no annoyance ensues, owing to the changes which the constituent parts have undergone. The author annexed cases, successfully treated according to the principles above laid down.

ON THE DURATION OF THAT PART OF
HUMAN LIFE CONNECTED WITH
MENSTRUATION, WITH GENERAL
REMARKS ON THAT IMPORTANT
FUNCTION.

By CHAS. CLAY, M.D., Manchester.

[Continued from p. 95.]

Mr. Strong says, in his work on Greece, "that females in that kingdom attain puberty at the age of ten or eleven, and men at fifteen. That it was not unusual to find lads of sixteen or seventeen with families. One instance was personally known to him, of a lady at twenty-five, who had had sixteen children; and another, of a lady who was a grandmama at the age of twenty-four." He states also, "that beauty, so precocious, sooner fades; at twenty, they appear like middle-aged women of a northern climate, and at thirty-five they look old and full of wrinkles." In another part of the same work he states, that, in *mountainous regions*, life is prolonged to very advanced age—instances are known from ninety to one hundred years of age. These are the principal or leading facts quoted by Mr. Robertson, in reference to the subject under consideration, and on which Mr. Robertson is disposed to differ. From the position occupied by Mr. Strong, it is extremely probable that he was assisted by medical men in making his inquiries. To combat this, Mr. Robertson obtains information from missionaries, assisted by the physicians before stated; their evidence, however, is not given directly, but through the missionaries, and is not only of a very general kind, but very limited as regards illustration. I will now give the substance of the evidence given by these physicians; the first is that of:—

Dr. C. Usiglio, who says—A Maltese was a mother in her thirteenth year. I have also attended labours so late in life, as when menstruation ceased. (When was that?) In Albania, girls marry at twelve. The usual time for marriage is from fourteen to sixteen. Menstruation commences from twelve to fourteen, and ceases from about forty to forty-five.

Dr. Cogivina says, he has seen mothers at little more than thirteen years of age, that is, in the fourteenth year. I have attended a labour at fifty-one. Some marry at twelve; the usual time for marriage is from seventeen to twenty. Menstruation commences at about fourteen, and ceases from forty-two to forty-five; one rare case I have seen at fifty.

Dr. Zaviziano attended births at fourteen, and also at forty-eight. I have known marriage at eleven; usual time of marriage about fifteen. Menstruation I have seen at eleven; oftener from twelve to fifteen. Menstruation ceases from forty-eight to fifty; one rare case at thirty.

Usiglio adds to his evidence—I have known women have children who never menstruated at all, and I have attended five children at one birth.

Cogivina adds—Menstruation generally lasts *eight days, and very copious*. I have heard of cases menstruating at eleven; and in Greece I have heard of a mother at twelve.

Zaviziano adds—I have known a woman that never menstruated, and, though married three times, never had children. I knew a woman who had a

* Abstract of a paper lately published in the *Medical Gazette*.

child at forty-eight, and when she was seventy-five, her daughter-in-law had a child, and was not able to suckle it; she then took it (being seventy-five years old) and applied it to her breasts, when sufficient milk came, and she continued to suckle it a whole year. This Dr. Zaviziano then gives a table of thirty-six cases of menstruation, as follows:—

Nos.	Commenced at.	Present age.
1	9	20
2	11	65
3	11	25
4	11	30
5	11	64
6	11	15
7	12	17
8	12	23
9	12	42
10	12	13
11	12	18
12	12	14
13	13	15
14	13	32
15	13	16
16	14	21
17	14	15
18	14	19
19	14	28
20	15	18
21	15	27
22	15	39
23	16	32
24	16	17
25	16	22
26	16	16
27	17	30
28	17	29
29	17	43
30	17	26
31	0	17 not yet
32	18	21
33	18	44
34	18	36
35	0	18 not yet
36	0	65 never

It is impossible to view this evidence without feeling its imperfection; and I am inclined to believe, if taken as a whole, it is more corroborative, than otherwise, of the testimony of Mr. Strong. Certainly, there are not opposing facts sufficient to rebut his testimony; in some places the medical evidence is contradictory, on points on which it might be supposed it could not differ. One physician states that marriage is usually from fourteen to sixteen, whilst another states it usual from seventeen to twenty. Again, one admits that menstruation lasts generally eight days, and very copious (indicative of hot climate); mothers at thirteen; marriages at twelve; whilst the cessation of menstruation is from forty-two to forty-five, and up to fifty. Generally speaking, precocity is manifest in this evidence, and the few cases of an opposite tendency, are only such as might be found in every climate. If the table of thirty-six cases is examined, very early menstruation predominates, and what is still more evident, from the twenty-third to the thirty-sixth case, the table is liable to serious objections, as many of those cases might be fully matured for the menstrual function, before the time fixed for its commencement, but unable to do so from morbid obstruction: all such cases would have no business on the list. Indeed, the last case shows itself one which ought not to have been quoted; it is not to be supposed that a woman of sixty-five was not matured for menstruation, and I have no faith in the thirty-first and thirty-fifth cases. If I turn to the evidence of Zaviziano, the author of this table, I find he admits marriages at eleven; the usual time to be about fifteen; menstruation commencing at eleven; menstruation ceasing from forty-eight to fifty, in some at thirty; yet at the same time he tells us of an old woman of seventy-five giving suck for a whole year to another woman's child. This certainly gives a character to his evidence, not the most enviable. It was not great cry and little wool in this case (if it is to be believed), but from her withered dugs a pleutuous stream outpoured. The tale of the old man suckling his grandchild,

may, after this, gain believers; and can it be possible this evidence comes from a physician? Again, Mr. Robertson doubts the case presented by Mr. Strong of a grandmamma at twenty-four, and calls for proof, by registration, of her birth; but, should not Mr. Robertson first have defended Zaviziano by birth-registration testimony, for his seventy-five year old wet-nurse? Mr. Robertson also maintains that Mr. Strong's admission of longevity, of from ninety to one hundred, is contrary to his supposed notions of precocity, but Mr. Robertson forgets that Mr. Strong, in these cases, alludes only to *mountainous districts*. In this Mr. Strong is amply borne out by numerous medical and other authorities; the inhabitants of hilly districts in any climate, are longer lived than in the valleys of the same; a very wide difference in average temperature is apparent, at but a short distance, provided one be high, and the other low land. Then, again, do not these very facts prove the effects of climate on the human system? At one period of my life, I had to attend a very hilly district, and I invariably found the females late in menstruation. Mr. Robertson's missionary informant inclines to the belief (although he labours hard to help him with evidence to the contrary) of early precocity in Greece. As to the laws of ancient Greece, they are not so much to the purpose, as they varied according to the whim of the lawgiver, or rather the school of philosophy in which he was taught. They were not guided so much by the commencement of menstruation, as the consideration of the time at which a man ought to marry to secure a strong progeny? Their object was to give birth to heroes, and philosophers, which they conceived best done by the man marrying late in life (a notion perhaps not of the best foundation after all). I will now endeavour to show that, even on this part of the question, Mr. Robertson has not given his Greek authorities full justice; believing, as I do, that if he had extended his quotations further, he would have proved his own ideas of their laws incorrect.

Mr. Robertson, quoting Potter's Antiquities of Greece, says: "The time of marriage was not the same in all places. The Spartans were not permitted to marry till they arrived at full strength, and though I do not find the exact number of years mentioned, yet, from the laws of Lycurgus, it is evident both men and women were limited in this affair." Lycurgus fixed on the time of full strength, as a means of preserving strength and vigour in the Spartans. The Athenian laws fixed for men to marry at thirty-five; Aristotle thought thirty-seven; Plato, thirty; Hesiod, thirty. Now the whole of this evidence had only reference to men. Again, quoting Bishop Potter, Mr. Robertson continues to state: "That women married sooner than men. The old Athenian laws say, twenty-six; Aristotle, eighteen; Hesiod, fifteen: which latter some interpret as meaning nineteen" (as will afterwards be pointed out). All this is very well for Mr. Robertson's argument, but it is not fair to quote an author, and leave the pith of the matter behind. To show that this has been the case, I will take up Bishop Potter where Mr. Robertson leaves off, first premising that Hesiod was a poet, and a mere relator of the events, habits, and customs of the Greeks, &c., then prevalent, whilst Lycurgus, Solon, Plato, and Aristotle, were either lawgivers or philosophers, enforcing their will, or expressing their opinion. Turning to Hesiod, I find these lines:—

A wife when fifteen chuse, then let her wed
I'th prime for Hymen's rites, for th' joys of th' marriage bed.

"When Hesiod advises women to grow in maturity four years, that is four after ten (the latter being the supposed time of averaged menstruation), and marry the fifth, that is, the fifteenth year," some contend the poet means four years after fourteen, and marry the fifth, which would make the nineteenth year. But Bishop Potter supposes the first version correct, inasmuch as women were sooner marriageable than men: it being common for men to marry much older than women; thus, I find Lysistrata complains in Aristophanes:—

Ly.—It's some concern to me when I reflect

On the poor girls that must despair of man,
And keep a stale and loathed celibacy.

P. R.—What! ha'nt the men the same hard measures then?

Ly.—Oh, no! they have a more propitious fate, Since they at sixty, when their vigour's past, Can wed a young and tender spouse to warm Their aged limbs, and to repair their years, &c.

Now, it is evident that the quotations, with respect to the regulations of men, are in Mr. Robertson's favour; but not so with the women. From all we know of the ancient Grecian laws, it is highly probable that menstruation was expected at ten, but that four years were allowed from that specified time for the varied peculiarities of the sex, as some might commence somewhat later, namely: twelve, thirteen, or fourteen. And, as winter was the time selected for marriage, it took place the first winter after the fourth year had expired. From a scene in Terence, laid in the Grecian Islands, he says—

Until the seasonable time of the year,
When frosty weather binds all things, the priest
Counsel'd us by all means to put off marriage.
Thus the fifteenth year was chosen; an excellent historical proof of the precocity of the Grecian Islands.

To prove the influence of climate on menstruation, it is necessary to look, not only on its first appearance, but to its duration, and cessation, as well as its character when present, to which I shall next direct the readers attention.

(To be continued.)

LARDACEOUS SCIRRHOMA OF THE LUNG, INVOLVING THE FIRST RIB, CLAVICLE, &c.—A warper, 41 years of age, came under Dr. Tinniswood's care, having had cough and dyspnoea for twelve months, together with mucous expectoration, occasionally tinged with blood, and dull respiration on the right side, puerile and sonorous on the left. There was a large hard tumour on the right side of the neck, apparently rising from the first rib and clavicle. This had existed six months. This tumour continued to enlarge: the face and arms became anasarcous, and the veins of the breast tortuous and enlarged. About three weeks before death, the clavicle fractured. On examination of the body, the clavicle was found involved in a lobulated tumour, which extended up the neck, and encroached upon, and somewhat displaced, the vessels of the neck. The subclavian and innominate arteries passed through it; they were somewhat thickened and enlarged, whilst their accompanying veins were almost obliterated, especially the internal jugular, which was a mere thread. The tumour occupied all the left side of the superior thoracic opening, passing up from the lung, in the substance of which it seemed to have originated: the upper lobe being entirely occupied by it, whilst the middle was gradually assuming the same character, being condensed and completely solidified. The neighbouring muscles were also being involved in the diseased growth, and the cells of the first rib and manubrium of the sternum were filled with scirrhous matter. The clavicle itself had been gradually absorbed in the tumour, till a mere spicula remained, which had at last given way. The bronchi of the left lung were considerably dilated.

FEIGNED DISEASE.—Dr. Dunglison gives a remarkable example of feigned disease, which fell under his notice many years ago, in a young lady who was unhappy at school, and assumed the symptoms of chorea of the left arm. She was subjected to every form of treatment, and to agencies of a severe kind, yet the affection did not yield, and its true nature was only detected by directing her nurse to watch through the keyhole of the door of her chamber, whilst she was alone within, and thought herself unobserved. At such time there was no motion; but, when the nurse made a slight noise at the door, it was seen to be renewed.

PARAPLEGIA.—Cases of paralysis frequently result from injury to the spinal cord, constituting paraplegia, in which motion or sensation, either singly or together, may be impaired or destroyed.

NOTICES TO CORRESPONDENTS.

Asmodeus asks the following question:—A store loft contained salt; the floor, in consequence, has been ever moist,—what process (chemical, or otherwise) should be adopted, so as to render it sufficiently dry to receive corn?

M.R.C.S.L. and L.A.C.—The apprenticeship system we apprehend will be destroyed. The other question, the present state of the Bill does not enable us to answer, except that the general practitioner will be registered a Licentiate of Medicine and Surgery.

Dr. Little.—The June number is that published on May 31. We have, as yet, published but six Pharmaceutical numbers.

Philo-Chirurgus, who sends us strictures on the mesmeric operation, recorded in our last number, should have sent his name.

A. W. C.—We must leave the fact to gradually diffuse itself, that in no particular did any gentleman now connected with the Medical Times support it, or indeed know of it, during its first two years existence.

A Correspondent from Croydon (H.) asks the qualification of one of his neighbours (name mentioned) for the College Fellowship. We do not know, and cannot but regret that the "Charter of Infamy" should be setting such enquiries afoot. Unlike Charity, the distinction curses him that gives and him that takes, whilst it is a bane to even those that have otherwise nothing to do with it.

Dr. Jackson's letter on Empiricism, we hope to insert next week. Of about one hundred communications (generally without name) which have been sent to us on Medical Reform, we shall not be able to use above two or three. Our pages are already as much devoted to the subject as they well can be, doing justice to our other claims on them.

Vindicator's first letter is not, we presume, intended for publication. We shall be glad to hear again from the same quarter.

X.—We do not answer questions to settle bets.

Mr. Tweed's query would require a more elaborate answer than we have time to give.

An Enquirer suggests that Mr. Tosswill erred, in supposing that the children of Negroes are born white, and continue so a month.

A. P. C.—We are obliged to give our lectures to suit very varying tastes. A. P. C. must remember he is only one among many thousands whose tastes are to be consulted.

Mr. Nicholls.—We should recommend the last edition of Turner's work on Chemistry, with the work of Carpenter, published by Orr and Co., on Physiology.

Veteran calls our attention to the different medical practitioners in different parts of the United Kingdom, who formerly served as surgeons in the army and navy, that have long since ceased to have any connection with the public service, and yet possess no qualification but the certificate from the Royal College of Surgeons, and their appointment from the Medical Board, testifying as to their qualifications in medicine. The new Bill, we apprehend, will allow those gentlemen to register as Licentiates of Medicine and Surgery.

The very late hour at which we received Mr. Ikin's reply to the charge of Scalpel, has caused us much inconvenience in giving it insertion.

Mr. H.—The French weights have their equivalents given in the Medical Times about six months since. A French livre is equal to 500 grammes, or one pound, one and one-fifth of an ounce, and ten dwt. avoirdupois. Our Correspondent may hence answer his own question.

Several important communications are unavoidably postponed.

THE MEDICAL TIMES.

SATURDAY, NOV. 16, 1844.

Quid sit pulchrum quid non.

THE scheme of a New College of General Practitioners, so earnestly propounded to our consideration by the Marylebone Medical Association, and received with such seriousness and attention by the Profession, marks an epoch in medico-political history. It speaks, in no ambiguous language, of

the mad mis-government that has characterized the recent policy of both the College of Physicians and Surgeons, and tells, trumpet-tongued, of the bad state of law which, tolerating their absurd and suicidal injustices, forces the great mass of the Medical Profession to consider the propriety of establishing some grand and novel social organization of their own, as the only means open to them—troublesome and costly as they may be—of securing the benefits of a decent and just mode of government.

When, in 1815, the Surgeon-Apothecary was emerging into high science and professional importance, he naturally sought connection with that College of Physicians which was founded, supported, and illustrated by men in every particular like himself. He was practically, and by education, as much a Physician as those he sought association with: and if he was a Surgeon also, he remembered that Surgery was one of the branches of Medicine recognized and claimed for the College in every Charter: and that, till very recently, we have been indebted to Physicians for almost every grand discovery yet made in Anatomy, Physiology, and Surgery. The College of Physicians were, however, jealous and short-sighted: and, in a silly desire to keep down the rising Surgeon-Apothecary, yoked him to the car, or rather waggon, of a Trading Company of Drug-gists, that had yet scarcely emancipated themselves from the partnership of Grocers.

Rejected by the College they would have enriched and made respectable, nay, august, they yielded to the law so far as to connect themselves with the Trading Company by a contemned and unregarded tie, and sought redemption to social respectability by purchasing, with extra outlays of money, membership in another Royal College—that of Surgeons. Undergoing the same studies required from the very members of the Council; paying the same fees; passing the same examinations, they were, as far as charter, law, common sense, and justice ruled, their corporate equals in every thing but official dignity; yet, in the twinkling of an eye, we have seen this high status lowered, these equal privileges annulled, these vested interests destroyed, for no reason on earth that we can guess at, save to give the twenty-one Councillors patronage on one side, and the power of depressing below them the members they have sworn to protect, on the other! The Physicians behaved foolishly, and in a miserably selfish spirit; but this can be said for them, that if their conduct was insulting, it was not treacherous or deceitful. It remained for the Council of Surgeons to dupe the General Practitioner into a connection with them which should afford them some hundreds of thousands of pounds, and then suddenly turn round and make that membership worthless, worse than worthless—degrading. The breach of faith is so infamous, that we can scarcely trust ourselves, even at this distance of time, to speak of it with decent temper, and is of that dishonouring character as to carry impeachment to the personal reputation of every member of the Council that was in any way concerned in it. This subject has, however, been recently placed on so true a footing, in a leading article of the *Morning Chronicle*, that we cannot do better than reprint it for our readers. We mistake much if it be not the voice of public opinion:—

If Sir James Graham do not know the fact, it is right we should do him the kindness of imparting it, that the ruling council of the College of Surgeons and the ten thousand of its members have, at this moment, anything but identical interests. Chartered in the worst days of the worst of Toryism, the London Surgical Council has continued to

offer itself to the public as the sole living exemplar (and among SCIENTIFIC gentlemen, too) of those self-elected, irresponsible governments, with secret and unknown management, which the progressive enlightenment of the time has extirpated in all our municipal corporations; and, by one foolish or suspicious act after another, it has succeeded in becoming, without exception, the most unpopular learned body that at this moment holds office in any part of the world. Possessed of the most magnificent anatomical and physiological museum in Europe (which it owes, not to itself, but to the genius of Hunter, and the too confiding generosity of Parliament); and enjoying, with princely buildings rent-free, a revenue of twelve thousand a year, these College governors have nobly allowed their cares of themselves so far to yield to those of the science for which they CORPORATELY exist, as to munificently pay for thirty-six ill-attended lectures per annum, provided only that they shall be delivered by the select victims of their own election and patronage! They have persisted also in appointing one another to their serious but irresponsible duties, on any grounds they thought proper; have as arbitrarily excluded from their number all, however eminent in surgical science, whom they in any way disliked (the reasons being quite as potent when personal as general, when private as public). They have raised or lowered at will the fees of surgical candidates; have fixed for the surgeons of the empire any qualification it has pleased them to name; have decided and in secret too, who shall be a surgeon, and who shall not, and, however hard-working the student, he has had no appeal from their injustice; have absolutely ruled who shall and who shall not be lecturers (and John Hunter would be silenced if they decided against him), and what shall and what shall not be a medical school, or recognised teaching hospital (and their fiat is conclusive). They have met for deliberations that affect ten thousand members, without notice; have decided on them without the possibility of a single witness; have expended their members' money—their very large income—without a single auditor; and have, in fine, offered themselves to Europe, liberal or despotic, as the most anomalous body known to the history of its science or literature.

It need hardly be said, that in the nineteenth century, with one active or influential representative in Parliament, acquainted with the circumstances, so frightful a monstrosity in English medical government could not have survived the Reform Bill a single year; yet the Council, as if taught audacity by their long impunity, have so far further relied on public forbearance, so much ventured to make bad worse that they recently, under the pretence of having the Council NOT self-elective (WHEN the present gentlemen shall be so obliging as to leave the stage they now tread so profitably), surreptitiously secured themselves a Charter, by which they had placed at their disposal a new surgical grade of honour, AMONG THEIR OWN MEMBERS—the power of making out of the general body a nominally higher class of surgeons. During twelve months they managed that the distinguishing elevation should be a mere matter of private patronage for themselves, their Charter kindly giving them the privilege of gratuitously making great men of six hundred of their friends, and, during all subsequent years, of demanding ten guineas from all others that might sigh after so prized a distinction.

The great evil of this monstrous arrangement, however; did not concern the increased influence or emoluments so foolishly given to these corporate rulers. It was in the privacy of domestic life, in the struggle of every-day business to the ordinary practitioner, that the sting was felt and the poison embittered. Each favoured protegee honoured with the name of "fellow" had fifty neighbours, the fathers of families—some equal, nay better, than himself—who were overlooked, and who felt that a public voice (and of their own College) had gone out to the world, proclaiming HIS excellence and their inferiority, and stripping them, by a retrospective enactment, of that equal position in the professional body for which they had studied much, paid dearly, and staked the venture of a life.

We know of one medical teacher, standing high as an anatomist and surgeon, the favoured pupil and assistant of a distinguished lecturer of the last century, and who, as the principal of a school of medicine, has taught surgery for twenty years, delivered about forty courses of lectures, and formed at least one thousand accomplished medical practitioners, who has been passed by as unworthy of occupying a place in the higher grade of surgeons this new Charter instituted. No motive can be alleged for the extraordinary omission, save the fact, that this gentleman has been looked upon by the possessors of this singular piece of wholesale patronage (the teachers composing the College Council) as a rival and opponent. The exclusion of such a lecturer in favour of young men wholly unknown to fame, is only a type of the injustice suffered by many others like him, and may serve, with the other instances of mismanagement by this SCIENTIFIC ruling body, to demonstrate how absurd is the notion that the MEMBERS and their self-elected governors have interest in common, and to prove that, in the present exasperation of the former, to give additional powers to the latter would be the sure way not to lessen, but increase, the professional discontents now so much to be deplored.

But if the general spirit of the bill give us anything to judge by, it is very plain that Sir James Graham intends that the new surgical members of the Council of Health shall be elected, not by the rulers, but the members of the London College. The main duty of the supreme board will be to supervise the examinations of the college, to exercise censorship over its requirements of fees and studies, and to disqualify or qualify it, as occasion offers, as an examining and licensing body. It is absurd, then, to anticipate that the controlled shall constitute the controlling body—that one court shall be at the same time the seat of judgment and the hall of appeal. It is fair, therefore, to conclude that the new bill will carry with it a salutary remedy for the corporate grievances of many of our English surgeons, and that this injudicious, we had almost said frenzied, surgical junta will in future not only be placed under the useful supervision of the Council of Health, but partially

also under the rule of its own members. If anything can atone for the many all but incurable vices of self-elected corporations, it is a check of the kind now suggested. It might be no aid to scientific progress, but would be a vast obstruction to future corporate injustices.

"It is strange that the use of bathing as a part of diet is left. With the Greeks and Romans it was as usual as eating or sleeping; and so it is amongst the Turks at this day; whereas it remaineth with us but as a part of physic."—BACON.

How much it is to be regretted, that the follies and luxurious habits of the ancients, were the means of bringing into disrepute, some of their excellent customs, which after ages would otherwise have gladly imitated in perpetuity! Alexander, weary and bathed with sweat after his rescue of Tarsus, cast a stigma upon the pure and gelid Cydnus, by plunging recklessly into its waters and furnished an opportunity for the pen of Curtius to describe the mischievous effects of indiscriminate cold bathing. "Vixque ingressi subito horrore artus rigere cœperunt: pallor deinde suffusus est, et totum propemodum corpus vitalis calor reliquit. Exspiranti similem ministri manu excipiunt, nec satis compotem mentis in tabernaculum deferunt." These nearly fatal consequences to the person of the Emperor, left an indelible impression and prejudice against bathing upon the minds of his people. Antoninus Musa, whilst receiving the honours of the Roman Senate for having cured Augustus of a dangerous malady, by the cold bath; through the very same means caused the death of Marcellus, and so rendered his vaunted remedy unpopular for ever. Hot bathing, once so general and judicious a custom of the Romans, at last degenerated into a luxurious effeminacy, and was reviled and ridiculed by their poets. The debilitating and sickening effects consequent upon bathing after meals, are recorded with smart satire by Persius.

Turgidus hic epulis, albo ventre lavatur,
Guttur sulphureas lente exhalante mephites;
Sed tremor inter vina subit, calidumque triental
Excutit e manibus; dentes crepuere relecti,
Uncta cadunt lassis tunc pulmentaria labris.

The severe educational discipline of the Spartans prohibited the use of any but the cold bath; and Philip of Macedon declared a Captain, who had used warm, instead of cold water, to be unworthy to serve under his orders. The Romans, in copying the Grecian school, at first addicted themselves to cold bathing, and were not a little indebted to the habit, for the health and strength of their athleteæ. This was subsequently exchanged for the warm bath, the abuse of which, finally, as we have said, led to idleness, lassitude, and indecency. The consequent prejudice against it, has been inherited by ourselves in common with other nations, who have made, to a certain extent, Roman discipline their model, to imitate or to avoid. In some countries, as Turkey and Russia, the practice of bathing is perpetuated for the most part after the ancient fashion. But upon the former it entails habitual enervation and sloth, and with the latter it is often attended by consequences, which, in nations more cultivated and christianized, would be regarded with horror. In vain do they build on the example of the Gauls, who were in the habit of plunging their children into the cold bath from infancy: a great number suffered from it, and the weakest inevitably perished.

By many other modern nations, better subjugated by arts and civilization, public bathing, as provided by the legislature, is conducted upon an ample and more salutary scale. In the cities and chief towns of France, Italy, and Germany, public baths are numerous, and are easily accessible to the poorer classes of the people. In our own

country, which boasts itself, and not unworthily, of the civil and moral culture of its inhabitants, no such opportunities of public health and cleanliness exist. We are yet in the practices and prejudices of our forefathers, upon a popular question which ethics and physics should have decided long ago. We can comment with classical refinement and relish, upon Thetis rendering Achilles invulnerable by dipping him into the Styx, but we fail to discover in this beautiful allegory, an illustration of cold bathing and its consequences; or, at least, we fail to apply it to the physical welfare of our fellow-men. The centre and the source of civilization and refinement, we are still, as if in pride of paradox, degraded comparatively with ancient and modern nations, in the neglect of an observance which the welfare of humanity, and the ceremonies of religion, have sanctioned and rendered sacred. Elevated by education above the false prejudices and superstitions of antiquity, we may surely adopt its wisdom without imbibing its weakness. It is not necessary that we should run into the Spartan extreme, as the Russians do, of indiscriminate exposure to inclemency, or to fatal alternations of artificial heat and cold, or that Roman-like, we should render a wise provision for health and comfort, a source of effeminacy and debauch. But it is necessary, and most proper, that the opportunities of cleanliness and personal decency should be provided for that class of our fellow countrymen, who have hitherto suffered the want of such invaluable services. With the light of science and of medical skill, and with the ample pecuniary resources which belong to us, why may we not have national bathing establishments conducted upon such principles as shall contribute to the physical welfare of the poorer classes? It is scarcely required that we should enforce our suggestion by discoursing upon the advantages of cleanliness. In all ages they have been admitted and understood. With the Patriarchs, washing was a sanctified rite, and, like others of the Jewish customs, happily identified a healthy recreation with the ceremonials of religion. Under the Christian dispensation it was an observance of much consequence, and was rigidly adhered to. By the heathen nations of antiquity, it was enjoined as being conducive to health. It was commanded as a law, in the republic of Plato. And to wash, as Eustathius tells us, was not only understood to signify a means to cleanse the body from filth, but, also, to refresh it.

Thus, also, was it regarded by the Romans, who, taking much exercise, and wearing neither linen nor stockings, accustomed themselves to bathe for cleanliness and health in the Tiber, until the sumptuous baths of Agrippa, Caracalla, Dioclesian, and others, corrupted them into a less salubrious practice.

It is not less proper to ourselves than it was to the ancients, nor do we less understand than they did, the necessity of cultivating habits of decency and cleanliness. Knowing, as we do, how greatly the purification and friction of the skin, contribute to preserve an equable circulation, and to maintain a healthy condition of the system, we ought to encourage, in every possible degree, as a national custom, the practice of bathing. It is much a pity that our standard of cleanliness is so low, but this furnishes the greater reason and the ampler opportunity, for inducing on our countrymen a better inclination and habit. We are not prepared to say that we suffer more from skin disease than our neighbours, but, at least, we can affirm that many of the cutaneous ailments that are rife amongst us, would be prevented by the practice of frequent ablution. Imagine the condition of the majority of our mechanics—poor fellows!—with no great variety and change of linen, working till they are bathed in perspiration, and resting until their clothes have dried upon them, with no chance of cleansing their bodies from the accumulated filth with which their occupation and exercise induce upon them! All they do is to wash their faces and hands, and having neither opportunity nor inducement to relieve the remainder of their bodies of the hoarded perspiration which is condensed upon and clogs them;—they may be said to be perpetually encased in

decomposing dirt. Can it be wondered at, that under such circumstances, with the pores obstructed, and the sources of natural exhalation stopped, and the constant effluvia from a filthy surface, visceral obstructions, congestions, enlarged livers, tubercular deposits, fevers, and infectious diseases, should prevail? Many of the ailments which our mechanics and the poorer classes of our community suffer from, are traceable to an imperfect cleansing of the skin. The fetid perspiration, especially of the feet, which the lower orders are peculiarly subject to, are mainly dependent upon accumulated dirt, and upon the collection of the animal matter of exhalation. That every man may find opportunity for washing his feet is freely admitted, but we wish to be understood to signify that, as cleanliness, like many other virtues, is a habit, and greatly dependent upon education and discipline, so if we do not inculcate it amongst our poorer brethren, as we inculcate other moral habits, and give them the liberty of its exercise, we cannot expect that they will in any wise compare with ourselves who are better trained and taught. We not only take the Gospel to a man's door, and tell him how he ought to observe the rites and ceremonies of religion, but we provide him with the public opportunities of worship. To tell the poor how necessary a grace is cleanliness, is but to repeat a kind of information sufficiently familiar to them; but in order to induce them to its practice, we must not only discourse upon the importance, but we must furnish them with the occasions, of cleanliness. Very few of our towns have rivers near them to grant even the chances of bathing, and if where some inviting stream or canal runs, a poor fellow is found stripped upon its banks, he is forthwith indicted for an act of indecency. And very properly. Such places are not a fit resort for humanity in *puris naturalibus*. In the majority, however, of our populous districts, there are no rivers to induce a man in a spirit of cleanliness to commit a trespass upon public decorum, and our artisans and less favoured poor are left to wallow in their dirt from year to year, without even the luxury which is afforded to a dog, of shaking his coat in a shower, or rolling himself in the waves of some tempting ditch-water. For those of our population who have baths in their houses, or who can afford to pay half-a-crown for a single ablution, we are not called upon to plead. If such people are filthy, let them be filthy still! But it is for the poor and the needy who are denied the public opportunities and advantages of cleanliness, that we make our appeal. And we make it not more for their physical than for their moral improvement, of which we consider bodily purity to form a cardinal part. We beseech our legislature, wise and benevolent as it is, or should be, to take into consideration this most important subject. In most of the cities and towns of the continent, public baths are numerous, and are easily within the reach of the middling and even the poorer classes. And why may we not be supplied with similar provisions for health and comfort, rich as we are, and well furnished as are our towns with aqueducts and water companies? There is little doubt that if public bathing establishments were erected upon an extensive scale, and were conducted liberally and cheaply, the demands for them at a low rate of charge would be amply remunerative; and if under the surveillance of skilful managers, they would be procurable at all seasons of the year, of such temperature as to be best fitting the condition and necessities of the people. We hope ere long to see this desideratum remedied.

HYDROSTATIC TEST.—Dr. Reid examined the lungs of an infant, which had been destroyed by the use of the perforator, and which had not exhibited any signs of respiration after birth. They were not at all expanded; the upper lobe of the right lung was of a red brick-dust colour, and crepitated. The entire lung floated. The fringes of the other lobes were also of a brick-red colour, and floated in water, but the other portions sunk. Dr. Reid considered this case militated against the value of the hydrostatic test.

REVIEWS.

A Complete Course of Meteorology: by L. F. KAEMTZ, Professor of Physics at the University of Halle. Translated, with Notes and Additions, by C. V. WALKER, of the Electrical Society, Editor of the *Electrical Magazine*.—London: Baillière—pp. 598.

A correct knowledge of the conditions and phenomena of the air in which we live, and move, and have our being, is of vast importance, not only to the general student of Nature, but, also, in an especial degree, to the medical philosopher.

That the state of the atmosphere, at varying periods, affects the moral and physical condition of man, is proverbial; and languor and disease are as commonly traced to what we denominate "bad weather," as the vigour and elasticity of health are referred to an opposite condition. Not only, however, are individual health and comfort contingent upon aerial purity, but also the sanitary conditions of large districts and communities. Thus, we find that the matter of contagion is much influenced and modified by the hygrometric state of the air; and as the odour from drains and ditches becomes more obnoxious in damp weather—as the perfume of flowers is also increased—so the poison of disease, under the same circumstances, becomes, perhaps, by its great solubility in moisture, more active and dangerous. On the contrary, epidemics have frequently been arrested by a change from a damp to a dry atmospheric state. On the western coast of Africa, the Harmattan, a wind which, owing to its passage over an extensive space of arid country, is remarkable for its excessive dryness, not only puts an end to small-pox, and other epidemics, but, also, during its prevalence, infection can scarcely be communicated by art.

In fact, we are so convinced of the powerful influence of atmospheric changes upon the general health, that, in our opinion, medical education cannot be complete without a careful study of the science called Meteorology. Under these circumstances, we rejoice to find that Mr. Walker has brought before us, in an English dress, the excellent work of M. Kaemtz. From Mr. Walker's intimate acquaintance with natural phenomena, and especially those dependant upon, or connected with, electrical action—and what phenomena are *not* so circumstanced?—he is, we should have thought, of all men, best qualified for the task. Nor have we been disappointed. In a literary point of view, the translation is perfect; while, with Mr. Walker's notes and additions, it is now the *most*—nay, the only complete—Treatise on Meteorology, in our language. The work is couched in plain and concise terms, and, as such, is eminently fitted for an elementary course. It leaves no division of the science untouched; and, in each chapter, enough is presented to the reader to enable him to obtain a knowledge of the science as it now is.

The course, as may be imagined, opens with a consideration of temperature—the key-stone, undoubtedly, of all atmospheric changes; and throughout the volume, the attentive reader will readily detect the many influences of this prime agent: he will see how it operates in determining winds; he will also notice its action in causing evaporation; and, in a secondary way, in influencing the condensation of vapour into clouds and rain, in their multifarious modifications; and so of the other phenomena. The usual physical properties of heat are described; and then the influence of the sun on our earth, with the consequent diurnal and annual variations of temperature,

are duly investigated, and illustrated by copious tables. The modes of determining mean temperature are given; and sections are added, descriptive of the distribution of heat, according to the time, and place.

In necessary sequence, we have the motions of the air, due to the differing degrees of heat—in fact, the winds; with a description of the several anemometers, that have at various times been introduced. The causes of wind are duly investigated; as are also the local phenomena, by which it is constantly modified, including land and sea breezes, trade-winds, monsoons, and so on. The general and mean directions of the wind are traced for several countries; and the chapter concludes with an account of the physical properties of certain winds.

The chapter on barometereals commences with an account of the physical and chemical properties of the atmosphere, and of gases and vapours generally; followed by tables, giving the tensions of aqueous vapour at various temperatures, and also the weights; and this leads to the latent heat of vapour. We here, again, become reminded of the importance of Meteorology to the medical profession, inasmuch as the means of determining, philosophically, the exact state of the air, at any time and any place, promise to be of essential service in the study of the predisposing causes of disease. Meteorological Reports now go hand-in-hand, at the registrar-general's office, with the statistics of disease and death; and the day seems dawning, when the private practitioner will consult his hygrometer, as an important acquisition to his daily studies. This instrument, in its various forms, is fully explained; and its use, with the mode of manipulation, is clearly pointed out, illustrated by several tables of tension of vapour, and relative humidity, with the many variations due to times and seasons, to latitudes and elevations, and to the various winds.

The transition from invisible vapours, to condensed or visible vapour, is obvious; and we now come to dew, white frost, fog, cloud, rain, and snow. Hail is considered in the chapter on electricity.—The philosophy of clouds, with their classification and mutual transitions, are very fully laid down; and the cause of their suspension is traced to very obvious laws. The geography of rain, and the influence of the seasons, is next in order, and concludes the chapter. The next section treats of the distribution of temperature on the surface of the globe, in which we have: absorption of heat by the atmosphere, actinometric instruments, &c. The proper heat of the earth, and that of space itself, is next investigated, and some very interesting results are obtained; and the influences interfering with the solar action are given in order. Long and elaborate tables of maxima and minima, and of mean temperature, are added; and these are followed by a chart of isothermals. A long list of observations is put forth in illustration of the influence of elevation over temperature.

The weight of the atmosphere occupies the fifth chapter, which is opened by a description of the barometer, and of the various modes of weighing the air. Tables are given for correcting the barometer for temperature and capillarity; and the influences of time and place, and circumstance, are traced as before. But we now arrive at a very remarkable proposition, which we believe is peculiar to M. Kaemtz, and wherein the barometer is shewn to act as a thermometer, indicating change of temperature in regions far away. We cannot pretend to follow the author throughout his reasonings: our readers must do this for them-

selves; we shall merely give his proposition, which is thus expressed:—

When the barometer falls in a country, it is because the temperature of this country is higher than that of the neighbouring countries, whether because *it* is heated directly, or because *they* are cooled; on the contrary, the rise of the barometer proves that this country becomes colder than those which surround it.

This is obviously laying the axe to the root of many of our old opinions, and of our long-cherished faith in the weather-glass: for we are here taught, that the barometer has no fellowship with the other instruments of observation, since they all tell us of changes going on in the region which they occupy; whereas the barometer is shewn to play the part of one arm of an immense differential thermometer, the other arm of which may be in very distant regions. This proposition is very fairly sustained: and of course leads the author to secondary influences, by which the barometer is constituted a weather-glass. We would advise an attentive perusal of the section headed, "State of the Barometer during Rain:" it lifts the veil from our eyes, and shews us the false foundation to which our faith in the causes of barometric oscillations may be traced. We are tempted to give an extract in illustration: our readers will readily see the drift of the reasoning:—

A cubic decimetre of the vapour of water not being so heavy as a cubic decimetre of air, Deluc explains all barometric oscillations by the greater or less proportion of the vapour of water contained in the atmosphere. Indeed, when a certain quantity of air absorbs a certain quantity of vapour, it expands; the atmosphere at this point is higher than in the neighbouring points; a part of the air passes away on all sides, and the pressure of the remaining part is less on account of the proportion of vapours, that it contains; &c."

"Deluc's hypothesis rests on a principle, the fallacy of which has been proved by Dalton, Gay Lussac, and others. At equal tensions, a volume of moist air weighs less than an equal volume of dry air; but, when water quietly evaporates in the open air, the vapours ascend through the interstices of the aerial particles, without having any influence by their weight or their elasticity on the movements of the air. The atmospheric pressure is, therefore, increased by the weight of the vapour of the water, all other things being equal. The barometer ought to be higher in moist than in dry air. Observation seems contrary to this assertion, since the barometer is lowest with winds loaded with vapours. But S.W. winds, which bring rain, are the hottest of all: they tend to raise the barometric column by the pressure of their vapour, and to lower it by their temperature. This last influence being the more energetic, the pressure diminishes, &c."

The chapter, devoted to the barometer, is written with considerable care; the importance of right views, and a clear comprehension of its action, seems to have been present to the author at every page. Barometric winds are analysed, and some practical deductions, in the form of weather axioms, are set forth. The chapter terminates with barometric phenomena during tempest. The electrical phenomena of the atmosphere are next investigated, and are brought up to the present day, in the notes of the learned translator. Peltier's recent views are included; and a full description is given of the Electrical Observatory at Kew, and of the mode of taking observations. The optical phenomena of the atmosphere, including halos, coronæ, and rainbows, occupy the 7th chapter. The 8th is devoted to the magnetic phenomena as developed in the auroræ. The following chapter completes the text of the author, by comprising the many problematic phenomena which have at times

presented themselves, as showers of blood, of sulphur, of corn, of animals: also, dry fog, shooting stars, fire-balls, aerolites, &c.

Immediately following the text of M. Kaemtz, is a chapter of notes by the French Editor, M. Martins: many shorter notes are interspersed by the same author, throughout the work. These notes are on interpolation, registering instruments, mountain vegetation, glaciers, atmospheric electricity, twilight, and the crepuscular curve. Then follows an appendix by the mathematician, M. Lalanne, which demands our patient study, and will repay the labour bestowed. It treats of the methods of delineating, graphically, natural laws in general: and it especially shews the importance of employing the mode in which three "variables" are involved. M. Lalanne is himself the author of this mode; he gives the process very clearly, and shews how readily the eye may obtain, at a mere glance, an insight into the rate of variation, or the relations in phenomena apparently the most complex. The curves he uses are analogous to De la Beche's contour lines of elevation. Without diagrams, we should find a difficulty in explaining the method; we therefore pass on.

The volume is closed with a second appendix by the translator, Mr. Walker, containing observations on decimal notation, and digital tables of French measures, thermometric conversions, condensation of gases, Daniell's Hygrometer, then films, Herschell's actinometer, barometric conversions, a full account of the Electrical Observatory at Kew, with observations made in the month of August last, the electricity of the atmosphere, and of fog, &c. It concludes with a description of Wheatstone's electrometeorological register, illustrated by two plates.

We have thus taken our readers very cursorily through the volume, touching here and there upon the leading features: had we entered more closely into its pages, we should have found the laws of meteorology gradually developing themselves; and, on what has long been to most of us a dark and doubtful chaos, we should have seen the lights of science commencing to shine and dissipating the clouds. The present edition, we would remark in conclusion, is enriched with several additional plates; it is also furnished with a complete index of authors' names, so that the subjects on which any one has written may be traced immediately.

The Principles of Surgery: by JAMES MILLER, F.R.S.E., F.R.C.S.E., Professor of Surgery in the University of Edinburgh, Surgeon to the Royal Infirmary, &c. &c.—Edinburgh: Adam and Charles Black.

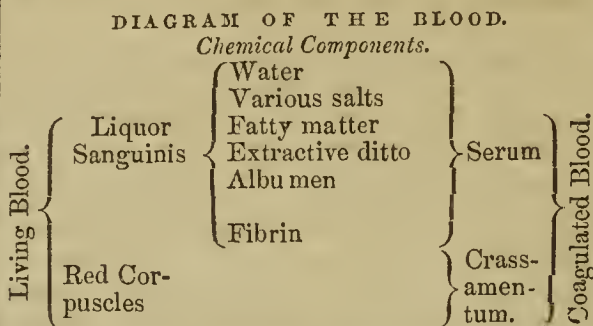
The substance of this work of Prof. Miller, is taken from his annual course of lectures, and his object in publishing them in this form, is to exhibit to his students a condensed view of the principles of the healing art. The book is divided into four sections:—

- I. Elementary Disease.
- II. Perverted vascular action in certain tissues.
- III. Perverted nutrition.
- IV. Injuries.

The first thirty-nine pages are occupied with an historical notice of surgery, condensed from a paper by our author, in the last edition of the *Encyclopædia Britannica*. It is amusing, and at the same time instructive; although some, we fear, may doubt the propriety of its occupying, in a *practical* work, the place of more useful matter. We are a sadly utilitarian age.

The grand divisions of the work are, again, sub-divided into chapters. The following

table is given, to assist the reader in perusing that part of the work, devoted to inflammation:—



The part, given to Elementary Disease, is divided into six chapters, which we shall proceed shortly to notice in detail.

I. *Perverted action of the Blood-vessels.*—Inflammation is customarily defined: "a perverted condition of the blood and blood-vessels of a part, interrupting its healthful function and changing its normal structure; ordinarily attended with redness, pain, heat, and swelling; and inducing more or less disturbance of the general system." This definition, in our author's opinion, takes far too wide a range: "it renders the cause of simple effusion one and the same with that of suppuration, ulceration, and gangrene,—unites, as in one harmonious operation, the healing of a wound, with its gaping and suppuration,—the gradual enlargement of a part, with its destruction and discharge,—the death of a portion of bone, with the formation of its substitute,—the successful re-union of a broken limb, with the suppurative arrest and undoing of the callus,—the infliction of an ulcer, with its process of healing: all, however dissimilar, are declared the offspring of one common parent—Inflammation." Professor Miller, therefore, limits the term—Inflammation—to what is "*essentially morbid*."

There is, however, a transition from the healthy to the inflammatory state, occupying different periods of time: these he has divided into three stages:—"I. *Simple vascular excitement*.—II. *Active congestion*.—III. *True inflammation*."

I. *Simple vascular excitement* commences with the simple determination of blood to the part, the result of reflex nervous action; "nutrition is exalted; the fibro-cellular tissue is fuller than before, giving slight increase of bulk." This increase in the tissues, immediately surrounding the vessels, is the result of effusion from over-distension of the vessels themselves. Our author belongs to that class of physiologists, who suppose the capillaries, first to undergo contraction, either from an inherent property, or from spasm produced by the exciting cause, according to the duration of which the result will be, either restoration by resolution, or (if allowed to proceed, undisturbed, another stage)—*true inflammation*.

The period of incubation, and the stage we have just given, are, of course, best fitted for beneficial results from active treatment.

II. *Active congestion* may be supposed to have its origin, at a time shortly following the spasm or inherent contraction in the capillaries, which is overcome by the excited contraction of the heart and arteries; for, "hitherto they were simply dilated, retaining their tone, and controlling the circulation of their contents." From a mixture of this—an altered condition proper to the blood itself—and "from an increase of vital attraction between the blood and surrounding parenchyma," the circulation in the part loses its velocity—there is an increased deposit of fibrin, and the functions are disturbed. This state of things may be overcome by removing the exciting cause,

and is looked upon as proper for "healing of wounds and closing of ulcers," or, being allowed to remain, will terminate in:—

III. *True inflammation*,—where there is total loss of power in the capillaries, from loss of nervous influence, the result of pressure from effusion, with thickening and softening of their coats—loss of circulation—profuse exudation of liquor sanguinis—the walls of the smaller vessels giving way, and blood is extravasated.—"Suppuration is in progress by extravascular degeneration of the fibrinous effusion, or else by a secretive elaboration of it, ere yet it has left the vessel." We need scarcely say, that, suppuration having commenced, inflammation must have ended.

In inflammation, there is a sort of *vice-versa-ism* between deposition and absorption, according to the stage of inflammation present; the latter being totally inactive when the constitution is suffering most severely from its ravages, and most active, when comparatively free, or recovering from a sudden and acute attack, followed by an abundant effusion.

Such is our author's "Theory of the Inflammatory process," which he finishes by remarking: "It has often been disputed, whether inflammation is the result of an increase or diminution of vital strength in the part." From his reasoning, it would appear to be neither one nor the other, exclusively, but a mixture of both,—an attack always commencing with excitement, and terminating (true inflammation being established) with an immense decrease of vital power. The local and constitutional symptoms are now described, with their appropriate treatment, with equal discrimination and ability.

We cannot conclude, without particularly recommending the chapter, on "Perverted Vascular Action occurring in Bone," one of the most beautiful surgical disquisitions it has been our good fortune to read. Indeed, no one can peruse the work, without the conviction that he is addressed by an accomplished surgeon, endowed with no mean literary skill, or doubtful good sense; and who knows how to grace and illumine his subjects with the latest lights of our rapidly advancing physiology. The book deserves a strong recommendation, and must secure itself a general perusal.

PENCILINGS OF EMINENT MEDICAL MEN.

BERNARD SIEGFRIED ALBINUS, M.D.

Bernard Siegfried Albinus, incontestibly one of the greatest masters of the science of anatomy the world has seen, was the son of an eminent physician, Bernard Albinus, a professor at the University of Leyden, who was fortunate enough to have two other sons greatly celebrated also,—viz., F. B. Albinus, the naturalist, and C. B. Albinus, who succeeded the subject of our pencilling in the professor's chair at Leyden.

B. S. Albinus was born at Frankfort, on the 24th February, 1697. At an early age he received instructions in Latin by Nesterhoff and Sommers; in philosophy by Gronovius and Person; and in a knowledge of the profession, of which he was destined to become so bright an ornament, by Bidloo, Boerhaave, Decker, Raw, and his father, who had no difficulty in prognosticating his future eminence from the singular abilities which he then displayed.

In 1718 he visited Paris, and made the acquaintance of Winslow and Senac, attending also the lectures of Du Verney, Vaillant, and other celebrated professors. Here, however, he was not allowed to remain long, as, by the death of Raw, he was recalled to Leyden by the curators of the university, to supply his place. Complying with their flattering request, in opposition some-

what to his own inclinations, he was appointed, when only twenty years of age, teacher of anatomy and surgery; he also received the degree of doctor of medicine without examination.

His peculiar attachment to anatomy and surgery gained him the intimate friendship of Ruysch and Raw, who at that time resided in Leyden; and the latter, so justly celebrated to succeed him as a lithotomist, is said to have seldom performed an important operation without inviting him to be present.

Upon the death of his father, in 1721, he was chosen as professor, and, upon his admission to the chair, he read a paper entitled: "De Vera Via ad Fabricæ Humani Corporis Cognitionem ducente," in which he forcibly demonstrated the importance of the study of comparative anatomy.* By the excellence of this installation-address he obtained much reputation. In the capacity of a professor, he not only bestowed the greatest attention upon the instruction of the youth entrusted to his care, but in the improvement of the medical art. He formed the design of giving plates of the muscles; imagined various methods of determining more precisely their ligaments; caused them to be drawn by the best artists; and in this way far surpassed all that had been done before him. "For goodness sake," says the late Mr. Atkinson, of facetious memory, in his very excellent *Medical Bibliography*, "don't lose a single work of Albinus, nor of his engraver and friend in this department, Wandelaar. He edited his own anatomical transcendent works; they are some of the most delightful specimens which are to be met with of art and nature.—The small work "De Arteriis et Venis Intestinorum" (hominis) is coloured and beautiful; it is executed in the most charming style, by Ladmiral.† Not anything can exceed the feeling and delicacy of this performance, unless it be the work 'De Sede,' and 'Causa Coloris Æthiopum,' &c., or the plate of the vessels of the male *secreta*, wherein all the pathos of colouring is exhibited. 'De Sede' was published at Leyden, in 1737, and at Amsterdam. 'De Pene' was published, as we see, in 1741. The 'Retæ Mucosum' is also most elegant. The plates of the 'Icones Ossium Fœtus,' Albinus kept ten years by him; and he had especial care that not any but good impressions should be issued. On the 'Tabulæ Sceleti et Musculorum,' and the edition of the 'Tabulæ Ossium Humanorum,' we are informed that he expended 24,000 florins. The 'Icones Ossium Fœtus' are delightful; the delineations are tender as the subject. 'Tabula Sceleti et Musculorum.' What can be more majestic or correct?—

"Tabulæ Ossium Humanorum.—Dry as the subject is, we could admire and look at them for ever. We have seldom yet seen any, in our mind, so beautiful, so masterly, so divine, as are some parts of this inimitable work. Admire the thorax; massy bone, yet light as air.—Look at it,—in fact, look at the whole composition, and you may well, like Galen, sing a hymn to the Creator."

He also published, in 1725, an edition of the works of Vesalius, with an account of his life, very correct editions of the works of Harvey, the Anatomy of Fabricius, of Aquapendente, and, lastly, the fine anatomical plates of Eustachius.

The zealous application of Albinus to anat-

mical researches is, perhaps, to be attributed to his being a strong advocate of the mechanical theory of Boerhaave. Another result of the influence of this doctrine was, the intense industry with which he devoted himself to the study of minute anatomy. He was one of the first to follow up the views of his celebrated teacher, and to note with great precision the intimate structure and disposition of the several parts of the human body. No other individual can be said to have paid equal attention to the arts of design, to illustrate his works. He took uncommon pains to ornament and render attractive his various anatomical productions, as we have shown, but he is never found to have sacrificed the truth of Nature to the beauty of delineation.

He was twice Rector of the University; and as often refused that high honour, when it was voluntarily offered him. At length, worn out by long service and intense study, he died on the 9th of September, 1770, in the seventy-fourth year of his age.

The autograph of B. S. Albinus is of very great rarity. "I am assured" (states Mr. Pettigrew, in his *Medical Portrait Gallery*) "by the director of the Anatomical Collection at Leyden, of which Albinus was himself for many years the conservator, (and where, for nearly fifty years, he filled the chair of Anatomy)—"that, among all the documents belonging to that department, it is not to be found." By the kindness of Mr. T. M. Stone, the assistant-librarian of the Royal College of Surgeons of England, we are enabled to give the following translation of an original letter by this celebrated anatomist.

The letter is addressed to Dr. Nesbitt, the author of the celebrated work on "Osteogeny." The collection which contains this precious relic is enriched with others from the same pen: and Mr. Stone has promised, at our request, to make them known through the medium of the *MEDICAL TIMES*.

Original Letters of Albinus.

Albinus to Dr. Nesbitt.

"I received your letter, written in French, yesterday, and I am greatly grieved that my duties to my patients absented me from home at the moment when Dr. Letherland called to present it. I regret this the more, as he informed my porter that he was starting for Amsterdam in an hour; and thus deprived me of an opportunity of showing, by deeds rather than words, the value I place on your introduction. You yet await an answer to your last letter but one, which I should certainly have responded to sooner, if I could have found the leisure: for, besides Anatomy, I have also to lecture now, daily, on Physiology, and, at the same time, have to keep *au courant* with the many anatomical and surgical books which are being published in almost every quarter. Besides this, I have to fill the medical and surgical chair, and discharge many other academical duties requiring also much time: moreover, a good space of time must be given to preparation, the want of which increases on me every day. All these causes together will surely offer an excuse for my silence, which, unless you are a Democritus, you will not fail to accept. And, now, as an answer to your letter: C. S. Gravesande does not boast, as a new discovery, that the forces of bodies are as the squares of their velocity; for I had myself lent him, before receiving your letter, Polenus's Treatise, given me by the author; after reading which, he acknowledged that his theory was previously announced by Polenus. Nay, farther: he found that his genius had previously based his views on it, and he openly availed himself of his labours, so that he in no way claimed any of the merit. But what he wrote on the percussion of bodies, he considers to be new; and hence he desires that all objections be directed against the percussion, not pressure of bodies, and thinks his assertions, in that regard, difficult of refutation, being based on very certain experiments. As far as he gathers from the anonymous letters he now and then receives from Britain, and from the rumours commonly afloat, he thinks his views not fully understood; and regrets to think them condemned

before his meaning is apprehended. You will do me and him a favour if you transcribe, as soon as possible, the sum of the objections made by Dr. Pemberton—whom we greatly esteem and like—in order that it may appear whether Gravesande's meaning has been fully penetrated; and, if so, whether the doubts offered are of importance or not. The sooner you perform this commission, the more you will increase our obligation. Your assurance that all my papers will be considered so good, by the Royal Society, as to be certainly inserted among their transactions, is very gratifying to me. I have to regret, however, that what I may have to communicate, *ex.gr.* discoveries about the larger parts,—if pleasing, perchance, to others, are no way satisfactory to me, or are so subtle, that while they give me pleasure, they are not understood by a great many. But this shall not prevent my doing something, if I can obtain leisure for digesting the views which I have scribbled down in my different note-books. The time I may have this winter, I have pre-engaged to bestow on preparing a Treatise on those muscles which occupy the whole anterior surface of the body under the fat, in the natural size of an adult man. Whatever leisure may remain, I shall employ in publishing a complete Description of Osteogeny, with engravings. Having performed these two tasks, I shall, perhaps, be able to send you something next spring. Meantime, give my thanks to the gentleman who informed you that he would take proper measures to see me received amongst the number of Fellows. This would really be a great honour to me, but I would feel much more gratified if I could flatter myself that I could communicate to you, out of my poor treasury, matter worthy of so celebrated and distinguished a Society. I shall, however, endeavour to send, every now and then, a paper, though, perhaps, rough and inelegant enough: for there are many things, not very suited to a work, which would do very well for your 'Transactions.' I have attended to the subscriptions, and am in possession of the list of names. It will be your place to inform me whether you wish me to send you the latter, or whether you prefer my keeping them, in order that they may not have to be returned to me again, when the payments are to be renewed. This latter seems to be the better way; you can, if you like, settle with Renau. I hear that a new English edition of the 'Haversian Osteology' is published in London: pray, let Renau bring with him a copy of this and of the old edition. I should be glad, too, if you would give him for me the last Latin edition of Keill's 'Astronomy.' Both books shall be reprinted here. Whatever you lay out in expenses, deduct from the sum which you will have to pay to Renau for subscriptions. Boerhaave has been attacked with rheumatism for some successive weeks; at one period he lived in very little hope, but he has now almost recovered.—I am angry with the paper, which forces me to bid you farewell. Remember me to Drs. Mead and Pemberton, and our other friends. Farewell, once more.

"Given in the City of Leyden; 2nd October, in the year of our Lord, 1722.—Care of Renau, at Mr. Bernard Nannick's."

ON THE NEW LIST OF FELLOWS, AND THE COUNCIL OF THE COLLEGE OF SURGEONS.

(To the Editor of the 'Medical Times'.)

SIR,—Time, which has produced a new list of Fellows, has likewise shewn that the spiteful venom, which has distinguished all the previous acts of the Councillors, is not yet expended.

Mr. Lee's manly protest shews, that they have renewed their intrigues, and at the same time their aggressions on the character of some of their Professional brethren, with a malice almost personal, and a perseverance towards their own obloquy and destruction, that seem more like the acts of the demented, than those of sane men. Still it must be confessed that there is a boldness and daring in their actions which must call forth some respect, I mean that kind of respect, with

* It is gratifying to find, that in this opinion the Royal College of Surgeons of England appear to participate. By the recent institution of their three studentships, (for which the profession are indebted to Mr. Guthrie,) they are forming a school of rising talent: an opinion which none will doubt, who have seen the beautiful injections and dissections of microscopic objects by Mr. J. T. Quekett. Mr. Guthrie, in his examination before the Parliamentary Committee, speaking of the acquirements of Professor Owen, exclaimed: "*we made him!*" We hope that the council of the college will succeed in striking more Owens in the same mould.

† It appears that Ladmiral, sensible of the excellency of his art, requested Albinus to furnish him with an opportunity of displaying 'its magic in some preparation.' Albinus complied, adding the descriptions and letter-press.

which the prize-fighter may view an antagonist, whom he knows to be possessed of a certain degree of brute courage, combined with a disposition to do mischief. The supercilious contempt with which the Councillors treat the whole Profession, and the very openness of their misdeeds, should make us pause to consider, whether it be a manifestation of a power which we know not of, or the mere impulse of headstrong ungovernable passion, and determined ignorance. Like all other corporate and chartered bodies, they are guilty of misdemeanours, known only to the irresponsible, but unlike them, they do not attempt to palliate, to conceal, to confuse; they do not send forth their deeds in false garments, or with vain ornaments to clothe a wicked, and rotten and perfidious, interior; but the prodigies they beget, they give to the world in all their natural deformities, and with the brazen marks of their parentage branded openly on their brows. Is this ignorance, or is it strength? a consciousness of some power beyond their own? or is it one more illustration of the old hackneyed verse, "*Quem Deus vult perdere, prius dementat.*"

In attacking such measures as these, it is fitting we should know the power of the men we have to cope with—we should learn their strength, as well as their weakness, and in battling for our rights we should be prepared for the worst, and to struggle with the determination of desperate men. We should measure well their strength and capacity, as well as their weakness and imbecility; at the same time that we mark the ignorance of many in anatomy and surgery, and the blunders by which not a few may be hereafter characterized in professional literature, we should also be aware that there are men amongst them, who have fought their ways in adverse circumstances, from meanness to power, and from servility to triumph; we should recollect that there are those among them of talent, undoubted talent, who have played the part of the infidel, as well as the moralist, the low practitioner, or the accomplished surgeon, just as lucre was to be got, or place to be maintained; those who in adversity have pandered to the passions of the multitude, and reviled the institutions of their country, those very institutions, which, in their prosperity, they are the most forward to defend; those who, in the first morning and evening of life, might be seen paying adorations to all sorts of reform, sacrificing at the altars of revolutionary change, with the busts of martyrs in their closets, and lo! a little while, when the evening and morning were the second day, they are loyal to their Queen, warm admirers of the laws of their country, proud of the statesmen who uphold those laws, and the busts of Peel, Wellington, and Graham, soar proudly over the marble fragments, the only remnants that remain, of Horne Tooke, Hardy, or Wilkes. Such men as these are not to be despised; they are to be feared, to be hated, to be denounced, for the ruin that they are bringing on the profession, and for the personal malice, and bitterness, with which they pursue those, who, differing from them, have, unaided by interest, or powerful influence, raised themselves, by their own exertions alone, to the first ranks in the profession. In the plenitude of their power they may sneer away the characters of good men, but they may yet live to see the words, that Sir Francis Drake applied to the Spainards, verified in their own persons: that, "as there is general vengeance which secrettlic pursueth the doers of wrong, and suffereth them not to prosper, albeit no man of purpose impeach them; so there is a particular indignation engrafted in the bosom of all that are wronged, which ceaseth not seeking by all means possible to redress, or remedie the wrong received, in so much that these great and mighty men, in whom their prosperous estate hath bred such an overwheneing of themselves, that they do not onlie wronge their inferiours, but despise them, being injured, seem to take a verie finette course for their own safety, and a farre unfitter for their rest." Let them reflect well on this, for 'tis difficult to imagine that so much arrogance and injustice can be longer endured, or their impenetrable silence be much longer maintained. Of late, their characters as gentlemen have been called in

question, and yet they are deaf to their own honour; Messrs. Laurence and Stanley may console themselves that the charge is made by an anonymous writer, still they should be reminded, that it is founded on facts afforded by one who stands high in his profession, and whom a large minority of those fellows, whom they themselves created, and called together, thought worthy to a seat on the Council.

And now Sir, for Mr. Lee's protest, which seems likely to meet with the same neglect by the Council, as the charge above mentioned; at present it remains to most a mystery, why he should have been excluded from the second as well as the first list of fellows. As a successful competitor for the Jacksonian prize, and as former house-surgeon of St. George's, we should suppose that he had some claims on the Council on the one hand, and on Sir Benjamin Brodie on the other. It would be hard to find a reason which enabled this secret inquisition to dispose of his claims; if his name had not been known to them, it would be easy to imagine how he might have been hemmed off the stage. One might blandly state, that every house-surgeon of a hospital, was not fit to be a fellow; others depreciate the prize-getters; others book-writers; but no one could sneeringly say, as has been done before, "who ever heard of Mr. Lee?" No, Sir, they had heard of him, and they must have known him to be infinitely superior to many on the list, and, nevertheless, they have left us to guess at the cause of his exclusion.

If we cast our eyes over the new list of Fellows, one glance will suffice to shew us on what principle they have been elected. We must remember how reluctantly they yielded up their close borough system of election; and we must recollect that this scanty reform has been wrung from them by our repeated assaults on the Secret Council, and the expressed determination of the profession to have the Council elective. In answer, they urged the impossibility of granting the franchise to the whole profession, and, with a false show of liberality, have themselves created the Fellows.

The first list was an endeavour to pacify the great interests in the profession, and was chiefly composed of surgeons to hospitals, infirmaries, &c., and of those who had made for themselves such character and strength, that they dare not omit. True it is, that there were some made from an interest of a different, and viler, sort. Those who, from their repeated calls for assistance in difficult cases, were known to the Council as being in good practice; and thus, that very intimacy with the Council, which should have saved them from further honour, was made the means of raising them to the Fellowship. However, with these sins of commission, and a few of omission, the old list appeared not so bad, and, though I differ from the majority, I must affirm, that had the Council possessed the resolution to say "so far we will go, and no farther," but a meagre case would have been made out against them, on the score of an unjust and partial election. In the present list, however, there is as much cause of complaint as there was, in my opinion, little formerly; we see at once that interest has been at work, and what sort of interest. Mr. Guthrie's power has been made manifest, in favour of the army; that the late election of Councillors has not been unnoticed, is clear, from the few additional voters that are made, and those even friends of the Council. Thus, then, we should regard the new list of Fellows as composed of army and naval surgeons, and those abroad, who will not be able to vote—surgeons of interest living at a distance in the country, who will not be willing to vote, and of a small proportion who will be ready to vote in favour of those, who have made them Fellows. To state the numbers: we have 220 in the whole: 50 being in the service of the army and navy, 50 belonging to establishments in the East, 100 living at a distance in the country; and the remaining 20 are all that are likely to vote. The names of certain gentlemen doing large practices in London, Clapham, Hackney, Woodford, &c., are not among the favoured few. The reason is obvious; they have not required the assistance of the Councillors, as others have done; their names, therefore, were not so familiar, their merits not so

obvious, to the leading men on the Council, as some others. Can he, who is supposed to have great influence in the creation of the Fellows, state truly, he does not know that there is one (and this might be taken as a type of many) among the Fellows, who is attached to neither hospital nor infirmary, is guilty of no invention or publication, and who is only distinguished in the town where he lives for his gallantries to the fair sex, and to his having requested the Councillor's assistance to a case, where no aid was needed. Doubtless, a pleasant country journey, and a bouncing fee, with no trouble, make a man's faculties of memory wonderfully acute! Such interest as this seems, indeed, to have superseded all natural ties. The Council have forsaken their very children; the oldest apprentice of the oldest surgeon of a large hospital, notwithstanding he was demonstrator, notwithstanding he has been surgeon to an hospital, has been forsaken for a younger apprentice, with no such advantages. Apprentices of other hospitals have been deserted also for mere bantlings, who have not possessed their diplomas more than two years; but the reason of all this—is it not written in the books on genealogy? Would not a correct list of the family connections of the Councillors explain much? But I am sick of relating the monstrous absurdities and intolerance by which the profession is governed; I have said enough I hope, to raise the indignation of those who are not Fellows, and of many who are—enough to shew to the Councillors that their downittings and uprisings are not entirely unknown to your obedient servant,

CHIRURGUS.

November 5th, 1844.

COSTELLO AND WAKLEY.

(To T. Wakley, Esq.)

[Mr. Wakley has at length addressed to Dr. Costello the letter he had promised so long before. For the present, it will be enough to say, that it puts queries to the Doctor as to the instances of Mr. Wakley's ingratitude, and the fact of Dr. Costello's authorship of the Biographical Sketch of Sir C. Bell. The following is Dr. Costello's reply.]

SIR,—I beg to acknowledge the receipt of your letter of the 8th instant,—just fourteen days later than I expected, from your pledge of "immediately" communicating with me.

May I recal to your recollection, that when you ungenerously inserted every line of my letter of the 22nd ult., which met, however severely, the attack of Messrs. Eccles and Gay, you as carefully suppressed every portion of it which defended my character from the aspersions you yourself had flung on me. Subsequently, also, you have declined inserting another letter from me in answer to a fresh assault you have permitted on my character by the same pair of instruments; the reason being, as you yourself assign, some private assurance you had kindly made a week before, when giving to the world the malecontent *niaiserie* of these clumsy accusers. You are thus, most unfairly, as I consider, one letter and the more important portion of another, in debt to me. When you shall do me and the public the justice of discharging these arrears, I shall be most happy to meet you on something more of an equal footing, and to give you a full and most explicit answer to every question you submit to me in your note of the 8th instant.

I am, Sir,

Your obedient servant,

W. B. COSTELLO.

Golden Square, Nov. 11th, 1844.

W. Thomas, Esq., and J. Bryan, Esq., Surgeons, were elected Councillors for the Borough of Pembroke, last week. The former unanimously,—the latter by a majority of votes.

APOTHECARIES' HALL. — Gentlemen admitted Licentiates 7th Nov. 1843: George Yates, John Davison Geldard, Edward Bishop.

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REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 113.)

Mrs. T—, æt. 24, married ten months, never pregnant; blondine.

May 27th, 1844.—Complains of severe pain in the lower part of the abdomen, sometimes dull, and sometimes sharp (especially at the catamenial periods, when it makes her very sick), coming on in paroxysms, after which the bowels are much constipated; evacuations dark; much gastric derangement. She has, also, pain in the left ovarian region, particularly at the menstrual periods, with pain in evacuating the rectum, and on sitting down suddenly on a hard seat.

Two years ago, began to have painful menstruation without exsudations; the pain coming on very intensely for five or six hours before the discharge, which is always of a bright colour, from which moment the pain subsides almost entirely. Her last menstruation, however, was with copious exsudations. During the last two years she has had piles, which bleed occasionally; latterly she has had leucorrhœa.

R Pil. hydrarg. extract. colocynth. eo. ext. hyoscyami aa ʒj. M. Ft. pil. xij., sumat ij. h. s.

R Acid. nitrici dil. acid. hydrochlor. dil. aa ʒj., tinct. hyoscyami ʒij., syrupi aurant. ʒss., infus. gentianæ comp. ʒvij. M. Ft. mist. cujus sumat cochl. magn. ij. ter die.

June 3rd.—Feels better generally, but has still much pain and hæmorrhoidal congestion. Hirud. vj. ano. Rep. Med. Let her sponge herself every morning with tepid water, and use friction with a salt towel.

10th.—Leeches bled very freely; blood very black; has lost all sense of hæmorrhoidal congestion; feels much better in every respect; the leucorrhœa has disappeared, and she has none of her former pains; expects the catamenia in two days. Urine passed in the morning, sp. gr. 1029; slight excess of urea; not much epithelial matter; copious lithate of ammonia; copious phosphates, but with a small proportion of lime; numerous large crystals of oxalate of lime.

17th.—Menses appeared at the right time, and with scarcely any pain or exsudations; little or no pain in the ovarian region; still slight pain on sitting down upon a hard seat; the bowels are open, but the tongue is dry; she has a good deal of frontal headache, and but little appetite. Omitt. Pilulæ. Rep. alia.

R Extracti taraxaci ʒj., sumat cochl. minimum ½ om. nocte ex lacte.

25th.—It is the half-way period; she feels quite well in every respect; appetite pretty good.

Rep. Taraxacum et mistura. Sumat magnes. carb. cochl. min. j. o. m. ex aqua.

July 23rd.—Catamenia appeared on the 12th, and lasted a week, preceded and attended with very little pain; the discharge was copious, very florid, and with scarcely any exsudations; tongue still dry and white; headache; says the bowels are regular. Pergat.

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Let her take a five grain calomel pill at the half way time, viz: on the 26th.

August 16th.—Catamenia appeared yesterday, without any pain or exsudations; bowels regular; tongue dry; appetite moderate; looks well; is going into the country. Omitt. mistura.

Contin. taraxacum and magnesia.

R Pil. hydrarg. ʒj. Ft. pil. iv. Let her take one pill for three successive nights at the half-way period.

September 23rd.—Has returned to town; feels quite well; has gained flesh. The catamenia appeared exactly at the right day, and with scarcely any pain; the discharge was natural in appearance, and she noticed only one piece of exsudation in it. Pergat pilulis ut antea, medio inter paroxysmos menstruationis tempore.

The history of this case, as given in my first report of it, is interesting from the circumstance that the appearance of hæmorrhoids was contemporaneous with that of the dysmenorrhœa. It is a condition which can scarcely exist without affecting the uterus more or less; or, rather, I should say, that the same state of general health, which induces hæmorrhoidal congestion, will also be attended with uterine derangement. I may, also, notice another fact, viz.: that the early attacks of dysmenorrhœa were without exsudations, whereas the last appearance of the catamenia, previous to her calling upon me, was attended with a large quantity, and that latterly, and apparently not long before the appearance of the exsudations, she had been attacked with pain in the left groin, increased at the catamenial periods, indicating pretty clearly the existence of ovarian irritation.

The argumentum crucis on this point was established by the manner in which the catamenia appeared after the application of the leeches; it was with little or no ovarian pain, and scarcely any exsudations. The succeeding period showed but a minute quantity of exsudations, and so little pain in the region of the ovary as not to have been noticed in the report; and that of August 16th was entirely without exsudations, the pain in her groin having ceased.

As the nature of the case seemed tolerably distinct, I did not deem it necessary to make an examination, either to ascertain the state of the os and cervix uteri, or how far the ovary was enlarged, so as to account for the pain in passing fæces, because in the present instance this symptom, as also the pain on sitting down suddenly upon a hard seat, might fairly be attributed to the existence of the piles; the relief also obtained by the leeches rendered an examination the less necessary.

The state of the urine was what we usually observe in the hæmorrhoidal diathesis, viz.: of a high specific gravity, and much loaded with lithic acid, or lithate of ammonia. There was also a slight excess of urea here, probably owing to the deficiency of aqueous matters in proportion to its other constituents. Although the triple phosphate was shown to exist in considerable abundance, the proportion of phosphate of lime was unusually small, and would seem, as far as I have had the opportunity of observing, to be an indication of renal irritation, although she did not confess to any pain in the lumbar region. Still, however, as the

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whole abdominal circulation is more than ordinarily congested in the hæmorrhoidal diathesis, and it seems to be invariably accompanied with derangement of the assimilating functions, as regards the albuminous principle, and shown by the excess of lithic acid or lithate of ammonia, it may, I think, safely be presumed that the kidneys were undergoing more or less irritation from the increased exertion which was required of them, for the purpose of throwing off so large a quantity of these principles.

There was much derangement of the stomach and bowels in this case: and, although she progressed very favourably under the plan of treatment I adopted, and the bowels were reported to be very regular, yet, as there was still much headache, with a white and dry tongue, (July 23rd,) I determined to excite a more vigorous action of the liver and upper bowels by a smart dose of calomel, at the two critical periods in a case of deranged menstruation, viz.,—just at the half way time, and also a day or two before the appearance of the catamenia.

The next case of dysmenorrhœa connected with mal-assimilation, which I shall quote, is one which verges on those where there is a rheumatic, or rheumatic-gouty, diathesis, and may, therefore, be used as a sort of transition case in coming to this subject.

Miss W., æt. 24, very short.

March 9th, 1842.—Much gastro-enteric derangement; bowels irritable and irregular, sometimes approaching to a state of dysentery; catamenia always preceded and attended with much pain; during the last year it has become sparing and irregular, sometimes coming on sooner, but generally later, than usual. Has sometimes noticed slight membranous exsudations at the menstrual periods. Acid taste in the mouth, much flatulence, turbid urine, aching limbs. Had inflammation of the instep five or six months ago from no assignable cause.

R Hydrarg. c. creta, pulv. ipecac. co. aa ʒi, confect. rosæ caninæ q. s.—M. Ft. pil. viii, sumat ij. o. n.

R Infus. gentianæ co. ʒvij, acid. nitrici dil., tinct. hyosc. aa ʒij, syrupi aurant., ʒss.—M. Ft. mist. cujus sumat cochl. magn. ij, ter die.

Let her take active exercise, sponge the trunk freely in the morning, and use friction with a salt towel.

13th.—Bowels irritable; does not feel better, but the period has passed over more easily. A good deal of mucous irritation of the bowels seems to be present. Omitt. medicamenta.

R Ammonia carb. ʒss. succi limon. q. s. ad saturandum, adde tinct. hyoscyami, sp. ammon. arom. aa ʒss, syrupi aurant. ʒi, aquæ puræ ad implend. ʒiiss.—M. Ft. haustus bis die sumendus.

R Extr. taraxaci, extr. lupuli aa gr. iv, pulv. ipecac. gr. ij.—M. Ft. pil. ij h. s. s.

18th.—Feels better, but the bowels are still in an irritable state; complains of being weak.—Contin. mistura.

R Extr. hyoscyami, extr. gentianæ aa ʒi.—M. Ft. pil. viii, sumat ij. o. n.

R Extr. taraxaci ʒii, sumat cochl. min ½ mane et nocte, ex lactis et liquoris calcis partibus æqual.

25th.—Has had a good deal of irritable griping, but during the last three days it has been better, as also the appearance of the evacuations, which are of a better colour and less slimy; the tongue is also better, but there is still much lassitude.

Contin. extr. taraxaci ex lacte et liq. calcis m. and n.

R Pulv. ipecac. comp. ℥i, mist. acaciæ q. s.—M. Ft. pil. iv, sumat i, h. s.

R Extr. sarzæ eo. fluid. ℥iv, sumat cochl. med j, ex lacte om. meridiæ.

31st.—Still feels languid and tired in the morning, with pain of back. Bowels more healthy.

Omitt. taraxacum. Sumat sarzam c. lacte mane et meridiæ.

R Pulv. guaiaci, magnesiæ carb. aa gr. x. Sp. ammoniæ arom. ℥ss, aq. puræ ℥iss.—M. Ft. haustus h. s. s.

April 5th.—Looks better; complexion much clearer and more healthy; tongue natural; bowels more healthy.

Rep. haust. magnes. c. guaiaco o. n. et sarza c. lacte bis die.

As she expects the catamenia on the 8th, let her use a warm hip bath every night and take:

R Camphoræ, extracti lactucæ, extr. lupuli aa ℥ss.—M. Ft. pil. vi, sumat ij, incipiente dolore et rep p. r. n.

15th.—Catamenia appeared with less pain. She thinks that the appearance of the discharge is improved; much less lassitude and fatigue upon exertion; considers herself decidedly better. Pt.

May 6th.—Has returned home; writes that she is going on well; that the bowels are apt to become irritable and slimy; complains of aching in the feet and ankles when she stands long.

Contin. med.

The turbid urine, aching limbs, and previous attack of inflammation on the instep of her foot, all shew that the system was suffering under the general effects of mal-assimilation which were assuming more or less of a rheumatic-gouty character; and that nature was making ineffectual efforts to throw off, by different emunctories, the morbid products of this condition. I had hoped that the pills, which I prescribed at her first visit, would have allayed the irritability of the bowels sufficiently to continue the use of the tonic; in this, however, I was disappointed, and had recourse to the mixture of citrate of ammonia, for which I am indebted to Dr. Prout, and which I have found of great use in such cases. It seems to controul the disposition to mucous irritation and flatulence more than any combination with which I am acquainted. In its preparation, it is necessary that alkali should be slightly in excess, and this is best insured by adding some sp. ammoniæ arom. to it when brought as near as possible to the neutral point.

Although little or no progress was gained as regards the state of the bowels and general health, the catamenial period passed over more easily than it had done before, and being unwilling to continue the use of mercury under such a state of the intestinal mucous membrane, I determined to lay it aside altogether and trust to some of the vegetable alteratives for obtaining the effects I desired. The pills of taraxacum, hop, and ipecacuanha agreed well, but the dose of the former was far too small to produce any satisfactory result; I therefore gave it in a much larger quantity with milk and lime water, morning and night. No apparent effect was produced in the appearance of the evacuations at first, but in the course of four days a favourable change took place, with much relief. I may here observe that, although a very certain, as well as gentle alterative, taraxacum mostly requires a period of this length in the adult to produce its peculiar effects; even in the child it seldom shows them under three days, and I would, therefore, warn those of my professional brethren who have not had much experience in its use, against being impatient at the tardiness of its effects, which, on the other hand, usually last, when the remedy is discontinued, much longer than those of mercury.

As the state of the bowels improved, and ceased to produce irritation, a number of symptoms became more prominent, and were evidently referable to the general condition of the system,

which I noticed in the commencement of these remarks. Her state was one of atonic debility in a system which had shewn a marked tendency to rheumatic-gouty action; a condition not indicating tonics, but the use of gnaicum, which was now given with much benefit.

(To be continued.)

CLINICAL LECTURES ON CATARACT.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

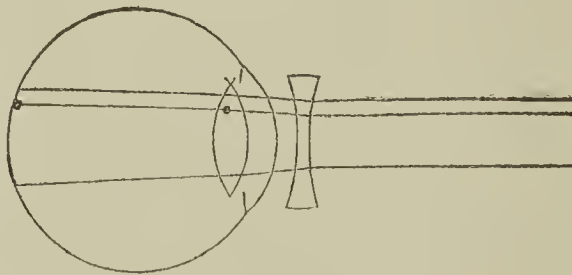
By CHARLES GARDINER GUTHRIE, Esq., Jun.

November 13th, 1844.

LECTURE VI.

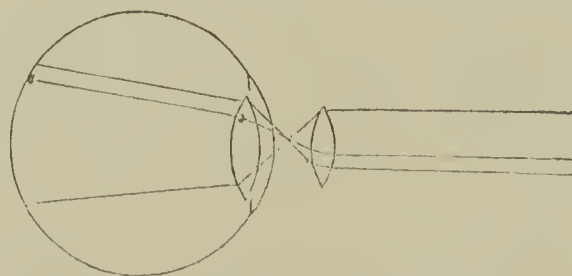
As many persons, not professional, are greatly interested in spots or muscæ in the eye, I here add some observations of the late Capt. Kater, F.R.S., which were addressed to Mr. Guthrie in the year 1834, with three diagrams.

"If the flame of a taper, at the distance of about twenty feet from the eye, be viewed through a concave lens of about a quarter, or half an inch, focus, a circular disk of light will be perceived, which, if the diameter of the lens be greater than that of the pupil of the eye, will appear fringed at the circumference. Now, if any spots exist, either upon the cornea, the crystalline lens, or in the vitreous humour, the shadow of such spots, if the light be not too strong, will be projected upon the retina. But, in order to be assured that such spots exist in the eye, it is necessary to turn the glass around its axis; when, if the spots move, they are imperfection of the glass, and not of the eye. If such spots remain perfectly stationary, it may be concluded, that they are either imperfections in the cornea, or the crystalline lens.



On continuing to look steadily at the taper, a floating spot, more or less transparent, may sometimes be perceived to arise slowly from the bottom of the eye, until it attains a certain place, where it becomes nearly stationary. On moving the eye, or rubbing it, such spot is again depressed, and again rises slowly, and takes its station as before. Such spots appear to me to exist in the vitreous humour.

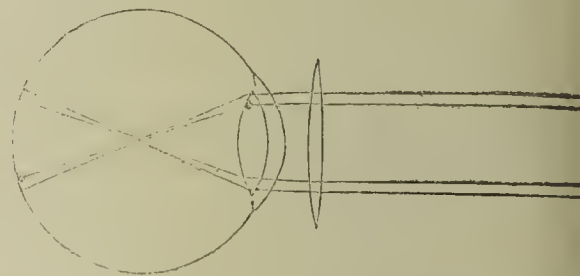
On first looking through the concave lens, many spots will, perhaps, be seen, more or less moveable. These arise from particles of mucus upon the cornea, and are dissipated by rubbing the eye; though sometimes the mucus is so thickened as not to be dislodged without some difficulty. The fringe at the circumference of the luminous disk is the shadow of the edge of the iris forming the pupil.



The same effects occur if a convex lens be used, the focus of which is so short, that the rays cross before they fall upon the crystalline lens; and in this case, also, the spots are represented as they actually exist in the eye with respect to the pupil.

But if a convex lens, of about an inch and a half focus, be employed, so as to form, with the crystalline, a compound lens, the focus of which will be somewhere in the interior of the eye, we have a

means of discovering in what part of the eye the spot is situated; for if the appearances be reversed, viz., if the spot which was seen at the lower part of the luminous disk, when the concave lens was employed, should now appear on the upper part of the disk, the spot must be either in the crystalline lens, or somewhere between it and the compound focus formed within the eye, and the approximate distance of which focus from the crystalline lens may be calculated.



But if the apparent situation of the spot be the same as when the concave lens is used, such spot must be in the vitreous humour, and at a greater distance from the crystalline lens than the distance of the compound focus of the crystalline and the convex lens employed.

The spots, which I have described, are not visible under ordinary circumstances to the person in whose eye they exist, and have little, if any, effect on the distinctness of vision. If they are perfectly, or nearly opaque, they may be compared to wafers put upon the surface of the object glass of a telescope, which have no other influence on the image formed than that of rendering it less luminous, by impeding the transmission of a certain quantity of light. Such spots may, however, prove a most serious evil to the scientific observer, as their shadow is perceptible on looking through a telescope of high power.

If a spot is constantly seen by a patient under all ordinary circumstances, that spot, I conceive, must originate in some imperfection of the retina."

When the cure of cataract is not effected by the removal of the opacity, but by that of the lens itself, the restoration of the patient to his former state of vision is not implied, and ought not to be so understood. Convex glasses will always be required as a compensation for the loss of the lens, and a person, successfully operated upon, should have two pairs of glasses, one for close, and the other for distant, vision. In some cases the recovery is so far complete, that the sight restored is equal to the performance of all the common offices of life, including sometimes in young persons a moderate degree of reading and writing.

The proper period for operating is a subject of great importance, involving several considerations. The first is the period of the year. It has been supposed by many surgeons, and the opinion has been entertained and acted upon, particularly in France and Germany, that operations for cataract, and especially those by extraction, should only be performed during the spring and summer months, that is from April to October. This opinion, or rule, is a good one, so far as regards poor people, who cannot receive proper attention at home or in hospitals; but the experience my father has had in these complaints, induces him to believe that the season of the year makes little, if any, difference to persons in that situation of life, which enables them to have every comfort and accommodation about them. Poor people are apt to be neglected during the long nights of winter; they cannot be prevented from putting out their hands to help themselves when they want any article of drink, &c., and they then involuntarily move their eyes and do themselves mischief. He is, therefore, disposed to attribute anything unfavourable that there may be in the winter season, to the length of the nights, and the less degree of attention which is paid by night, rather than to the coldness of the weather or any other cause. As this neglect may take place with persons even of condition, he prefers long days and mild weather for these operations, unless delay is very inconvenient to the sufferers, in which case he does not hesitate about operating, taking, however, more than the ordinary precautions as to the attention given to the patients.

especially by night. You see that we operate only one day a week, in order that the nurses may not be overworked by sitting up, and I shall continue to do so as long as the weather remains tolerably mild. If I could ensure 20 cases at one time, I would do them all on the same day for the sake of saving trouble to the servants and to myself, but for no other reason; for it is better for you to have the opportunity of watching them in succession, inasmuch as few cases are exactly alike in their after treatment, and in many instances they require great attention and management.

The age of the patient is of no consequence, provided the state of health is good. Operations of all kinds succeed as well between 70 and 90 years, as at any previous period of life; and age, alone, is not therefore a cause of prevention, unless it should be conceived that the strength of the patient would not admit of the necessary privation from accustomed comforts which the operation might render requisite. The state of health should be what is usually considered good for the period of life, and the person should be free from any inflammatory disease. If liable to gout, rheumatism, or erysipelas, the operation should be done after a fit or an attack of either, and not when one is impending, or likely to occur on the application of any exciting cause. In persons subject to dyspepsia, hypochondriasis, or hysteria, it will be proper to strengthen the patient for two or three weeks previously to the operation, by attention to the bowels, and by the exhibition of some light alkaline bitter remedy, for the less irritable and nervous the patient is, the milder are the symptoms consequent on a successful operation, and the better able will the patient be to bear the means of cure, necessary to be resorted to, should the symptoms unfortunately become severe.

A course of preparation has been insisted upon by some, and has been as much neglected by others. It is certainly necessary in all instances, although it is more required in some cases than in others, and particularly in those persons who have a tendency to inflammation, so that they may be in the best possible condition to support the actions which may be induced by the operation, and to bear the means necessary for their repression, if required. If the patient is of a good habit of body, not inclined to indulge in great eating or drinking, and not prone to inflammatory affections, he should be restricted from animal food for a week or ten days, and all stimulating drinks; and he should be purged twice or three times during that period. If not far advanced in life, from ten to twelve ounces of blood may be drawn from the arm the evening previous to the operation, but this is a point which requires that knowledge which can only be acquired by experience in the practice of physic and surgery. If the patient is of a rigid fibre, inured to hardships, of a wiry form, and in high health, it may be proper to take blood even twice from the arm, and to enforce a greater degree of abstinence. If the condition of the patient should be the reverse, or if he is far advanced in life, or of a nervous, pallid, pasty, or leucophlegmatic habit, a few days' quietude and a gentle aperient will only be necessary.

If the eye, or its membranes, be in a chronic state of disease, it should, if possible, be remedied, and any minor operation be performed: such as ectropium, entropium, &c., before that for cataract is attempted. Derangement of the lachrymal passages is not a sufficient cause for preventing the operation; it only precludes the mode by extraction, if it can be accomplished in any other way; for the tears, finding an obstacle in their transit to the nose, regurgitate upon the eye and interfere with the union of the edges of the incision. If, from hardness of the cataract or other cause, extraction is the only mode of operating considered advisable, one eye should be done first, and the patient be made to lie on the opposite side, so as to favour the passage of the tears into the nose or over the inner angle of the eye.

The eyelids are frequently, in elderly people, in a state of chronic irritation, slightly tumefied, looking red, and causing a watery appearance of the eye, independently of disease of the lachrymal passages, and accompanied with a

secretion of mucus in a greater or less quantity, which encrusts on the lids, about the roots of the eyelashes, and glues them together in the morning; sometimes there is only a weeping of the eyes, with great relaxation of the fold of conjunctiva passing from the lower lid to the scleroticæ. In this case a slight touch of the sulphate of copper, every other morning, will soon give tone to the parts; whilst in the former, relief will be more readily obtained from the ung. hydrarg. nitrico oxydi, diluted with three or even six times its weight of the ung. cetacei, according as it excites irritation, gently rubbed every night on the edge of the tarsus within the cilia, whilst a little of the ung. hydrarg. nitr. or a drop of the tinct. ferri muriatis, diluted with three drops of water, may be instilled into the eye every morning. This application I have found of essential service in many chronic states of the eye; it is useful in most cases, in which the liq. plumbi diacetat. or the vinum opii is considered serviceable, and in some it has been found more useful; a solution of the sulphate of zinc alone, or combined with the nitrate of potass, in water, may be used with advantage, until the conjunctiva assumes its natural appearance, and the eyelids have recovered their usual softness and flexibility.

Pregnancy is usually considered as a state unfavourable to the operation, and during which, it ought, if possible, to be avoided.

When one eye only is affected, the propriety of operating on it is a question, on which much difference of opinion has been maintained, both on account of the utility, as on the expediency of doing it, and the reverse; one party contending with Sabatier, that the operation, if successful, only confuses the sight through the irregularity of the foci of the two eyes; and that, if unsuccessful, it might cause an affection of the sound eye, through sympathy of inflammation; whilst the deformity, produced by a failure of the operation, would be greater than the defect which appeared from the presence of the cataract. The other party maintained, with Wathen, that when the cataract was successfully removed, the eye gained a power of accommodating itself, so as to cause, after a short time, little or no inconvenience from the difference of focus, especially in persons who had been previously myopic; and that, although reasoning might be against this, facts were in its favour. Secondly, that the removal of the cataract from one eye prevented its formation in the other, and that they did not advise the performance of the operation, unless there was every reason to expect a fortunate result.

Maitre Jean, so far back as 1685, appears not to have had any hesitation on the subject, and relates several cases in his work, in which success seemed to have crowned his efforts. St. Yves does not seem to have doubted the propriety of it. Richter, at first, supported this opinion, but afterwards doubted its correctness. Wenzel strenuously advocated it, and makes mention of several successful cases in his work. I have performed the operation myself, both satisfactorily and the reverse. St. Yves, however, relates a case which alters the question materially, by adding another, and very important, reason for operating. It is of a person, who, having sustained an injury on one eye, which caused the formation of a cataract, began to suffer from amaurosis in the other. The operation for cataract having been performed under these circumstances, the amaurotic affection in the other eye began to subside, and, in the course of a year, was completely removed by the unassisted efforts of nature; but, as amaurosis often becomes stationary under proper treatment, it would not be easy to decide how much was attributable to the operation, how much to general treatment.

It appears to me, that a person had better be blind of one eye, seeing well with the other, than be obliged to carry a glass before the affected eye, to avoid having confused vision with the other. That the inconvenience of the loss of sight of one eye is scarcely felt, must be acknowledged by every one conversant with diseases of the eye; for many persons are only made acquainted with their loss by some accidental circumstance, which induces them to depend on the blind eye, when they find, to their great surprise and alarm, that it

is utterly deficient. That the sphere of vision, laterally, is diminished by the loss of one eye, cannot be doubted; but an operation seldom enlarges it in such a satisfactory manner, as to render it worth undergoing the risk attending it; and, admitting that the eye has the power, after a time, of adjusting itself to the alteration which has taken place, no one will venture to contend that direct vision will be improved by it, although it may be urged that it is not much impaired by it even without a glass. I have, however, met with several cases, in which great inconvenience was sustained by the confusion of vision caused by a successful operation. I have no hesitation in declaring it as my opinion, that, as far as the improvement of sight is concerned, the operation should not be attempted on one eye, whilst the other remains sound. If the sight of that one should become deranged from the commencement of cataract, or any other cause, the objection is of course completely removed. In local, or accidental, cataract, I do not believe the presence of an opaque lens in one eye has any influence on the other; neither does the removal of it prevent the formation of an opacity in the other at any subsequent period. The only reason there is for performing an operation, is to remove the deformity, and to restore that intelligence of countenance, which is much diminished by the presence of an opaque lens. If the patient has lately had inflammation of either eye, and especially if it has alternated, as it is frequently observed to do, the performance of an operation, which might re-excite dormant sympathies, would be manifestly improper, until a considerable time had elapsed, so as, in all probability, to allay this increase of sensibility; for we frequently see that inflammation will be produced at one period from a very trifling cause; whilst at another and subsequent one, great liberties may be taken with impunity. In forming our decision, much will depend on the nature of the cataract; if it be simple, and will admit of removal without difficulty, the operation will, in all probability, succeed; for, in the healthy state, one eye seldom sympathises with the other, unless considerable inflammation be induced.

A question has arisen as to the propriety of operating on both eyes at the same time, which has been as much disputed by one party, as it has been strongly enforced by the other. When cataracts are completely formed, the patient being only capable of distinguishing light, or the shadows of objects when passing before the eyes, and everything else promises a favourable result, both eyes should be operated upon at the same time; but it ought not to be done when any circumstances are present, likely to render the event doubtful, so that, if the first operation should fail, the patient will have one eye left for another attempt, under, perhaps, more favourable circumstances. The best argument which can be adduced in favour of operating on both eyes, is that the same treatment, the same time and confinement, answer for both, which, in delicate, nervous, people, is an object of importance, as the general health may be injured by the repetition of them, and particularly if any unfavourable circumstances should have taken place. If the patient should be subject to gout, rheumatism, or erysipelas, or is of a bad habit generally, one eye only should be operated upon at one time.

The state of the opacity, and of vision, materially influences our decision on this point. It frequently happens, that a cataract is completely formed in one eye, long before vision is impeded in the other, so as to prevent its being of service. In such a case, the patient should submit to his complaint, keep himself in a good state, and have the operation done on the eye first affected, as soon as the other becomes nearly unserviceable, so that he may, perhaps, have the good fortune of never being completely blind; or if not conveniently situated to effect this, or if both eyes are nearly in the same state, as to vision, to wait until he be blind of both. The advocates of the operation on one eye, whilst the other remains perfectly sound, have relied on the belief, that the removal of a cataract from one eye would prevent its formation in the other—an opinion which can in no way be depended upon, as I have already shewn. I have

seen many persons who have been operated upon twenty or thirty years ago on one eye, the other being, as they supposed, perfectly sound; nevertheless, in scarcely one did it appear that the occurrence or progress of the disease in the apparently sound eye was prevented; for the sight of that eye became gradually worse after the operation had been done on the other, until the cataract was completely formed, and vision was destroyed. In several of these cases, the patients can see so well with the eye that had been operated on, that they would not submit to its being done on the other. My father has not found, that operating on the eyes of pregnant women has always prevented the occurrence of the appearance of cataracts in the eyes of infants at birth, although the children of such persons have not all had cataracts.

Mr. C. Guthrie, after the lecture, performed the operation for artificial pupil, and Mr. B. Dasent operated for strabismus in three cases. Several operations for cataract were deferred until Wednesday next, when Mr. Guthrie will commence his lectures on the operations for cataract, and will illustrate them by practical demonstrations.

J. F.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

But the most essential of all the senses, that to which animals are indebted for a knowledge of surrounding objects, is sight. The objects upon whose position, shape and size, the sight has to form a judgment, must, of necessity, be lighted or luminous: luminous bodies emit rays which proceed with excessive rapidity in a straight line; luminous bodies, if opaque, or dull, reflect the rays they receive. When a luminous ray meets a smooth and transparent surface, it passes into it wholly if it be perpendicular, and partially if it be oblique; in the latter case, the penetrating ray deviates, and is refracted, passing from a line perpendicular to that surface, if the medium be of lesser density, and approaching to it, if the density of the new medium be greater: it thus forms an angle of refraction, greater in the former case, and smaller in the latter, than the angle of incidence with the perpendicular line. When the surface, on which the rays fall, is polished like a mirror, the oblique rays are, in part, reflected, and the greater the angle of incidence, the greater will be the quantity of the rays reflected: the angle of reflection is always equal to the angle of incidence, and the rays are always reflected with all their qualities of vividness and colour. If the surface be rough and dull, it reflects the light unequally from its different points, and in proportion to the intensity with which they had received it; and it is owing to the different intensity, that our eyes perceive the appearances of light, shade, form, and relief. Light, whether reflected from a dull surface, or passing through a transparent or prismatic body, undergoes decomposition, from which result colours. The instrument, adapted to all these operations, must be most complicated; and either considered as a whole, or in its smallest details, the sense of sight is, in itself, a wonder.

The apparatus by which the eye, in reality, is made the most perfect optical instrument, and by which the rays of light are so disposed as to produce regular and distinct impressions on the retina, is composed of parts, the form and density of which are different, but which combine in a single operation; the cornea, aqueous humour, lens, and vitreous humour, with their appendages, constitute

this apparatus, the mechanism of which is well known. But with this, our concern is less, than with its relations to the functions of the brain. The influence of the sight on the intellectual life of man knows no limit. Almost all the operations of the intelligence are no more than the consequences of the images perceived by this sense.

In man, the optic tracts, and the part of the brain adjacent to the crura cerebri, constitute the optic nerve; and, consequently, as this nerve has multiple roots in different parts of the encephalon, we must not be surprised at the sensitive, locomotive, or contractile phenomena, which we observe in its functions, lesions, and diseases. The same remark, however, applies to all nerves of the senses, and to all the encephalic centres; in none of them, shall we find any precise limits of structure: all are, more or less, related, or connected. This observation may explain how all these nerves, and all these centres, each with its own special functions, present also complex functions: the difficulty is to distinguish that which is peculiar to each, from that which is merely secondary.

IV.

CEREBRAL OPERATIONS.

In describing the anatomical mechanism of the successive operations, we pointed out, briefly, how it was possible to conceive and explain it. We have now to study the sensations in the cerebral lobes, where they are changed into determinations, will, memory, expressions, and where they become the cause of propensities, passions, and acts, more or less voluntary, the *ensemble* of which constitutes the principal intellectual phenomena.

In order to facilitate this study, let us call to mind that the motory and sensitive cords of the spinal marrow extend themselves throughout the almost totality of these lobes, an arrangement that fully explains their functions of motility and sensibility, and the great variety of lesions to which these functions are liable. We must next endeavour to find out, what influence the diversity of the internal structure of the hemispheres may have on the diversity of their functions. The corpus callosum, the optic tract, corpora striata, the medullary substance, the ventricles themselves, the convolutions, the internal, and superficial grey, substance, all differ from each other, as much in their conformation, as in their uses. To suppose that they had been arranged in such regular order, and with such perfect wisdom, without having to perform any determinate function, would, at the present day, be sheer blindness. Before entering, therefore, on the consideration of the general faculties of the hemispheres, it cannot but be profitable to retrace, in a few words, what is known of the different parts of the brain.

The corpus callosum had been considered, by ancient anatomists, as the centre of union of the two hemispheres; it has been, since, seen, that its reflected anterior portion unites the inferior convolutions of the frontal lobes; that its posterior is connected with the posterior convolutions, and its middle with the middle convolutions. The anterior commissure, which can be easily followed through the corpus striatum, as far as the sphenoidal convolutions of the posterior lobe, has been considered as the means of communication between these convolutions. The posterior commissure, which is lost in the substance of the optic tracts, answers the same end for these tracts. We see, then, how important it is to bear these anatomical facts in mind, when we want to account for the disorders produced by alteration of any given region, or convolution, of the brain.

The posterior pillars of the fornix serve as a commissure for the posterior convolutions of the middle lobe.

The crossing of the fibres of the corpus callosum, from one side to the other, is now established on the clearest evidence. It does not appear to be endowed with any great sensibility; its lesions, especially when they occur on the median line, are productive of the general phenomena of paralysis; by its function, as a bond of union between the hemispheres, it contributes to the unity of their double action.

According to some, the corpus striatum, and optic tract, regulate: the former, the action of

the leg; the latter, that of the arm. We cannot, however, admit, that organs, so largely developed as these are in man, should be destined to such secondary uses: they exercise, without doubt, some very important action, although it has not yet been determined, upon the higher faculties of the intellect, and even of the sensibility. The use of the ventricles is still one of the obscure points of physiology.

But the most essential circumstance, in regard to the brain, is unquestionably the number and arrangement of the convolutions and anfractuositities with which the whole brain is covered; those, on the convexity of the hemispheres, being the largest and most complicated. They vary, however, in size, number and depth. Being anxious to determine whether I could appreciate, externally, the number of the frontal convolutions, I am led to believe, that the result can be determined almost positively. With this view, I measured the space between the meatus of the ear and the root of the nose, following the arch of the orbit to the lower part of the forehead. I found the differences of measurement in individuals to be considerable, varying from three, four, four and a half, to six and seven, inches. This is an enormous disproportion, and must, of necessity, profoundly influence the intellectual development. In men of very limited intellect, whose ideas could scarcely reach beyond mere manual labour, in many women, and in several negroes, also subjected to this examination, this distance did not exceed four inches and a half, or, at the very utmost, five inches. In men, holding high rank in the social scale, this distance exceeds six inches and a half. It is easy to conceive, that the development of the frontal convolutions must augment this distance, which may become a measure, almost certain, for appreciating the intellectual faculties of the frontal region.

The parietal convolutions are of larger size, usually, than the frontal. The occipital are smaller, more sinuous, and numerous. Neumann and Leuret, seeing that these convolutions are only found in man, have supposed that his intellectual superiority might depend on this portion of the brain! but this is a mere exaggeration; for the brain of man is comparatively more perfect—equally in its superior, anterior, and lateral regions. It is ascertained that, in old men, in a state of demency, the occipital convolutions are atrophied. Comparative anatomy also shows that, in the animal series, the posterior part of the brain is the first to diminish, until it entirely disappears. The occipital lobe has an undoubted share in the intellectual phenomena; but, to assert that it is their sole seat, would be to uphold a too exclusive opinion.

Others have given a physiological explanation of the uses of the convolutions and anfractuositities of the brain; they have compared nervous phenomena to those of electricity, imagining that the cerebral action was developed in the same manner as the electric fluid, in the ratio of the surfaces; and as these surfaces are much more developed in man than in animals, this appeared to them to be the cause of his superiority: this presents the same fact, but with a different explanation.

Let us now consider the cerebral sensations, and the phenomena to which they give rise.

The sensations, or impressions, which the two cerebral lobes perceive through the senses, are the foundation and essence of all the other cerebral operations. Suppose a person completely destitute of the senses of sight, hearing, smell, taste, touch, and of the feeling of visceral reactions, he would be completely destitute of ideas, and, as a consequence, would neither possess memory nor will. It is only through the senses, as means of perception, and by means of an insensible and continual education, that he becomes habituated to see and to retain in his brain images, and to hear and to retain sounds; to smell, touch, taste; and to comprehend the stimulus of his visceral wants: hunger, thirst, and other internal sensations. The sensations, then, are the unique source of the other faculties; and we may, therefore, affirm, that the brain is the organ of the sensations.

But these sensations would be sterile, if they did not remain impressed in the cerebral tissue in

such a way, as to be capable of being found again, and revived, sometimes, even after many years; if they did not in a word become memory. If I were asked, in what portion of the brain the sensations were thus engraved, and thus became memory, I should answer, unhesitatingly, in the lamellæ or leaves of the convolutions of the whole surfaces of the hemispheres; I would say, that they are engraved on these lamellæ, on which they remain like the images on plates subjected to the daguerreotype, and perhaps by means of a very analogous mechanism; and that, for this localization of the sensations and of the memory, in the lamellæ or leaves of the convolutions, that is to say on the periphery of the brain, proofs, both physiological and pathological, abound.

It is always by confusion of the sensations and of memory, that the first effects of intoxication are manifested: that is, of the alcoholic action on the convolutions, by means of the pia-mater; it is also by confusion of sensation and memory that dementia and general paralysis foreshew their coming, and these affections are always accompanied by disorder, more or less general, in the convolutions of the brain, as we shall see hereafter.

We shall now affirm, therefore, that, not only is the brain the organ of the sensations, but also that it is in the convolutions that they are perceived and treasured up; that the convolutions, therefore, are the receptacle of the sensations, and the organ of memory; and we attribute this general property, as well to the convolutions of the convex surface of the hemispheres, as to those of the internal, and the inferior, surfaces. The more ample, large, and deep, the convolutions are, in an individual, the more capable is he of receiving sensations, of having memory and, consequently, ideas; the more is he intelligent: this is a chain of functional power which is in perfect relation with his structure. As to the grey substance, which envelopes the convolutions and which has been supposed by some to be the seat of this function, so vaguely denominated—intellect, we consider it to be simply an organ of nutrition, of reinforcement, for the nervous substance, and as a vascular tissue, interposed between it and the lamellæ, to protect them against the too direct action of the blood-vessels.

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSSWILL, Esq., Surgeon, Leicester.

(Continued from page 116.)

THE food, which is received daily into the system, contains the elements of the blood. The waste, which at every moment takes place in the body, by the absorption and elimination of old material, as well as the deposition of new matter during the process of nutrition, is sustained by a renewal of the same elements, derived from the food we consume. Organic bodies, according to Liebig, are incapable of generating, of themselves, the elements of any of their parts; all they are able to accomplish, is, the separation of their principles from substances containing them, and the applying and combining of them to their own purposes.

The blood contains not only material for nutrition, but also those compounds which, after having served their physiological purposes, are intended to be separated as excrementitious substances from the system. From the fluid condition—as arterial blood—the tissues are deposited and converted into a solid organism: from the solid, they again become transformed into the fluid state, in order that they may be finally discharged from the body.

To enable a just conception to be formed of the chemical composition of the body, as likewise of the character of its excretions, it is necessary to refer to an analysis of the blood. According to Le Canu, who has devoted more attention to this subject than any of his predecessors,—its component parts may be examined in the subjoined table:—

Water	780.145
Fibrin	2.100
Colouring matter	133.000
Albumen	65.090
Fat, crystalline	6.430
Fat, oily	1.310
Extractive matter soluble in alcohol } and water	1.790
Albumen united to soda	1.265
Chlorides of sodium and potassium }	
Carbonates } of potash and soda	8.370
Phosphates } Sulphates }	
Carbonate of lime and magnesia	
Phosphate of lime, magnesia, and iron . }	2.100
Peroxide of iron	
Loss	2.400
	1000.000

These constituents Le Canu found to vary, according to temperament and disease. He asserts, that the blood of persons of the lymphatic temperament contains more water, than that of those of the sanguine; he also found that the blood-globules were much more numerous in individuals of the latter, than in those of the former, temperament. The fibrin, too, presents considerable variation of proportion in different subjects;—even in the state of health, it is more considerable in the young and sanguine than in the old and lymphatic; the salts contained in the blood are, no doubt, equally influenced by the same causes, as is proved by the relative proportionate constituents of the bones, in different persons of different temperaments and ages. In addition to the effect which temperament and age has, in increasing or diminishing the number of the red-globules, various diseases have a most powerful influence in producing the same result. In phthisis, for instance, it has been proved that their number continues steadily to decrease from the commencement to the termination. It has also been satisfactorily proved, that these bodies take no part in the nutritive purpose, and that the intention they fulfil is to transport oxygen to the capillaries, there to effect those combinations with the disintegrated tissues, the result of which is the formation of carbonic acid and water. If, therefore, these bodies are admitted as not participating in the nutritive process, and yet gradually disappear, it is clear that their component parts must either have entered into new combinations, or must have been separated from the system in the shape of excretions, and this is accomplished by the action of oxygen upon them, by a process of self-combustion.

In persons affected with phthisis, the blood undergoes an alteration in quality; it becomes poorer, and contains more serum and less fibrin;—consequently, were we to subtract the constituents entering into the blood of a person, under the influence of phthisis, from those of one in perfect health, we should arrive at a certain knowledge of those materials, entering into its composition, in which the blood suffers a deterioration.

The soluble inorganic, as well as the soluble organic, matter taken into the body in the shape of food, is absorbed and received into the circulation, to form a part of the new blood;—the insoluble, effete and innutritious material being rejected, and voided as excrementitious matter by the bowels. In the feces of the carnivora, we have little else presented, excepting the insoluble earthy phosphates, constituting bone-earth, which had originally entered into the composition of their food, together with a small proportion of mucus which had assisted in promoting its passage through the intestinal canal.

The soda, which enters the circulation, constitutes no part in the formation of any organized structure; it is met with only in the serum of the blood, in the fat of the brain, and in the bile;—consequently, the blood, which is deposited as a component of any organism, gives up the soda it contained to the tissues of the metamorphosed parts, to assist in the process of the formation of the bile, and is finally excreted in the urine as phosphate, carbonate, and hippurate of soda—(Liebig.)

The lime, which is contained in the blood, exists

as a soluble super-phosphate (Liebig, Muller,) and is deposited in all those organs of which lime forms a component part as an insoluble sub-phosphate (Muller,); when thrown off as a metamorphosed portion of those tissues, it re-enters the circulation as a soluble super-phosphate (Liebig,) and is excreted by the kidneys as such in a soluble condition (Muller). Muratic acid enters the circulation combined with bases, taken with the food, as, for instance, in combination with sodium, forming the chloride of sodium, or common salt.

Lastly, all the tissues, with the exception of cellular tissue and membrane, contain phosphoric acid and sulphur, the latter being converted into sulphuric acid, in the capillaries, by the action upon it of the oxygen of the arterial blood; whilst, however, there exist in the circulation these various acids and their bases, traces only of phosphates or sulphates can be discovered in the various fluids of the body, except in the urine, where they abundantly exist; they are therefore derived from the metamorphosed tissues, and enter the venous blood, as soluble salts, and are separated from the blood in the kidneys (Liebig); consequently, in their passage they travel through the capillaries, the liver, and the lungs, as soluble salts, and finally arrive as such at the kidneys. If, at any point in their course, from any cause they become insoluble, at that point must an irritating foreign body be deposited.

We have now seen in what state the inorganic constituents of the body exist in the blood, and how they enter it, namely, in a soluble condition; whilst we have also stated that, when they form a portion of the solids, it is as an insoluble component of their structure. We shall now proceed to investigate the means by which they are excreted from the body, when they have ceased to take a part in its vital function; but, as bone-earth forms a prominent part in the composition of these excretions, we shall first consider the chemical conditions under which it exists in the body.

The composition of bone-earth may be said to consist of phosphate of lime, carbonate of lime, a small quantity of phosphate of magnesia, and fluoride of calcium; in the analysis of human bone, as afforded by Berzelius, we have these elements given in the following proportions:—

Cartilage soluble in water	32.17
Vessels	1.13
Sub-phosphate of lime	51.04
Carbonate of lime	11.30
Fluate of lime	2.00
Phosphate of magnesia	1.16
Soda with a minute quantity of } chloride of sodium	1.20

100.00

As phosphate of lime exists in the bone, it is presented as an insoluble sub-salt of that earth, such as is obtained when the super-phosphate is precipitated by excess of ammonia; in the circulation, and in the healthy urine, it is always presented as a soluble super-phosphate, and it is to this fact that I wish to draw particular attention, since much of the explanation which I shall have to offer, respecting the cause of tuberculous deposit, will relate to these conditions of lime: first, as it exists in the bone, considered as an insoluble phosphate, and, secondly, as it is presented in the circulation, and urine, as a soluble super-phosphate.

In addition to the chemical composition of bone-earth, it must be remembered that its proportions vary considerably with the age of the individual. In children, the earthy material constitutes one-half the entire weight of the bone; in adults, four-fifths of the weight; and in those of old people, it forms seven-eighths of the entire mass; hence, bone-earth is more abundantly deposited, and less actively absorbed, as we advance in years, a fact, full of significance, to account for the more frequent occurrence of consumption in youth.

The chief organs, engaged in the depuration of the blood from inorganic compounds, are the kidneys, whose secretion will immediately attract our attention; a small amount of earthy phosphates is, however, given off by the skin, the perspiratory fluid containing phosphate and carbonate of lime, together with a trace of the oxide of iron.

The Urine.—By means of the urinary secretion,

the decomposed and effete animal principles are separated from the body, as urea and uric acid, as saline compounds and foreign matter, either in an altered state, or in their original condition. "All substances, excreted with the urine, must be in solution; they cannot exist in the state of granules" (Müller), at the time of excretion: those materials which do not pass off from the system, by the urine, are either eliminated by other organs, for instance, by exhalation from the surface, as in the case of camphor; or they are reduced to an insoluble condition in the intestinal canal itself, and never enter the circulation. Extraneous matter in the circulation is not excreted with equal facility, by all the free surfaces of the body; on the contrary, different excreting organs manifest varying degrees of attraction for different foreign substances, of which some are excreted with greater facility by one organ, some by another. Magendie and Teidemann have shewn, that alcohol, camphor, spirit of turpentine, musk, and phosphorus, are exhaled by the lungs, while saline, and many colouring, matters pass off by the kidneys.

It can, I conceive, scarcely admit of a doubt, that it is impossible for anything to enter the circulation in an insoluble form; even the iron, which constitutes a part of the composition of the blood-globules, is not an exception; all matter, I apprehend, must enter the circulating fluid in solution, and whatever principles may be discovered in the blood, in an insoluble state, I assert, in accordance with my conviction, must be the result of changes which have occurred in that fluid, subsequently to their entrance into it; and, although the iron, which is undeniably presented by the blood in an insoluble condition, may appear as an objection to this assertion, still it must be borne in remembrance, that it here forms a part of an organised solid, whose organic functions can only be performed by being continually whirled on, in the progress of the circulation. The urine of the carnivora is acid, and contains alkaline bases united with uric, phosphoric, and sulphuric acids; the soda in their urine is found in combination with sulphuric and phosphoric acids, and, along with the phosphate and sulphate of soda, we never fail to find a certain quantity either of muriate or phosphate of ammonia; the soda of their bile, or of the metamorphosed constituents of their blood, is very far from sufficing to neutralise the acids, which are separated, as is proved by the presence of ammonia in their urine. The urine, moreover, has an acid re-action. On the other hand, the urine of the herbivora is alkaline, containing alkaline carbonates in abundance, and so small a portion of alealine phosphates as to have been overlooked by most observers. This deficiency of alealine phosphates, in the urine of these animals, obviously indicates the slowness with which their tissues are metamorphosed. In the herbivora, soda exists in the urine in a predominating degree, and that, not in combination with sulphuric or phosphoric acids, but with carbonic, benzoic, and hippuric acids. (Liebig.)

To form any definite analytical table of the urine is impossible, it being admitted that no secretion is so materially influenced by every variety of agents; it would not, therefore, advance our investigations, were we to offer an analysis, unless it could be received as one, generally constant in its constituent elements.

That the origin of many diseases results from the presence of insoluble matter in the blood, cannot, I think, be denied; many affections can be satisfactorily traced to this source. Those principles which, in a healthy condition, we know naturally to exist in the circulating fluid, as soluble components of it, having become insoluble compounds—being carried in the course of circulation, as such—at length meet with that obstruction, which leads to their deposition as foreign bodies. The irritation which these bodies, so deposited, establishes, is the true source of the train of symptoms which subsequently follow. If, by any means, this deposition become re-dissolved, its presence, as an extraneous body, ceases; but if it continue in the insoluble condition, and cannot be expelled, it forms a nucleus for fresh deposit, around which nature, in her endeavour to preserve from injury the surrounding tissues, effuses al-

bumen. These principles—the cause of future deposition—carried in the course of the circulation, generally consist of insoluble salts, and especially of the insoluble sub-phosphate and carbonate of lime, which may originate, either from deficiency of phosphoric acid in the system, resulting from an insufficient supply of animal food, or from deficient amount of exercise to cause adequate disintegration of organic tissue, in order to furnish this acid, upon which the solubility of bone-earth depends; or, it may arise from a positive excess of lime, introduced into the circulation in a state of solution, through the medium of the water we are daily in the habit of drinking, and where the acid, in combination with it, exercising its affinities for some other base, with which it meets, causes the soluble super-phosphate of lime to combine with it, giving rise to the production of an insoluble sub-phosphate. Nor is this improbable; for Brande asserts, that there exists the greatest tendency for phosphoric acid to form, with lime, a basic or sub-salt.

Having made these preliminary observations, I shall offer a few cursory remarks upon the origin of certain diseases, whose existence has been assumed as depending upon the presence of insoluble matter in the blood. The chief of such affections are: gout, rheumatism, salivary concretions, and, perhaps, foreign bodies in the joints; all of which originate from insoluble principles, present in the circulation, deposited in those parts where the affection resides, giving rise to irritation and its results. Urinary calculi must not be regarded as the consequence of abnormal changes in the course of the circulation, but as formations occurring subsequently to secretion; and I am disposed to believe, that salivary concretions, and even those substances formed in the joints, recognised as foreign bodies, should be viewed in the same light, since they are the result of changes effected after secretion, but which secretion, unlike that of the urine, has, in the healthy condition, to be re-absorbed into the circulation. Gout arises, chiefly, from the deposit of a solid lithate of soda in the cartilages of the joints, in the hursæ mucosæ, sheaths of tendons, and cellular tissue. Rheumatism results from a semi-fluid lithate of soda, having its "nidus" in the muscular or fibrous tissues. Liebig asserts that the lithic acid, entering into combination with the soda, occurs when the quantity of oxygen absorbed is insufficient to combine with the metamorphosed tissues; and that uric acid and oxalic acid calculi have never been observed in phthisical people; nor, continues he, have concretions of uric acid ever been found in the wild carnivora; and, among nations living entirely on animal diet, deposits of uric acid concretions in the limbs or bladder are unknown. Urinary calculi must be regarded as the products of chemical combinations, subsequent to the process of excretion, arising from deficiency of those elements which retain the salts in permanent solution, or from the unusual formation of others, which, in combination with existing bases, give rise to the formation of insoluble compounds.

After the preliminary remarks which have been offered, respecting the soluble condition of the salts contained in the blood, and the production of certain diseases by their conversion into insoluble compounds, it will not excite surprise when I state, in accordance with my views, the proximate cause of tubercular deposit to originate from an analogous change; but, before proceeding further in the investigation, I think it preferable to explain, in general terms, how I conceive this change to occur, in order that we may understand the application of subsequent statements.

The proximate cause of tubercle, I conceive to be, lime existing and circulating in the blood, in the condition of bone-earth, as an insoluble sub-phosphate of lime, or introduced into the circulation by the food, in a soluble state, but which, subsequently, having parted with the acid, with which it was originally in combination, circulates as free lime, until it meets with some new acid with which to combine, when the soluble or insoluble nature of the salt, thus formed, will depend upon the combining acid; if it enter into chemical union with carbonic acid, an insoluble carbonate of lime results. These insoluble salts—carbonate of

lime, and sub-phosphate of lime—circulating with the blood, arrive at those organs where the capillary changes occur, and where, from their insoluble nature, and inability to pass through the minute capillary ramifications, they are deposited as irritating foreign bodies, forming a nucleus for that future deposit, consisting of more lime, and albumen, for which lime has a strong affinity, forming, in combination with it, an insoluble compound of albumen and lime, known by the name of, and recognised as, tubercle. I do not, however, anticipate that this change, in the soluble character of the salts contained in the blood, can happen only in the general course of the circulation; it can occur at any time, and in any part, where these soluble ingredients meet with a different base, or another acid for which they have a greater affinity, and by combining with which they are reduced to an insoluble condition.*

PROGRESS OF FRENCH SCIENCE,

FROM OUR OWN CORRESPONDENT.

Paris, Nov. 14, 1844.

On Varicocèle.—Dr. Vidal (de Cassis) has just published an article in the *Annales de Chirurgie*, which may be considered as the complement to the memoir read before the Academy of Medicine, and published at length in the *Medical Times* (vol. x. pp. 243 and 262.) To the six successful cases, related in that memoir, the author now adds fourteen more, of which a brief analysis shall be given. Case 1st.—A. R., ætat. 22, entered the hospital on 7th Dec. 1843; operated on, on the 15th, on the left side; ligature, having divided the varicose veins, was removed on the 17th, after separating the skin, and the cure was complete on the 23d; the testicle, on the diseased side, being not only on a level with, but even higher than, its fellow.—2d. N., aged 20; left varicocèle; operated on, on the 14th Feb.; it being impossible to separate a voluminous varicose vein from the vas deferens; this last was included in the ligature. During the operation, the pain was not greater than usual; but, in the night, slight re-action took place, with colics, vomitings, &c. but which yielded to lotions of cold water, and opiates internally. The ligature was removed on the 2d March, leaving a wound about an inch and a half in extent, whose cicatrization was hastened by cauterizations with the azotate of silver. *Exeat*, 25th March.—3d. L., ætat. 21: no varices, or hæmorrhoids; was not aware that the disease existed, until he presented himself as a soldier; operated on, on the 17th Feb.; ligature removed on the 5th March, by the division of the skin; cauterization with the nitrate of silver: cure complete, 6th April.—4th. C., ætat. 24, double varicocèle; left larger; no varices, or hæmorrhoids; operated on, on the left side, the 21st Dec. 1843, by Dr. Gagnebè's method, modified by Dr. Ricord; ligature removed on 25th January; but, twelve days after, the swelling was as large as ever; therefore, on the 14th Feb., the operation was performed by the author's method; no accident; ligature removed on the 26th, and on the 5th March it was placed on the right side, and taken off on the 19th. A fortnight after, the patient left the hospital quite well.—5th. B., ætat. 25: left side affected; operation on the 26th March; prompt cure.—6th. Shoemaker, ætat. 28; thrice affected with gonorrhœa; orchitis on the left side, followed by varicocèle; operation per-

* It may be enquired: if it be assumed that the presence of an insoluble salt in the blood be the cause of tubercular deposit, how is it that the insoluble lithate of soda does not produce the same result? In answer to this objection, I reply: that, before the venous blood reaches the lungs, the great mass of it undergoes the filtration of the liver, which separates the soda in order to form bile; and, secondly, that since Liebig has asserted the formation of lithic acid to result from a deficiency of oxygen, the lungs, whose function it is to inspire this gas, are the last organs where we should expect its existence; in addition to which, certain tissues present a peculiar disposition to be the subjects of particular and characteristic affections.

formed on the 11th March; no accident; and on the 25th, the skin alone preventing the ligature from falling off, it was divided with the bistoury, which caused a slight hæmorrhage from the cutaneous vessels, but which yielded to pressure; œdematous condition of testicle; application of twenty leeches: cure complete on the 20th April.—7th. B., ætat. 26: double varicocele, very painful, and so heavy that a suspensory bandage was requisite, even when in the horizontal position; testicles reduced in size; voice like that of an eunuch; operation performed on both sides on the 9th May; during the day, pain occurred, accompanied with colics, and slight nausea, which soon disappeared; ligature removed on the 25th, on the left side, and, on the 28th, on the right; the 31st, application of twenty leeches to the perinæum to hasten the *dégorgement*. Left the hospital, 29th June; the voice had then assumed its natural tone.—8th. D., ætat. 25: varicocele on the left side, complicated with epididymitis; operated on, on the 16th May; the second day after, there was local inflammation, accompanied by fever, and smart colics declared themselves, but soon yielded to emollient poultices; during the night of the 30th, slight shiverings took place, and, on examination, the next day, fluctuation was found to exist externally, and a bistoury being plunged into the part, allowed about a tablespoonful of pus to escape; after which, resolution proceeded rapidly, so that the cure was complete on the 29th June.—9th. P., ætat. 22: affection on the left side; small varices on the right leg; operated on, on the 19th June; smart pain during operation, but which soon ceased; ligature removed on the 4th July, after dividing the skin only with the bistoury; slight hæmorrhage, which increased in the course of the day, and to such an extent, that compression became needful; this was, however, productive of beneficial effects, as it reduced the inflammation; finally, on the 20th July, he left the hospital, and though the wound was not quite healed, still the testicle presented no tendency to descend.—10th. J., ætat. 21: wishing to enlist, but refused on account of a varicocele on the left side, came to the hospital, where he was received on the 15th July; operated on, on the 24th, the ligature was removed on the 6th August, and he felt quite well on the 31st Aug.—11th. D., ætat. 25: operated on, on the 18th May; ligature removed on the 2d June; hæmorrhage sufficient to render compression requisite; 5th June, 20 leeches were applied to hasten the resolution; but, at the end of June, a small fold of the skin still remained swollen; Dr. Vidal removed it with a stroke of the scissors, and, in a few days, the cicatrix was perfect, but much more apparent than if it had taken place without this last operation.—12th. C., ætat. 26, operated on, on the 30th May; left side; ligature removed on the 16th June; no accident; patient left the hospital on the 13th July, although cicatrization was not complete.—13th. L., ætat. 21: operated on, on the left side, 11th July; ligature removed the 27th July; no accident; slight cutaneous hæmorrhage. *Exeat*, 23d Aug.—14th. M., ætat. 22: double varicocele; operated on, on both sides, on 6th August; ligature removed, the 18th August, on the left, and the 21st, on the right, side; cicatrization complete the 3d Oct. These cases are sufficient to prove the usefulness of the method proposed by Dr. Vidal (de Cassis.) As to the causes of the disease: the principal ones were,—bleorrhagia, onanism, excess of venery, exercise, constipation. The operation was, in every case, except the last (in which the patient was laid on a bed), performed in the erect position.

On Cauterization in Diseases of the Skin.—Almost every species of caustic has been advocated, and employed, in diseases of the skin; but, as the choice is not a matter of indifference, a brief analysis of a memoir, just published by Dr. A. Cazenave, may be of use. The author passes in review the various caustics, and the disorders in which they may be had recourse to advantageously. *Actual cautery*: employed only in the pustula maligna, and inoculated wounds. *Nitrate of silver*: in erysipelas, variola, zona, &c.; often prescribed by Alibert. *Powders*: only two; the others are made into a paste ere they are applied. *Dupuytren's powder*: R. Arsen. alb. 3j., calomel. 3j., m. ft. pulvis; use-

ful in limited, superficial lupus, when it affects young children, women, or individuals whose skin is fair and irritable; if the part is not moist, a small blister must be applied before the caustic; this last produces, in half an hour or an hour, a slight degree of heat and swelling, and forms, with the moisture exhaled from the part, at first a soft paste, which is soon changed into a dry, greyish crust, and, on falling, shows that the part is so modified, that two or three applications are often enough to obtain a cure. *Vienna powder*, in *noli me tangere*, when it has penetrated so deeply as to be reached with difficulty by a paste. *Liquid caustics*: in chronic eczema; chronic impetigo; to hasten the cicatrization of the ulcers which exist in certain species of ecthyma, in patients of a deteriorated constitution; in these cases, the solution of the *azotate of silver*, or *hydrochloric acid*, more or less diluted, may be employed. The solution of *sulphate of copper*, to destroy the small epidermic hypertrophies, similar to warts, which appear on the back and shoulders, and the horny productions which sometimes appear on the chest, and back, with a fungous base; in the latter case Dr. C. prescribes—R. Sulphat. cupri. ʒi. aquæ destill. ʒviij.; m. ft. lotio. In favus, weak solutions of sulphate of copper, or nitrate of silver, acid washes, especially diluted acetic acid: in lupus, the deutoclhoruretum antimonii, or the hydrargyr. nitr. acid. The latter, applied in large quantities on a small surface, acts only as a caustic; but if put on large surfaces in small quantities, or diluted, it cauterizes superficially, and modifies the system after having been absorbed. *Pastes*: That of the *chloruret of zinc*, composed as follows:—R. Chloruret. zinci. 3j., farinæ tritici 3j.—3ij., aquæ puræ, q. s. A layer of a line or two in thickness, placed on a part, produces, after a few minutes, pain, which increases gradually, and lasts several hours, followed by a thin, hard, greyish scab, which falls off after about a fortnight or three weeks. *Vienna caustic*: employed in the same cases as the former; ought to be preferred when the disease is very limited, so that one or two deep cauterizations will suffice. *Arsenical paste*: has been neglected, and, without just reason, the two former preferred; its action is two-fold, local and general; the formula employed by Dr. C. is—R. Oxyd. arsen. alb. grs. x; hydrargyr. sulphuret. ʒiiss., pulv. carbon. animal. grs. x. M. A sufficient quantity to cover a surface, not larger than a shilling, is made into a paste; when put on, the pain does not take place immediately, but only after a few minutes, and gradually increases, until the skin assumes an erysipelatous aspect, with other serious symptoms, which, however, generally subside after 24 or 36 hours, leaving a hard brown crust, which does not fall off before a month. This paste is especially useful in lupus, complicated with ulcers which tend to increase constantly in depth.—*Annales des Maladies de la Peau*.

On the action of Fatty Oils on the Economy. By Messrs. Gluge and Thierneisse.—In this memoir, read before the Academy of Medicine, Brussels, the authors give the following experiments, performed by them:—1°. *Injections of olive oil into the external jugular vein.* Performed on four dogs. In the first experiment, two injections were made, of ʒiv. each; death, two hours after the second injection. In the second, three injections of ʒij. each; death, one hour after the third. In the third, two injections, one of ʒiv. the other of ʒvj.; death, ten days after. In the fourth, two injections, of ʒvj. each; death, 20 days after the second. 2°. *Injections of fish oil (oleum gadi morrh.) into the external jugular vein.* Four experiments: (a) two injections, of ʒij. each; death, 13 days after the latter. (b) An injection of ʒij. was made, but, being very thick, it caused death by obliterating the pulmonary capillaries. (c) Injection of ʒiv.; death, an hour after, the animal being asphyxiated. (d) Same dose; same result. 3°. *Administration of olive oil by the mouth*: dose increased daily, commencing with a tablespoonful. 4°. *Administration of fish oil by the mouth*: dose, a table spoonful, increasing half a table spoonful daily. From these experiments, the authors conclude—1°. That olive oil and fish oil, of a lemon colour, do not present any material difference in their action on the animal economy, whether given by the mouth, or injected into the veins,

except in some cases, in which the fibrine of the blood and muscles had become denser when fish oil had been given internally; this phenomenon, however, was not constant. 2°. That thick, dark-brown, fish oil, injected into the veins, causes prompt asphyxia, and decomposes the blood, which is proved by the irregular shape of the globules, and the existence of crystals in this liquid, discovered by the aid of the microscope. 3°. That fatty oils, however administered, have a natural tendency to deposit themselves in the liver, lungs, and kidneys. 4°. That this takes place in these organs in two modes:—they are deposited in the parenchyma by transudation, or in the biliary cells, the pulmonary cells, or the uriniferous canals. 5°. That animals resist the injection of these oils in the veins, even when repeated, if small quantities be employed each time: the oil disappears first in the blood, and successively from the lungs, liver, and kidneys. 6°. That their effect, when administered by the mouth, differs according to the dose and the length of time during which they are given. 7°. That, when the dose is increased daily, the animals lose their appetite, grow thinner, cough, and are affected with dyspnoea; finally, the dogs died after a month, and rabbits sooner, with all the symptoms of intense pneumonia. 8°. That the lesions, found at the autopsies, are—total or partial hepatization of the lungs; accumulation of a fatty matter in the parenchyma of the lungs, liver, and kidneys. 9°. That the hepatization is in a precise ratio with the quantity of oil introduced into the economy. 10°. That, when oil is given by the mouth, it is absorbed in the intestines, and through the medium of the circulation carried to the different organs in which it is deposited—lungs, liver, kidneys—giving rise to what is called fatty lungs (*poumons gras*), fatty liver (*foie gras*), fatty kidneys (*reins gras*). 11°. That imperfect digestion, caused by too powerful a dose of oil, produces a peculiar species of pneumonia, designated, by former writers, under the name of *bilious pneumonia*. Of late, the existence of this disease has not only been considered as doubtful, but even as impossible, which is to be attributed to the systematic opinions reigning, and which have led many distinguished authors to form erroneous views. 12°. That, when a fatty oil is given in small doses, and for a short time, it disappears gradually from the blood, and the organs in which it was deposited. 13°. That animals, to which small and equal doses are administered daily, experience no morbid symptoms. 14°. That fatty oils undergo no change after their absorption, or when injected into the veins, ere they reach the lungs, liver, or kidneys. 15°. That it is only in these organs that this change takes place, a fact which renders highly probable the hypothesis, that the fatty oils are burnt in the lungs, changed into bile in the liver, and form part of the principles contained in the urine. This important physiological question remains, however, to be elucidated. 16°. That, when oil is prescribed as a remedy, the muscles as well as the lungs must be made to act, and attention must be paid to the doses; for instance, if the oleum gad. morrh. is useful, when properly administered, it may, in a very short time, produce serious accidents, if taken in too large doses, and carelessly. This shews how needful it is, not to permit it to be given by ignorant persons. 17°. That fish oil, of a dark colour, ought never to be prescribed, even when the digestive process is able to neutralize or destroy part of its pernicious qualities. 18°. That fatty oils produce the same organic modifications, especially fatty pneumonia, in the herbivore as in the carnivore.—*Gazette Medicale*.

Internal Metrorrhagia during Pregnancy, caused apparently by Venesection; death of the Mother.—According to the numerous authors who have written on midwifery, bleeding has been considered as one of the best modes of preventing a miscarriage, when not carried to the extent to produce syncope. A. Petit considers it as one of the best means of quieting the mother and the fœtus; the convulsions experienced, sometimes, by the latter, may produce such pain as to be followed by abortion; a little blood drawn, from the mother, causes them to cease instantaneously. Baudelocque states that it is a very powerful antispasmodic. The following case, published by Dr. Loir, shows

that it may sometimes give rise to convulsive movements in the fœtus, which, by detaching a portion of the placenta, may cause fatal internal hæmorrhage:—Mrs. —, ætat 30, had reached her seventh month, without any accident; but then, signs of plethora came on, and increased to such an extent, that Dr. Loir considered it prudent to perform venesection; eight ounces of blood were, therefore, taken from the arm, the patient sitting; nothing occurred immediately, but, sometime after, on wishing to move about, she experienced a general uneasiness, accompanied with an unpleasant sensation in the abdomen, which ceased on her remaining quiet a few hours. The plethoric phenomena disappeared, but the patient said she was not so well, and did not feel her child move; auscultation being performed on the 30th, the throbbing of the foetal heart, and the flow of the blood into the placenta, were heard. On the 3rd of May, the patient, while walking, experienced an unpleasant sensation in the abdomen, followed by a weight on the rectum, and pain in the loins. 4th. To the preceding symptoms, were added nausea, vomiting, syncope, fleeting abdominal pains, painful constriction of the epigastric region; at three, a.m. Dr. Loir was called in, and was struck with the paleness of the patient, the feebleness of the pulse, and the extreme coldness of the extremities. The heart beat regularly, but frequently; uterus not more developed than natural; cervix not effaced, firm, and resistant; throbbing of the heart of the fœtus no longer to be heard. These accidents increasing in intensity, Dr. Loir diagnosed internal hæmorrhage; consequently, he dilated the cervix, and, when it was about the size of half-a-crown, ruptured the membranes; this being insufficient, secale cornutum was given, but without effect; version being the only chance that presented itself, to save the mother, it was performed, but, though successfully terminated, did not save her life. The funis went twice round the neck of the fœtus; several pints of liquid blood, containing numerous clots, escaped after delivery; on introducing the hand to remove the placenta, its centre was found to be detached, so as to form a cavity which was full of blood, caused, probably, by the convulsions of the fœtus, which had pulled violently on the placenta, owing to the brevity of the funis.—(*Revue Médicale.*)

Lusus Naturæ. Case communicated by Dr. Danyau to the *Société de Chirurgie*.—A woman, æt. 18, presented the following congenital deformity; nose divided into two parts, each having all the appearances of the natural organ, with the exception of one nostril instead of two; at the upper part of the interval which separated them, there was formerly a third eye, which had been removed by a quack, and, in its stead, an irregular, solid, osseous swelling exists, on which the lids, with their lashes adherent to each other, are perceived. The upper lip, divided in half its extent, was formerly raised by an osseous prolongation which supported six teeth; its most prominent part had been removed with the four teeth fixed to it; the remaining are hid by the lip. These teeth are evidently supplementary, for sixteen teeth exist in the upper jaw, but the four incisors and two canine, instead of being in juxta-position, form a triangle whose summit is directed downwards. The velum palati and neighbouring parts presented nothing abnormal; the roof of the mouth is divided anteriorly, in which separation is contained the additional portion of bone, a small furrow indicating the spot in which the two are united. The lower jaw has the usual number of teeth, but the incisors and canine are directed in an opposite way to the superior. Sight and smell normal, the former somewhat hindered by the swelling that exists instead of the eye; but, before this last was extirpated, it was perfect.

Prize.—The *Société de Médecine pratique* offers a gold medal, worth £20 (500 fr.), for the best essay on the following subject:—"What is meant by the denomination, typhoid fever? Describe briefly its history, and minutely its essential characters and treatment." Essays must be sent, p.p., before the 1st Jan. 1846, to Dr. Serrurier.

Academy of Sciences. Sitting of the 11th Nov.—Baron Ch. Dupin in the chair.—An unusual agita-

tion pervaded the assembly, on account of the election of a member in the *Section de Chimie*, vacant since the death of D'Arcet; the list of candidates consisted of: 1^o M. Fremy; 2^o M. Ballard; 3^o M. Peligot; 4^o MM. Cahours and Millon, *ex æquo*.—M. Peligot wrote to inform the president, that he withdrew. The votes were thus given: number of members present, 54; majority, 28. M. Ballard obtained 28, and M. Fremy 26; the former was, therefore, declared duly elected; his nomination will be submitted to his Majesty's approval.

Received:—"A letter of thanks from the Zoological Society, London; with proceedings for 1843;" and "Transactions of the Society," vol. iii. parts 2nd and 3rd.

On the Carbonic Acid exhaled by Plants under the influence of the Sun's Rays: communicated by Professor Dumas, in the name of M. Boussingault.—In a late Sitting, M. Schultz communicated the results of several experiments, which tend to prove: that carbonic acid is decomposed by plants in very small proportions, and that the oxygen, given off under the influence of the sun's rays, does not proceed from this acid, but from the organic compounds contained in the juices: the tartaric, oxalic, and other acids, sugar, glucose, &c.—M. Boussingault, in order to test their exactitude, performed the following series of experiments:—1^o. 20th Sept. Several peach-leaves, weighing from grs. xij. to grs. xij. each, were placed in solutions of racemic acid, oxalic acid, sugar, azotic acid, sulphuric acid, boric acid, phosphate acid of ammonia, in distilled water, and in water impregnated with carbonic acid, and exposed to the sun's rays, from 11 a.m. to 4 p.m.: weather cloudy from time to time; the result was:—

				Cubic cent. gas.
The leaf, in the solution of racemic acid,	gave:	0.2		
id. id. oxalic id. leaf grew yellow				
id. id. sugar	gave:	0.2		
id. id. boric	id.	0.3		
id. id. phosphate acid of ammon.		0.0		
id. in distilled water	id.	0.2		
id. in water impregnated with carb. acid	id.	1.2		

In the other solutions none.—2^o. 27th Sept., from 9 a.m. to 4 p.m.: bright sun. Each leaf, weighing about grs. xxij:

				Cubic cent. gas.
In water, containing 0.005 parts racemic acid,	gave:	0.3		
id. id. 0.0025 id. oxalic id. id.		0.2		
id. id. 0.0200 id. boric id. id.		0.4		
id. id. 0.0005 id. sulphuric id. id.		0.1		
distilled water	id.	0.3		
The leaves, in the oxalic and sulphuric acids, grew yellow.				

				Cubic cent. Oxygen
10 leaves, in water, gave impure oxygen gas.....		3.1		
id. id. containing 0.005 sugar id.		3.2		
id. id. impregnated with carb. acid				
gas,	gave	45.0		
20 id. id. id. id.	id.	87.0		

3^o. 1st Oct.: fine day; six drachms of carrot leaves furnished:

				Cubic cent.
In distilled water	impure oxygen gas	0.3		
„ water containing 0.008 sugar	id.	0.2		
„ „ impregnated with carb. acid, oxygen gas		20.5		
Finally, three drachms of peach-leaves, placed in water impregnated with carbonic acid, gave oxygen gas		51.5		

Thus, fresh leaves, placed in water impregnated with carbonic acid, gave off an abundance of oxygen, whereas there was very little in water and other solutions; and, in order to form a correct conclusion, the experiment ought never to last more than a few hours.

Experimental Researches on the Influence of the Respiratory Movements (respiration and inspiration) on the Exhalation of Carbonic Acid Gas: by Charles Vierordt, M.D., Karlsruhe, Baden.—By his experiments, the author establishes that, if, in:

12 expirations, per min. there is 4.3 per ct. of carb. acid—in				
24 ditto there will be 3.5	ditto			
48 ditto ditto 3.1	ditto			
96 ditto ditto 2.9	ditto			
130 ditto ditto 2.9	ditto			
150 ditto ditto 2.8	ditto			
192 ditto ditto 2.8	ditto			

Thus, it appears that the quantity of carbonic acid is influenced by the number of inspirations in a given time.—2^o If, in a minute:

Number of expirations	192	96	48	24	12	6
Duration of the respiration in seconds.....	0.3125	0.625	1.25	2.5	5	10
Quantity of carbonic acid evolved	2.8	2.9	3.1	3.5	4.3	5.9

In indicating by C, the quantity of carbonic acid exhaled, and by T, the shortest expiration,—the quantity of air exhaled in an expiration is: $T \times 2^n$, and that of carbonic acid $C \times 2^n 1-10$. The temperature, and numerous other causes, produce a variation in the quantity of carbonic acid contained in the expired air, its absolute proportions being far greater in frequent, than in prolonged expirations.

On a New Mode of Dressing Wounds; by Dr. Chassaignac, presented by Professor Velpeau.—For the last three years, the author has employed the following method, which he calls *pansement par occlusion*. On a recent wound, a sort of cuirass is formed by strips of sticking-plaster, covering one another like tiles; on this, a piece of linen, full of holes, covered with cerate, and then compresses, must be put, and the whole kept in place by a band. This dressing must not be touched for 8 or 10 days; then, if the suppuration be abundant, with the exception of the sticking-plaster, it may be renewed; the parts may be bathed with camphorated spirits, or lemon juice; additional strips put on if needful, and, should inflammation exist, leeches may be applied. This method differs from that recommended by Baynton, which is employed only on old ulcers, and hence called *pansement rares*. The cases in which the author has employed it, are: comminutive fractures, and limbs or parts of the limbs crushed, even when amputation appeared indispensable; large wounds without fractures, but with division of the tendons and aponeuroses of the feet or hands; paronychia; wounds while dissecting; wounds caused by the bite of a dog, or a horse; burns; wounds after amputation, or ligatures of arteries. The advantages it offers, are: diminution of the traumatic pain; absence of traumatic fever; less pus secreted; suppression of the irritation caused by daily dressing the wound; rapidity of cicatrization. In concluding, the author states, that Professor Velpeau, in 1831, proposed employing the method of Baynton in contused wounds, and that, on the 12th Sept., 1843, one of his pupils published in the *Gazette des Hôpitaux* a lecture, delivered by him at the *Charité*, in which this method was described.

Experimental Researches on the Action of Different Remedies: by Dr. Poiseuille, M.A.M.—In these researches, the author seeks to determine the phenomena, produced where a remedy is introduced into the stomach. When a liquid is swallowed, it is placed in contact with the epithelium of the gastric and intestinal mucous membrane, penetrates it, and soon becomes *en rapport* with the capillaries and villousities. What is the result of this contact? A reciprocal exchange of the liquids, situated on each side of the capillaries; that is to say, whilst a certain portion of the serum of the blood passes through the walls to mix with the liquid, introduced into the digestive organs, a part of the latter penetrates through the parietes and mingles with the blood in the capillaries, and from thence is carried into the circulation. This double current is, in every respect, analogous to the phenomena, so accurately described by M. Dutrochet, in his *Traité de l'Endosmose*; if the two are of equal force, the quantity of liquid contained in the intestinal canal will neither be increased nor diminished; but, if one be stronger than the other, for instance, if the current, formed by the serum of the blood towards the intestine, is greater than that from the intestine towards the interior of the capillaries, the liquid will accumulate in the intestine, and cause the latter to contract, in order to expulse the former; and the substance which produces this effect, will be *purgative*. A contrary result is obtained, when the current, towards the interior of the capillaries, is the most powerful, and the substance is an *astringent*. The author brings forward numerous facts, in the memoir, in support of this opinion.

Dr. Jules Guérin addressed a letter, stating that, in July, 1839, he described the mode of dressing indicated by Dr. Langier, and that, in 1842, he made several trials at the Hotel-Dieu, in the wards of Dr. Maisonneuve.

Dr. Langier, in reply, says that this assertion is not founded; the method, employed by Dr. Jules Guérin, being a species of covering made like a cupping-glass, formed of caoutchouc, placed on

the part, so as to prevent the action of the air on the surface of the wound.

Academy of Medicine. Sitting of the 12th Nov., Dr. Ferrus in the chair.—Professor Lallemand, of Montpellier, and Dr. Conolly, chief physician to the Hanwell Hospital, corresponding members, were present.

After some remarks from Dr. Bouvier, on the opinion expressed by Professor Dumeril, at the former sitting, the proceedings were adopted.

On the Real Value of Orthopedy, and especially of Rachidian Tenotomy, in Deviations of the Spine.—Discussion. Before giving the discussion to which Professor Velpeau's report (read in the preceding sitting) gave rise, it may not be uninteresting to give a brief analysis of the latter. The reporter, after giving the contents of Dr. Malgaigne's memoir, considers—1° *The clinical results furnished by rachidian myotomy.* Passing in review the opinions and facts published by various authors,—Dr. Held, of Strasburgh, in 1836; himself in 1837 and 1838; M. Pauli in 1838; Mr. Braid, who performed the operation four times with success; Messrs. Child, Whithead, Laycock, Cocks, and Hunter, in England; M. Klein (of Gruessen) six cases; M. Cammerer, 24 cases; M. Hein, of Canstadt, 58 cases; Messrs. Neumann, Behrendt, &c., in Germany; and finally, those presented by Dr. Malgaigne: the reporter concludes that the operation is useless; since the result, obtained in the establishments in which it is not had recourse to, is as advantageous as when it is employed—2° *Is rachidian myotomy a rational operation?* The reporter concludes by a negation.—Dr. Jules Guérin: In a chapter, entitled *Stratagems*, Montaigne indicates the conditions which render war loyal, and, among the number, he mentions that the adversary should be informed of the day on which he is to be attacked. The honourable reporter of the memoir, which gave rise to the present discussion, did not think it useful to follow this precept; he read his report on a day, on which I was accidentally absent. I made several fruitless endeavours to obtain a copy, and it was only at midnight yesterday that I got it; this, should my answer be insufficient, must be my excuse; my time was too short. But, at the same time, I find myself amply indemnified, in the adjournment voted by the Academy in the preceding sitting, as it proves that the decision will be calm and impartial. I here tender my sincere thanks. The report, on a first reading, appears perfectly scientific, but a second proves the appearances to be deceptive; however, setting aside all personalities, it is only my intention to discuss the facts contained in the report and the memoir. They ought to be considered in the following points of view:—1° their origin—2° their number—3° their nature. As to the first, I will content myself with stating, that they were taken without my consent, and, therefore, cannot present the necessary exactitude. As to the second, I may mention that, in July 1843, I published a statistical table of 155 cases of deviations of the spine, of which there were 24 cures, 38 ameliorations, 4 non-ameliorated, 1 death, and 98 in which the treatment was discontinued, or not ended. The author of the memoir, having met with some unsuccessful cases, concludes that no cures existed, and that the 24 cases were included in those he had seen. But it is impossible, as our honourable colleague, Dr. Louis, stated in a preceding sitting, to affirm that they belonged to such or such a category. And to which do the 24 cases belong? To this question, the author of the memoir furnishes the answer: "Some still attend Dr. Guérin's consultation, and others refused to continue the treatment;" consequently, the former cannot be classed among the persons cured, and the latter among the 98 whose treatment was not terminated; and yet the Committee accepted the numbers given by Dr. Malgaigne, without examining on what basis he formed his list, and in which category the patients were comprised,—a circumstance absolutely necessary, to be able to form a precise and positive conclusion. Hitherto, I have supposed that the 24 patients were seen and examined; but is this the case? In no wise; for only 12 were visited; of the remaining 12, 5 are in the country, 3 were not visited, 2 refused to receive the members composing the commission,

and 2 are dead; besides which, a case, in which the author of the memoir states having authentic proof, died three years ago of typhoid fever, while under treatment. The Committee, therefore, saw only 12 patients (one of whom was not operated on, and must be excluded), at a distance, and even without seeing their backs. Again, the author of the memoir affirms, that the cases related by him are sufficient to overthrow my statistics, and, in order to give some weight to his assertions, he strikes out several cases as doubtful; but these precautions are vain, since he is unable to prove in which category I had placed them; and, from what I have just said, it is evident that they are included among the 98, whose treatment was incomplete. The members of the Commission, from the examination of 11 cases, out of 155, considered themselves sufficiently enlightened to form their conclusions, and to draw the following inductions relative—1° to the efficacy of tenotomy—2° to the exactitude of my statistical table.—To the first, it may be answered, that the examination of 11 patients out of 155 is not sufficient;—that the disease ought to have been studied in its different phases, its nature, and its intensity;—that the reasons which caused the operation to be decided upon, ought to be known. Now, nothing of the kind has been published by me, and to supply the want of this information, the committee contented itself with a superficial and distant examination of the patients, and the details—often incomplete—of the parents and relatives. And yet a conclusion is drawn!...It is true, that the operations, performed by English and German practitioners (among the latter, the name of Dieffenbach is omitted) are related; but, strange to say, though all are favourable to tenotomy, the learned reporter comes to a contrary conclusion.—To the second, I will merely state that, with eleven imperfect, valueless facts, the committee affirms, that 155 are equally so; besides, the Academy is not instituted to scrutinize the facts announced by a colleague, and to doubt his veracity. As to the danger of the operation, the author quotes the case of a young person who became lame afterwards; but this patient was affected with spontaneous dislocation of the femur; therefore, the accident could not be attributed to the operation. But it may be said that, in proving the grounds, on which the committee founded its conclusions, to be insufficient, I have performed only half my task, and that I ought to shew the proofs of the excellency of myotomy; but, for the same reasons as those I have more than once declared, I still refuse so doing. Let us suppose that an individual attacked the results, obtained by Professor Roux, in his operations for cataract: operations which he performs with *especial* skill.—Professor Roux (interrupting): do not employ the word *especial*; I wish no *speciality* to be attached to my name.—Dr. Guérin: with his peculiar skill, I say; were an individual to take all the unsuccessful cases—and they are numerous—and request the learned professor to state on what grounds he founds the precepts of his theory; would he reply to the injunction? (Professor Roux made an affirmative sign.) Again, had I so done, would the result have been in any respect useful? I do not think it; indeed, facts exist which prove the contrary. The Academy, doubtless, remembers the discussion which took place on two cases of tenotomy of the hand; and though the cure was verified by several distinguished colleagues, the adversaries of the method persisted in denying it; and such, probably, would be the case in the present instance. Two years ago, I requested the nomination of a commission, a request which was refused: and since these discussions, at my special demand, the *Conseil des Hôpitaux* named a committee, which pursues with laudable zeal its task; and it is but just to await its decision. Finally, it may be asked: if it is necessary for the advancement of science, that the practice of individuals, who have made a branch of the healing art their peculiar study, be submitted to a species of inquisition? I do not think so: all that is needed is, that they should prove by experience, the real and sole touch-stone, the exactitude of their assertions. It is this principle which I defend, and I feel convinced that the Academy is of the same opinion.—Professor Roux, in reply to a phrase of Dr. Guérin's speech, said,

that, far from wishing his reverses to be hidden, he was the first to publish them; that he considers it the duty of every practitioner to allow their assertions to be investigated, and that he would never think of refusing.—Dr. Castel: After a preamble, made in his quaint manner, the speaker continued thus:—In the premises, all is moderate, enveloped in doubt; in the conclusions, on the contrary, all hostile and affirmative. I consider that the memoir of Dr. Malgaigne ought not to be printed among the memoirs of the Academy, it being a decided attack made against a colleague. As to the inquisition, nothing is more difficult among scientific subjects; nor is it proper. About a year ago, the operation of tracheotomy, in the last period of croup, and cauterizations in angina, made great noise among the members of the profession; and yet no inquisition was performed. Medicine has need of indulgence, life being too short to permit its being perfect. In conclusion, I consider the memoir to be written with a talent which might have been employed to a better end; I shall vote for the conclusions, if modified, and oppose the insertion of Dr. Malgaigne's Memoir, in the collection of the Memoirs of the Academy.—Professor Velpeau: Since no one wishes to speak, I will reply to what has been already said, and, at the same time, desire that nothing I may say, be considered as a personality. There is no analogy between tracheotomy in croup, and the operation for deviations of the spine; the two first, if not followed by death, end favourably; consequently, all verification is impossible: this is not the case in the last; examination being easy, as death does not ensue if the cure is not obtained. Dr. Guérin lays great stress on the impropriety of summoning a practitioner to give the proofs of his assertions; for my part, I think it ought to be done, when the successful cases related are such as fail in other hands. As to having refused to leave the report, it was because, from some remarks from Drs. Londe and Desportes, I wished to make some changes; but as soon as it was printed, I forwarded a copy to Dr. Guérin; as to his being informed before-hand, such is not customary. Dr. G. reproaches the author of the Memoir, for taking only 24 cases out of 155; but it was because he included only those from whom he could obtain precise information: he found that 42 had been treated at the *Hôpital des Enfants*; of this number, 18 were rejected, because they were affected with other diseases, or had remained but a short time in the hospital; the remainder, examined by the committee, were found still deformed, and may be shewn to the Academy, if the patients consent; as to their being among the 98, not cured, this is not probable. It is true, that a patient died of typhoid fever; but the person, who performed the *post mortem* examination, assured me, that the deviation still existed; and another is now in the country, and a letter from Dr. Picard, of Joigny, where she is, informs me, that she is as crooked as before the operation. Various other reproaches are addressed to the committee by Dr. Guérin;—that the patients were examined at a distance: this is not exact in every case; besides which, a hump may be seen at a distance, as well as close;—that only 11 patients were examined: this is inexact, and the proof, if necessary, will be given;—that the assertions of Dr. Malgaigne were approved of: it was only after severe examination, that they were adopted;—that Dieffenbach's name was omitted: this was done expressly, as I did not wish to quote any but published cases; I have, however, written to M. Dieffenbach, but have not as yet received an answer. As to the demand of the committee, made two years ago, it was refused, because the object was to judge between the methods adopted by Drs. Bouvier and Guérin (Dr. Guérin: No—no); and as to that named by the *Conseil des Hôpitaux*, without wishing to raise a doubt as to the impartiality and activity of its members, still many years will elapse ere a report will be made; and, therefore, I see no reason why the Academy should not judge the facts already made known, and which are quite sufficient.—M. Guérin requesting to be heard, the discussion will be continued in the next Sitting.

GARLAND DE BEAUMONT, D.M.P., B.L., & S.,
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the Changes which the different Combinations of Proteine undergo, in Dropsy, Scurvy, Purpura, &c.—The albumine of the blood does not present any remarkable changes in the above diseases; but the albumine of dropsical liquids contains less alkalies, in combination with it, than that of serum. The extravasation of albuminous liquids into the serous cavities, and into the cellular tissue, is not caused by any abundance of albumine, nor by want of fibrine in the blood, but by a scarcity of salts in the serum of the blood; by which means, the serum becomes lighter, less dense, and more inclined to *exosmosis*. The hydropic liquid itself contains, in general, less albumine than the serum of the blood. The quantity of albumine must not be computed according to the viscosity of the liquid, for this only shews the degree of solution dependent on the salts contained in the water. The quantity of albumine is largest in the transudations of the pericardium, the peritoncum, and the pleura. The following are the principal salts contained in them: chlorido of sodium, phosphate of soda, of magnesia, and of lime; also, salts of potash, and some iron. If, by medical treatment, such salts are introduced into the blood, as are abnormally deficient in quantity, the progress of disease is stopped at once, and, according to the laws of *endosmosis*, the extravasated liquid, becoming now *less dense*, will return into the vessels, the contents of which have, at the same time, become denser. Thus, the essential symptoms of colliquative diseases, salivation, cholera, cyanosis, &c., are based on a disposition of the blood (produced by a deficiency of salts) to penetrate the organic tissues; and, therefore, require a treatment somewhat analogous to that of dropsy. The decrease of salts occasions a proportional increase of water in the dropsical blood; besides, with the decrease of salts, the affinity of the blood for oxygen diminishes, a circumstance which must necessarily dispose the organism to many morbid phenomena. It is thus evident, how important it must be to ascertain the quantity of salts contained in the blood, for instituting a proper investigation into the nature of different diseases. If the salts of the blood are increased, as in sea-scurvy, in the higher degrees of typhus, purpura, &c., the blood becomes thin, and incapable of transformation into the solid, organic structures; the walls of the vessels become loose; the fibrine less coagulable; and slight causes will produce transudation of the liquid in an unchanged state. But, if the salts are diminished, as in dropsy, scrophula, tubercular disease, chlorosis, &c., organic metamorphosis is impeded, and the blood becomes overcharged with many unassimilable substances, which are either transuded, or deposited. The quantity of fibrine, which may be regarded as albumine oxydated in a higher degree, is generally diminished in the above diseases. The solidity of the coagulated blood is increased, where chloride of sodium is deficient; or diminished, if the other salts be deficient. The quantity of *cruur* is always diminished, when blood contains too large a proportion of water and salts. A want of certain salts seems to obstruct the oxydation of organic substances, and to prevent the red colour of the blood-corpuscles.—*Merkel, in Schmid's Jahrbuch. der Medicin.*

On the Doctrine of Digestion.—As regards the food taken by animals, they may be divided into two classes:—1°. *Crudivora*, namely: such as live on the proximate combinations of proteine, ready prepared (the non-azotised victuals must, however, be first modified before they can be assimilated). Albumen and starch form the principal food of these animals, to which belong the ruminantia, the domestic animals, and, likewise, man.—2°. The *Carnivora* are such animals as feed on combinations of proteine and hydrurets of carbon (particularly albumen and fat), completely formed. A metamorphosis in the alimentary passage does not seem to be intended here; the composition of their bodies being identical with that of their food. The theory of their digestion is not fully known; we only conclude, by analogy, that their saliva,

their bile, &c., is similarly composed, and exerts similar effects with those of the *crudivorous* animals. The following investigation refers to the first class, and may lead to a solution of the question. *By what means is amyllum brought to a state of solubility? And, which of its many soluble products play the most prominent part in the animal body?*—Amyllum undergoes the following metamorphoses:—*a.* If starch, dissolved in water, and carried to the boiling point, be left to itself, at the temperature of 30° R., after the lapse of a few days, it passes into lactic acid, dextrine, and sugar of starch and of grapes. As far as the laws of this so-called fermentation are known, we may assume, that this decomposition depends on a certain quantity of gum, adhering to the starch, and operating as ferment under favourable circumstances (heat and moisture). In the animal body, amyllum cannot be transformed in the same manner, since experiments shew the entire assimilation of the starch to be accomplished in a few hours.—*b.* The effect of saliva on starch is so active, that it is dissolved in it, in the course of an hour (digested at 30° R.), and partly transformed into dextrine and sugar of grapes. (These substances very rapidly reduce hydrated peroxide of copper to a yellowish-red powder—a protoxide of copper, and this can neither be performed by saliva alone, nor by amyllum or gum). At the same time, lactic acid is developed; but the acid re-action subsequently disappears, whilst the formation of sugar continues, probably in consequence of the formation of ammonia from the azotised substances of the ingested matter. The rennet of calves, and dilute muriatic acid, did not give rise, after four hours' reaction, to the production of dextrine. The experiments of other authors seem to confirm the view, that the chief action of saliva consists in making the starch soluble, and thus capable of being assimilated. On this account, the salivary glands and salivary excretion are very much developed in the herbivorous animals. It is difficult to explain the effect of saliva on the combinations of proteine. The circumstance of saliva always displaying alkaline re-action, during the process of digestion, justifies the supposition, that some of the combinations of proteine are more or less dissolved by this condition. Saliva, by itself, does not dissolve meat. But, if the latter be digested in it for some time, maceration takes place; but this rather tends to shew a catalytic, than a direct solvent power.—*c.* The gastric juice, as regards its effects on amyllum, &c., must be divided into the free acid (muriatic), and into the organic substances (pepsine, mucus, &c.). The author's experiments show, that greatly diluted muriatic acid produces a metamorphosis of starch (digested at 30° R.), but much less rapidly than saliva. This effect is produced less rapidly by the employment of fresh rennet, but more rapidly (after eight hours) by muriatic acid and rennet employed together. The free acid of the gastric juice is also found in carnivorous animals, and easily dissolves the combinations of proteine, and thus has another function than that of transforming starch. The acid is too weak to precipitate dissolved albumen; its effect on organised structures is but slight. It may be asked, now—For what purpose does this acid enter into the digestive juice of the ruminantia, since the alkali of the saliva possesses so considerable a power of dissolving the combinations of proteine? Probably, different combinations are more or less soluble in different menstrua.—The organic constituent of the gastric juice, pepsine (so analogous, in some respects, to mucus), is an azotised body, easily passing into metamorphoses and putrefaction. Rennet, dissolved in water, by itself, putrefies like other substances; no effect can be perceived, if rennet be added to the combinations of proteine in a coagulated state. But amyllum is peculiarly affected by rennet, and decomposed in the same manner as by the operation of saliva. Artificial digestion has not thrown much light on the process of natural digestion; for many substances, as meat, caseine, glue, paste, &c., were scarcely changed by the gastric juice; and it is, therefore, not yet explained, how the ultimate real solution of the combinations of proteine takes place. The opinion, that the oxygen, obtained by the food from the air, or the saliva, plays a pro-

minent part in digestion, is devoid of all proof. It is, on the contrary, also proved, that the artificial digestion of coagulated albumine, and of starch, proceeds quite as easily if oxygen be excluded; besides, the gases of the stomach, collected during digestion, shew a perfectly anti-oxydating tendency.—*d.* Bile is generally thought to exert an opposing influence to the acid of the gastric juice; but fresh bile is almost always neutral, and the contents of the intestine are shewn to be acid, even below the mouth of the biliary duct. Still, some such effect of bile on the acid cannot be denied. Bile produces, in chyme, a flaky precipitate, of a yellowish-green substance, which is nothing but mucus, found again in the excrements, and forming from one-half to two-thirds of the whole mass of meconium. With this, a great part of the colouring matter of the bile is precipitated. A decomposition of bile by the acid, similar to that effected without the body, by boiling, &c., cannot be reasonably supposed. The excrements always contain a neutral salt of ammonia, formed from the acid of the chyme and the ammonia, generated by the decomposition of some of the azotised substances. But, the chyme of a rabbit was found to contain an uniform quantity of ammonia, from the stomach down to the rectum; hence, this source of ammonia (from decomposition) cannot be considered as normal. We might, perhaps, assume, that the acid (of the chyme) becomes neutralised by the alkaline mucous secretion of the bowels; or rather, that the acid is received into the blood, or into the chyle (which, however, is generally alkaline), and, therefore, the latter might be sometimes found to be neutral, or even acid. Muriatic acid, of the same degree of strength in which it exists in the stomach, precipitates scarcely anything more from the bile than its mucus. Bile does not dissolve fat. But this is not required; since it is liquid at the temperature of the body, and can thus be absorbed. But it is not proved, that those fats are digested, which melt only at higher temperatures (as *stearinic acid* and *cholesterine*). Besides, it could not be conceived of what use the bile would be, in the herbivorous animals, which take no fat, whilst the resins, which are introduced into their digestive organs with their vegetable food, are eliminated again, undigested, with their excrements. (Liebig.)—That bile must serve for digestion, is shewn by its always mixing with chyme, immediately on its passage from the stomach, in all animals. The influence of bile on the combinations of proteine, is perfectly unknown. The author found, that fresh bile, mixed with mucus, causes flesh to putrify after some time; but bile, freed from mucus, preserves flesh so well, that it neither displays a fetid smell after some days, nor disengages ammonia; nor is it changed in its structure and solidity. Non-mucous bile, added to artificial gastric juice, arrests the digestion and maceration of the coagulated albumen. It further reduces amyllum very rapidly into dextrine and sugar (at 30° R.), but no lactic acid is formed. This is also done, if it be mixed with rennet. Fresh bile, mixed with rennet and weak muriatic acid, likewise transforms starch. Thus, bile may aid in the process of rendering starch soluble in the body. The non-mucous bile passes very slowly into putrefaction, even at a lukewarm temperature, and a moderate dilution; it also preserves other substances from putrefaction, retards the acidification of milk, the formation of lactic acid, and the precipitation of caseine.—Mucus is so powerful a catalytic agent, that it produces considerable metamorphoses, not only in bile, but also in urine; but the mucus of the bile is precipitated, and thus ceases to have effect; the antiseptic power of bile is increased by the addition of weak muriatic acid. If we consider how easily mannite, sugar of grapes, sugar of milk, &c. are made to pass, by rennet, into lactic acid, thus becoming useless for nutrition, that power of bile is important by which it arrests the formation of lactic acid. Digestion can by no means be completed by the solubility of starch, and the maceration of the combinations of proteine. These substances require some time to be absorbed. The uniform warmth, along the whole length of the alimentary tube, would certainly produce fermentation and putrefaction of the com-

binations of proteine, with disengagement of sulphuretted ammonia, and the formation of acetic and carbonic acids, as is the case in certain diseases, if a substance did not exist there to counteract this tendency by some antiseptic power. This substance is bile. Non-mucous bile, mixed with muriatic acid, arrests the fermentation of sugar; but bile, when mixed with mucus, promotes fermentation. Putrefaction of the combinations of proteine is, likewise, checked by the addition of pure bile. Pathological phenomena support this theory on the action of bile. Thus, Vogel mentions, that a patient, suffering under cancer of the stomach, vomited acetic acid,—a substance which is not found in the healthy state of the stomach, being an abnormal product of decomposition of some of the hydrates of carbon. Typhus readily supervened, along with jaundice, in animals, whose biliary duct was tied; the abdominal contents were also unusually putrid. The formation of large quantities of hydrosulphate of ammonia, in the small intestines, through decomposition of food, is thus easily explained. Many observations seem to shew, that some of the bile returns into the stomach. The use of spices, with their volatile, antiseptic, oils, of coffee, with its empyreuma, of wine and bitter remedies, and calomel, in disturbed digestion, has, perhaps, no other tendency than that of supplying the abnormally deficient principle of the bile.

[To be continued.]

NOTICES TO CORRESPONDENTS.

Philo-Chirurgus.—We rarely, or never, allow a correspondent without name to respond in our pages to one who gives his name. We are not disposed for an exception in the present case. The communication shall be sought for, and left in the office.

An Admirer of Truth should have written with his real name.

A Subscriber.—The new Bill will not prevent a man calling himself hygeist.

Mr. Toss will refers to the article "Complexion," in the "Encyclopædia Britannica," and to Lawrence's lectures on the Natural History of Man, page 451, in proof of the statement questioned by Enquirer.

Mr. James, of the Kilkenny Dispensary, illustrates Mr. Wilkinson King's recent observations in our journal, by the case of a child, eighteen months of age, subject to convulsions, and who for months before his death exhibited constant working of the mouth, twitching of the muscles of the face and eyes, with falling of the wrists, as in cases of lead poisoning. On the autopsy, the medulla oblongata, pons varolii, and crura cerebelli, were found indurated and cartilaginous; the other parts of the brain appearing healthy.

W. Swansea.—For six months it will be sent.

X.—We do not, and cannot, answer correspondents privately, except under special circumstances. We have no leisure for such a privilege.

Senex informs us that the diplomas of the College of Surgeons are altered since the Charter. Originally, it was "we hereby authorise him to practise the said art and science accordingly." Now the diploma simply announces the fact of membership. This very remarkable alteration deserves, as our correspondent says, consideration and comment.

Mr. Balls.—We know of no remedy, except a change of newsman. With the thousands of copies sent out, such accidents are beyond our controul.

Mr. Braid's paper, containing experiments on the nature of the proofs of phrenology furnished by mesmeric phenomena, will appear in our next; also papers by Dr. Costello, Dr. Clay, Dr. Jackson, &c.

Dr. Donaldson, of the Isle of Man, writes to us that the use of creosote, as recommended by Mr. McDonald, in our pages, was first suggested by Dr. Dickson.

Mr. Pim.—The advertisement would cost 5s. The salaries vary very considerably, few being so high as the sums named by our Correspondent.

C. L. H. S. is unavoidably postponed.

Mr. Crisp's communication has been received.

We regret that the pre-engagement of our columns excludes the pleasing notice of the meeting of the Medico-Civilian Society of Derby.

By the culpable negligence of our printer, Mr. Ikin's defence has been mislaid. Though received very late, we did our best (unsuccessfully) to give it insertion in our last number; and the interval between the two numbers has now lead to its loss. We need not say our pages are open to Mr. Ikin, if he sends us a second communication.

Other Correspondents next week.

MEDICAL TIMES ALMANACK,

The Almanack for 1845, will be ready in the course of the ensuing month. Gentlemen wishing to give advertisements the advantage of its large circulation, should remit their orders immediately.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

THE MEDICAL TIMES.

SATURDAY, NOV. 23, 1844.

Hic est aut nusquam quod querimus.

The great special meeting of the largest voluntary Medical Association that ever existed—the Provincial Medical and Surgical Association—has just been held, and proves to be all that the best friends of the dignity and well-being of our Profession could wish. The proceedings must have great weight with Government, and while they complete the certainty promised us by the general tone and character of most of our recent meetings, (that our distracted community will at length have the legislation we so much need, and have so long prayed for,) offer us also the best grounds for believing that the measure we shall get will be a considerable improvement on the Bill introduced last session. It is impossible, when the Profession has spoken its mind in a spirit so conciliatory, and after a fashion so deliberate and philosophic, that Sir James Graham will decline to adopt its moderate suggestions for making his measure in the utmost degree possible acceptable to us. We have shown that we know how to appreciate what is good in his proposals: it will be his part now to prove that he can do justice to the prudence and fairness of our recommendations. We give the resolutions elsewhere. The masterly speech of Dr. Hastings we shall have another opportunity of considering. It should be mentioned that though an amendment was proposed to some of the resolutions, there were merely two hands held up for it.

Gratis anhelans, multa agendo, nihil agens.

Not even an enemy of the Medical Profession, who has surveyed the attitude it has assumed in the face of the New Bill, can deny it the high praise of having proved itself quite equal to the present critical epoch of its history. Just look—we are disposed to say to any doubter—at the resolutions of the great majority of our meetings, of, indeed, every large and important meeting—and we defy you to name, nay, to conceive, anything more gentlemanly, more philosophic, or, in one word, more worthy of the men to whose good sense and skill the most valued interests of our fellow-subjects are confided. We say it proudly: our brethren have nobly distinguished themselves by the justice and prudence with which they have treated the most important question that could arise to affect their interests; a question surrounded with every complication

that could arouse suspicion or enkindle prejudice. They have praised and condemned with coolness and discrimination,—and the frankness of their commendation giving force to the decisiveness of their censures, the Home Secretary, as much out of gratitude and good feeling, as sound policy, must now make us the acknowledgments of giving us his Bill with the improvements we almost unanimously demand in it.

If anything could add further force to the claim we thus prominently put forward for our brethren, to the cordial good feeling and aid of Sir James Graham, it is found in the remarkable fact, that every influence that could delude or stimulate a body of men into a furious, factious, and indiscriminate opposition has been unscrupulously exercised, with an energy that wins one's wonder, and a craftiness of policy which, even in the worst of causes, might be expected to have secured success. The speeches of a real Member of Parliament have been vented in turgid vehemence and shallow inefficiency, the funds of the Apothecaries' Company have been squandered with the wasteful excess, proverbially predicated of ill-gotten goods, and to come to something of far greater importance, the immense powers vested in the *Times*, have been wielded with infinite industry, and almost its customary vigour; and yet, instead of that phrensy, *per fas et nefas* crusade—against the Bill and its author, which these parties would have preached up, if they had found tools to move at their interested bidding, we have had an expression of opinion, moderate and philosophical, founded on an investigation of the provisions of the measure itself, given to the world with a gentlemanly propriety, which conveys the most stinging censure of the clamorous vulgarity of each characterless and strife-fed medical disturber. They have piped, but the Medical Profession has not danced.

One of the most useful parts of the Bill, the Council of Health, has been, of course, the principal object of attack, and misrepresentation by those who would bring the measure into discredit: and our contemporary, *The Times*, has levelled at it accordingly some of its fiercest blows. We are told, first, that the Home Secretary will rule every thing, and a weekly contemporary, obsequiously following the lead, proceeds very characteristically thus:—"Decapitate this body; remove Sir James Graham, IN WHOM ALL THE POWER IS TO RESIDE, and what have we left in the shape of a Medical Institution, which can obtain confidence?" We do not quote this passage to note its exceeding absurdity—predicating all power of the "head," and yet rigorously asking all kinds of high qualities from the trunk after decapitation—but just to shew that the greater and lesser prophet are in complete harmony on the extravagant point that the Home Secretary is to be the "be-all and end-all," of the New Council.

Now, how stands the simple fact? First we have five medical men altogether unconnected with each other, and as honourable and high principled as, perhaps, any five that we can name: Dr. Kidd, famous, for his demonstrations for Medical Reform, Dr. Burns, Dr. Haviland, Mr. Syme, Dr. Stokes. These gentlemen know as much, probably, about the needs of the profession as Sir James Graham; have as decided opinions; and, considering the different sources of their education and sites of their studies and practice, are not likely to enter any Council room with a perfect identity of views with themselves, or with their President. Then the six Colleges send each a representative. If these be chosen by the members

of the Corporations, as the *Morning Chronicle* asseverates, and as the spirit of the Bill evidently requires, little doubt can be entertained of the decisiveness of their opinions, or the independence of their expression; and if even selected by the different Councils—though, in reference to the Profession, an evil greatly to be deplored—yet they will have such opposing, such conflicting, corporate interests to sustain, that a bland and uniform obedience to the wishes of a President, is almost the last thing to be expected from them. Then come the two country practitioners, whom Sir James Graham has promised to nominate. We have thus—supposing such a dire conspiracy against us by Government as that so magniloquently denounced—thirteen medical men, all, it may be premised, of high study and influence against the Home Secretary, and at the utmost four non-Medical Members, for him and yet we are in turns desired, ordered, and prayed to believe that “all the power is to reside in Sir James Graham!” Now there can be no mistake about the intentions or convictions of persons who deal with the Profession in this preposterous fashion. Taking it for granted that they are not passionate fanatics or moping idiots, they must know as well as we, that the Home Secretary will, ten thousand to one, be the least stirring, the least operating, the least influential member of the Council. His education, habits, duties, labours prove, on a minute’s thought, that, instead of the Medical Members being in the hands of the Government head, the Government head will be in the hands of the Medical Members. Though responsible in the face of Parliament for their acts—and, thank Heaven! that we shall at length have somebody answerable to the country for any future Medical misgovernment—he will have to depend almost entirely on their judgment and honesty for his protection from censure, having little else to guarantee their good faith to him, and good conduct to the Profession, but the Parliamentary resource of remodelling, with our aid, and that of the country, a faulty organization of the Council. When, therefore, the disappointed speculators in an outrageous Professional opposition come forward, despite their own common sense, to tell us, with grave, mountebank faces, that the thirteen medical, are to be swallowed up by four non-medical votes, and that the President, who will hardly ever sit, is to be *every body*, and all the others *nobody*—it is very clear that they are but trying to practice on that simplicity, for which, in their great cunning, they are pleased to give us an abundant credit. Acting the empirical make-believes of maladies that have no existence, save in their own lying representations, they shew out a barefaced attempt to delude Professional men into the most extravagant notion that an infatuated populace was ever duped into in a moment of thoughtless enthusiasm, by a Titus Oates or a Wilkes—and deserve to be hissed out of society as detected and frontless imposters.

But though, on the one hand, we thus feel it important to vindicate the Council from charges preposterous in purport as they are fraudulent in design, it is equally necessary, on the other, that the Profession should not lose sight of the faults in its constitution, which threaten so materially to impair its great and priceless utilities. The Council being founded on the representative principle—a merit that cannot be too well appreciated—it must be seen that the representation shall be fairly shared. Let the Universities have their representatives: let, also, the Government:

this is fair, and just, and politic: but let the Profession have a full and equitably distributed representation also. It will not do to let Dublin have three representatives—and London, two. It will not do that the bodies to be supervised in the Council, shall be themselves the supervisors. And, finally, it cannot be tolerated that the great bulk of the General Practitioners shall not have a share, and a large share, in their own Representative Governing Council. These are points we cannot now farther enlarge on; but we suggest that they should be impressed on Members of Parliament and the Government, and no efforts lost to get the corresponding improvements worked into the Bill.

THE PHYSIOLOGICAL THEORIES OF LIEBIG.

The Source of the Carbon and Nitrogen of Plants.

THE enthusiasm, which very naturally followed the first announcement of the views of Liebig, having, to a great degree, subsided, and a number of new facts having been subsequently established, we are now in a better position to analyze his theories, and to determine, with their truth or falsehood, their influence on science. One of the greatest merits of Liebig, is one common to all high scientific men—the impulse he has given to research. Until his time, and that of Dumas, chemistry, with few exceptions, had never been applied to the explanation of the processes of life; for physiologists confined themselves, either to the anatomical examination of man and animals—vague theories of their functions,—or learned theoretical disquisitions on the nature and cause of life. Nevertheless, it must be admitted, that an immense mass of facts were accumulated, though nearly valueless, from want of connection. It is the credit of Liebig, that, departing with equal ingenuity and originality from the old scholastic ideas which ruled the science, he, though almost ignorant of anatomy, at least of its details, has done something to classify and reduce the hitherto shapeless mass, the chaotic jumble, to a beautiful and connected whole; and, though sometimes forgetting the true inductive method of reasoning, and jumping at conclusions, unsupported by facts, no one can deny that many of his theories are characterized by extreme beauty and simplicity, and that his works abound in clever and valuable suggestions, which will one day become the fruitful germs of new and important discoveries.

In the belief that a simple and connected statement of the views put forward by Liebig, in reference to physiology, with remarks on the question—how far they are borne out by facts—will not be unacceptable to our readers, we have determined to enter on the undertaking. We pledge ourselves to our utmost impartiality; for, though, in more than one respect, disciples of Liebig, we are still *nullius in verba*, and are far from thinking that many of his views must not be largely and materially altered. We shall not aspire to any large degree of originality, either in our views or treatment of them; and, in many cases, we shall entirely yield place to our learned predecessors, allowing them to speak in their own well adapted words. Commencing with the subject, prefixed to the article, we shall continue our observations at appropriate intervals.

Before our knowledge of the relations between the atmosphere and plants was sufficiently deve-

loped, it was naturally considered, that the carbon of plants was derived from the organic substances of the soil. This view was strengthened by the necessity which exists, of adding organic substances, from time to time, to the soil, in order to keep up its fertility. When wood, or, in fact, any vegetable or animal substance, undergoes decay, a number of bodies are formed, which, until lately, were confounded together under the name *umine*. In all soils, this *umine*, derived from the decay of leaves, roots, &c. was supposed to be taken in solution by the spongioles of the roots, and assimilated in the interior of plants. Such, we believe, was the received opinion when Liebig took up the subject. He brought forward a host of arguments in order to show that this view was wrong, and that *umine* played a very secondary part in vegetation, and that the carbon was obtained solely from the atmosphere. He stated, in the first place, that many plants live only in the atmosphere; while others, though rooted to the soil, yet in one containing very little soluble matter, and still less of an organic nature—at all events, far too little to afford sufficient nourishment to the plant—that thousands of pounds of plants are annually reaped from good clayey soils, of which organic matter forms but a very minute constituent; and yet little or no manures are added to such soils;—that if barren, or sandy, soils, covered with only an extremely thin layer of organic matter, be ploughed up and sown with plants, nothing more will be necessary in order to form a thick coat of vegetable mould on such soils; here the plants yield organic matter to the soil, instead of the latter to the former. Again, the luxuriant vine often flourishes in a handful of clay placed in a crevice in a rock, and many *cactæ* vegetate and flourish on barren rocks, destitute of a single trace of soil, while many of the *orchidæ* are true aerial plants, requiring no soil, but merely a propitious atmosphere. In the primitive forests, from which annually thousands of pounds are continually removed without being again replaced, the vegetable matter continually increases. Then, again, barren rocks, on which no soil whatever occurs, become first covered with mosses and lichens, which, after a time, give place to a still higher class of plants, and these latter to others, without any interference of man; and that, finally, when covered with the most luxuriant forests, the layer of mould continually increases. Secondly, that all kinds of *umine*, existing in quantities sufficient for the wants of plants, are insoluble in water, both in a free state and when combined with earthy bases, and that the organic matter of the soil cannot, therefore, be taken up by spongioles, which are incapable of taking up solid matter of any kind. From these facts, he endeavours to show, that the good qualities which organic matter, in a state of decay, imparts to soils, depend upon its supplying, by its gradual decomposition, a constant supply of carbonic acid, which, in union with alkalis, or dissolved in water, is taken up by the rootlets, and assimilated in the interior of the young plants when destitute of leaves, by which they may extract from the atmosphere the carbon necessary to their development. This supply of carbonic acid is, however, not necessary after the leaves have been fully developed. And, in fact, in the conversion of woody tissue into *umine*, a quantity of carbonic acid is given off. In the early part of spring, when the young plants are destitute of leaves, the organic matter, which we add to the soil, is gradually changed into *umine*, by giving off a certain amount of carbonic acid, thus affording that very food in abundance to the young plants, at the time when, from their want of leaves, they are incapable of obtaining a sufficient supply from the atmosphere. At a later period, when the foliage fully expands, and sufficient carbon can thus be assimilated from the atmosphere, the greater part of the organic matter is, except under certain peculiar circumstances, already converted into *umine*, and, therefore, it ceases to give off carbonic acid in the same abundance, which is, now, absorbed in sufficient quantity from the atmosphere.

Until very lately, the importance of nitrogen, as an element in plants, was not recognized; and this discovery of its importance was one of the greatest steps in the rapid progress of chemical

physiology. Its recognition, as an essential element of plants, is, therefore, of the same date as the hypothesis of its source. Liebig considers that the whole of the nitrogen, in plants, is introduced into them in the form of ammonia, the whole of which ammonia is brought down from the atmosphere by the rain, &c., with the exception of what is directly added to the soil by man.

These views of Liebig, though they have served to classify facts, do not express the truth: the fact is, neither the old theory, nor that of Liebig, are borne out by facts; the latter, though very near the truth, yet requires some very important modifications. Liebig's statement, that all kinds of ulmine existing in soils, in sufficient quantity to yield nourishment to plants, were insoluble in water, and, therefore, could not be taken up by the rootlets, was fully supported by the facts known when that statement was first made; but the experiments by Mulder completely overthrow that opinion: however, on the other hand, they shew that the quantity of carbon derived from the soil, may, and is, probably, much less than that derived from the carbonic acid of the atmosphere;—that, in fact, its influence is more observable in cultivated land, than on land in a state of nature, connected as it is, as we shall presently see, with the supply of ammonia to vegetation. The importance of these experiments cannot be too highly estimated; they throw an extraordinary light upon the growth of plants; and, as we shall now shew, tend to modify Liebig's view, both of the source of the carbon and nitrogen.

If we except the foreign substances which sometimes occur in soils, and those whose decomposition is not quite far enough advanced, the number of organic substances, which occur in the black superstratum of the earth, will be reduced to a very few, which are found in every part of the earth, and on whose changes and decomposition the growth of plants depends: some of these are soluble in water, others in alkalies, others insoluble; some dissolve in alcohol and æther. The latter are resinous bodies, and appear to take no part whatever in the process of vegetation; they are most abundantly produced where vegetable matter decays under water, without much access of air—as, for instance, in the formation of peat.

The organic substances, soluble in water and alkalies, are sometimes found in considerable quantity in many soils; others, again, are very poor in them. They are of the same nature (not including the resinous bodies) as those which are insoluble in water and alkalies. At present, seven different organic substances are known to exist in soils, namely: crenic, apocrenic, geïc, humic,* and ulmic acids, humine and ulmine. The two latter are insoluble in water and alcohol; but, by the slow decay which is continually going forward, they pass into the other acid bodies, which are more or less soluble in water. Their quantity, as well as appearance, varies, of course, in different soils: some of them contain nitrogen; where nitrogen does occur, it is always as ammonia. These bodies may be conveniently divided into two classes,—the *humous*, under which may be included, geïc, humic and ulmic acids, humine and ulmine; the other class, containing crenic and apocrenic acids, may be called the *crenous* series.

If mould be treated with water, a number of salts are obtained in solution, consisting of the chlorides of sodium, potassium, lime, magnesia, ammonia and iron, formic, acetic, sulphuric, carbonic, crenic, apocrenic, and humic acids, combined with the bases of the above-mentioned salts. The whole is called *humous extract*.

The mould, thus treated with water, yields to alkalies a number of substances, which may be obtained by adding an acid to their solution; they are:—

Geïc acid	C ₄₀	H ₁₂	O ₁₄
Humic acid	C ₄₀	H ₁₂	O ₁₂
Ulmic acid	C ₄₀	H ₁₄	O ₁₂

* This humic acid is the humic acid of Mulder and Berzelius, having the formula C₄₀ H₁₂ O₁₂, and must not be confounded with the humic acids or ulmine of other writers, which consist of the whole five above-mentioned.

the latter being the first formed by the decay of organic substances. By the absorption of oxygen, it passes into the geïc or humic acids. The fluid from which the *humous* class of bodies is thrown down, still contains crenic and apocrenic acids in solution, which may be obtained by a very simple process, which it is unnecessary here to detail. Their formulæ are:—

Apocrenic acid	C ₄₈	H ₁₂	O ₂₄
Crenic acid	C ₂₄	H ₁₂	O ₁₆

These five acids enter into combination with the earthy bases of the soil, forming insoluble compounds. This fact it was which led Liebig to the conclusion, that the organic matter of the soil could not be taken up by the rootlets of plants. He supposed that the alkalies, which play such an important part in vegetation, were probably rendered soluble by acetic acid; that is, were taken up by the rootlets of plants, in the form of acetates. But, is it not quite as probable, that the organic matter of the soil could have served the same purpose?—and that this is the fact, we will presently shew. Again, Liebig's account of the source of the ammonia—which he very justly considers the only source of the nitrogen of plants—is very problematical. In fact, from the experiments of Liebig himself, there can be no doubt that the ammonia is not brought down from the atmosphere by the rain. The quantity at any time present in the air is so small, that it cannot be determined; in fact, its very presence was with great difficulty ascertained by Liebig himself. But had Liebig known the true nature of the soil, the real source of the ammonia could not have escaped his keen observation.

It is a general property of nitrogen gas, as also of common air, that it forms ammonia when brought in contact with decaying substances, or bodies giving off hydrogen in confined spaces. This property is the source of the formation of saltpetre, which, as Liebig has accurately shewn, takes place subsequent to the formation of the ammonia. In the soil, moist, decaying, organic substances are always surrounded by a confined atmosphere of air; this air would form saltpetre, if bases enough were present, even without the action or presence of organic matter, as Khulman has shewn. In Ceylon, there are twenty-two natural saltpetre pits, containing no organic matter which could yield nitrogen; the latter, in fact, being supplied by the air shut up in these caves, which, under favourable circumstances, decomposes water and forms ammonia, which is afterwards oxidized into nitric acid at those parts where there is free access of air, and then combines, forming nitrates, with the bases of the sides of the caves. A similar phenomenon may be observed in the great Kentucky cave, which yields enormous quantities of nitrate of lime every three years. The same thing would take place in the soil, if organic matter were not present, which takes up the oxygen, and thus prevents the oxydation of the ammonia. In porous soils, in which moist air is shut up, the nitrogen only combines with the hydrogen of the organic body to form ammonia, while the oxygen of the water and of the air is employed to bring the organic matter to a higher state of oxydation: in this manner, from the ulmic acid, the first product of the decomposition of organic bodies, is formed humic acid; and, from these, geïc acid; this passes into apocrenic and crenic acids: in both cases, the process is the same, except that, in the latter case, the oxygen, instead of being employed to produce nitric acid, changes the organic substances into the series of acids above-mentioned, commencing with the ulmic.

All moist, porous bodies, when filled with atmospheric air, produce ammonia at a certain temperature. The porous mortar of our walls, in moist localities, first contains ammonia, and afterwards nitrate of lime. In the same manner, moist charcoal contains ammonia, which, by subsequent oxydation, forms the *humous* substances in which Lucas grew plants, consisting, for the most part, of apocrenate of ammonia, formed by the oxydation of the charcoal.

It ought to be mentioned, that all the bodies, which we have been describing, can be obtained artificially from gum, lignine, sugar, starch, &c., by

the action of an acid; and it is even a curious fact, that *nitrophoretic* acid, obtained by the action of nitric acid on phloridzin, a crystallized substance got from the bark of the pear-tree, &c., is identical with *nitrohumic* acid, the product of the action of nitric acid on humine: both being apocrenate of ammonia.

The ulmic, humic, and geïc acids, in whatever way prepared, have the property of condensing water and ammonia to the amount of some per cents., retaining it with greater tenacity, and losing the whole of it only at a temperature of 195° Cent. This strong hygroscopic property promotes very much the growth of plants. But a much more valuable property of these acids is, the power they have of chemically combining with ammonia, forming soluble salts. Humic and geïc acids always occur in the soil, combined with NH₃; all the ammonia given off in the decay of nitrogenous matter, or formed by the condensation of the constituents of the atmosphere and of water, in the porous earth, combines with humic or geïc acids, forming salts. Thus, Mulder found, in different soils, dried at 140° Cent., the following humates and geïates of ammonia:—

In a rotten tree,	C ₄₀ H ₁₂ O ₁₂ + NH ₃	5HIO
In garden mould, id.	+ 2NH ₃	+ 4HIO + O ₂
In a garden soil, in which currant bushes grew ..	id. + NH ₃	+ 6HIO
In soil from a meadow....	id. + 2NH ₃	+ 5HIO &c.

The power of ulmic, humic, or geïc acids, of combining with ammonia, is so strong, that these acids always contain it, even when artificially prepared from sugar by the action of an acid, unless the air be carefully excluded during the process. This property has a great and beneficial influence on the soil, namely: that of fixing the ammonia derived from the atmosphere, &c., by which plants are supplied with nitrogen, while the soil retains the ammonia resulting from the decomposition of nitrogenous matter, thereby preventing it from escaping at once into the atmosphere.

But the most important property of these acids is, the facility of forming double salts with ammonia, and the earthy bases of the soil, nearly all of which are soluble in water. This is the point on which the whole of the discussion, on the subject of the source of the carbon of plants, rests.

By means of ammonia, the geïc, humic, and ulmic acids of the soil are rendered soluble in water, and thus capable of being taken up by the rootlets of plants, just as many inorganic salts. Ammonia is thus a base, which joins itself to potash, soda, lime, magnesia, iron, and oxide of manganese, forming a series of salts, which must, and are, continually absorbed by plants, and again formed in the soil by the gradual decay of the organic matter present in it. The larger the quantity of ammonia present, the more it serves to replace the other bases, such as oxide of iron and manganese, and thus converts, in water, insoluble, or difficultly soluble, combinations of the above acid, into easily soluble combinations of these acids with ammonia; and, consequently, the richer the soil is in decaying substances, yielding ammonia, the more of soluble ammonia salts of these acids will be formed.

From the *humous* class of acids, the *crenous* is derived in the soil. If ulmic or humic acids are acted upon by nitric, apocrenate of ammonia results. When formed in the laboratory, formic and oxalic acids are at the same time produced; thus, for instance, from 2 æq. of ulmic acid, and NO₄₉, derived from the nitric acid, are formed:—

2 Æq. Ulmic acid ...	=	C ₈₀	H ₂₈	O ₂₄	+ N	+ O ₄₉
	=	C ₈₀	H ₂₈	N	O ₇₃	
1 „ Apocrenic acid „		C ₄₈	H ₁₂	O ₂₄		
1 „ Ammonia			H ₃	N		
12 „ Formic acid ..		C ₂₄	H ₁₂	O ₃₆		
4 „ Oxalic acid ..		C ₈		O ₁₂		
1 „ Water			H	O		
		C ₈₀	H ₂	N	O ₇₃	

nitric oxide being at the same time given off. It is formed in a similar manner in the soil, carbonic acid being, however, formed, instead of formic and oxalic. The ammonia of the soil, which is formed by the action of decaying vegetable matter and water on the air shut up in the soil, can be oxidized and converted into nitric acid; but the latter, as soon as formed, comes in contact with humine, or humic acid, which it converts into apocrenate of ammonia and carbonic acid, instead of formic and oxalic acids. This change, like the formation of ammonia, takes place gradually. In order to form 1 equivalent of apocrenic acid, 2 equivalents of humic acid, 1 eqv. of oxide of ammonium, and 76 eqv. of oxygen, must be employed, thus:—

	C_{80}	H_{28}	N	O_{101}
1 eqv. Apocrenic acid	C_{48}	H_{12}	O_{24}	
1 „ Ammonia		H_3	N	
32 „ Carbonic acid	C_{32}		O_{64}	
13 „ Water		H_{13}	O_{13}	
	C_{80}	H_{28}	N	O_{101}

The ammonia of the humate of ammonia simply passes from the humic acid to the apocrenic, in the formation of the latter from the former; at the same time performing another office, by fixing oxygen. The disposition which ammonia has to form nitric acid, causes the combination of the oxygen of the air, shut up in the soil, with the humic acid; while the ammonia itself remains unchanged in the soil, and is not converted into nitric acid. Where no excess of organic matter is present, but a moist air, and potash, soda, lime, &c., ammonia is first formed, and, from this, nitric acid: where bases are not present, but, on the contrary, organic matter predominates, humic acid is formed from their decay; ammonia from the atmospheric nitrogen; and, finally, apocrenate of ammonia, carbonic acid, and water. This formation of apocrenate from humate of ammonia, by the absorption of oxygen, continually proceeds in the soil during the heat of summer (except in the uppermost layer exposed to the air). When water enough is present, this salt, as fast as formed, can be taken up by the rootlets of plants, as a double salt of apocrenate of ammonia, and a fixed base; while in the soil, thus freed from apocrenate, a fresh portion is again formed from the humic acid, or humine, which is generally present in large quantity.

It is, however, probable that geic acid is the grand source of apocrenic acid; so that the order in which these different substances are formed by the process of decay, is, ulmic, humic, geic, and apocrenic acid, which latter passes into the final one of the series, crenic acid, which, also, occurs in combination with ammonia in the soil, forming double salts soluble in water. According to Berzelius, apocrenic acid is readily formed from crenic; when the atmospheric air acts upon it, oxygen is absorbed, and almost nothing but water is formed.

	C	H	O
2 eqv. Crenic acid	48	24	32
1 „ Apocrenic acid	48	12	24

+ O_4 from the air .. = .. 12 12

while crenic acid can be formed from apocrenic, by the action of NO_5

	C	H	O
1 eqv. Apocrenic acid	48	12	24
1 „ Crenic acid	24	12	16

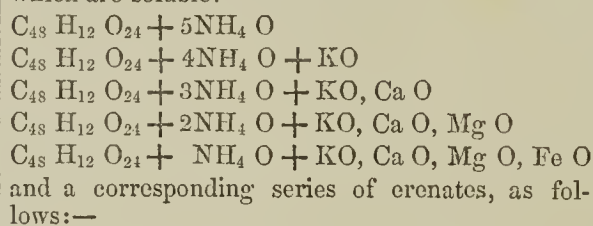
40 „ Oxygen from NO_5 40

24 „ of Carbonic acid 24 48

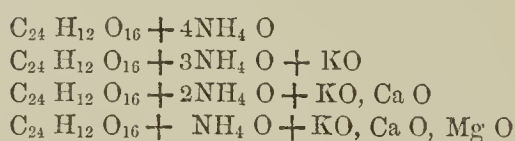
By the constant disposition to form saltpetre in the soil, the apocrenic acid must be continually changed into crenic acid, and the series of acids in the soil thus closed by crenic acid. In the upper layer of the soil, on the other hand, in which little air is enclosed, and, consequently, the disposition to form saltpetre very slight, crenic acid is converted into apocrenic.

Crenic and apocrenic acids occur in soils, so intimately combined with ammonia, that they

possess almost the character of quaternary compounds; but, besides with ammonia, they occur in combination with other bases in soils, but generally as a double salt of ammonia, potash, soda, lime, magnesia, or oxide of iron. A fact that cannot be too strongly dwelt upon here, is, that apocrenic acid is *quintebasic*, and crenic *quadribasic*,—thus affording scope for the formation of an almost endless class of ammoniacal double salts, all of which are extremely soluble. They can thus combine, the one with five atoms of water or base, and the other with four; owing to this property, insoluble crenates and apocrenates, such as those of oxide of iron, lime, &c., are rendered soluble, when they form double salts with soluble crenates and apocrenates, and, by that means, can supply plants with all the four elements, as well as with a series of inorganic bases, in varying proportions. For instance, the following apocrenates can be formed in the soil, all of which are soluble:—



and a corresponding series of crenates, as follows:—



The quantity of crenate or apocrenate of ammonia in these salts, in the soil, is greater, the more ammonia present. In the heat of summer, the moist air which is shut up in the soil has a continual tendency to form ammonia, and, consequently, ammonia will predominate in all the salts of these acids. These properties place the *crenous* series of acids higher in the scale of importance than the *humous*.

From all these facts, we see that the position of Liebig, in which he assumed that plants could not derive any nourishment from the organic substances found in the soil, is perfectly untenable, as well as the source from which he derives all his ammonia. When vegetable matter begins to decay, ulmic and humic are formed, which, by continual decay, pass into all the other stages, forming acids, which enter into combination with the earthy bases of the soil, yielding a series of insoluble compounds useless to plants. But, at the same time, another power is at work in the formation of ammonia, which ammonia, as fast as formed, unites with these insoluble compounds, rendering them soluble, and capable of being absorbed by plants, the ammonia itself being at the same time assimilated in their interior. The ammonia, on the one hand, prevents the whole of the organic matter of the soil from escaping into the atmosphere; and, on the other hand, the organic matter prevents, in a beautiful manner, the oxidation of the ammonia, thus affording another instance of the admirable regularity with which the balance of nature is maintained. It would seem, that, while a very large part of the carbon is derived from the carbonic acid of the atmosphere, another portion, dependent altogether upon the amount of ammonia formed, or added to the soil, is derived from the decaying organic matter contained in the latter; hence, the great value of ammoniacal manures does not depend solely on their supplying the plants with nitrogen, but likewise with carbon, and more or less inorganic bases; hence guano, &c., when applied to a soil containing a large quantity of vegetable matter in a perfectly decaying state, has much more effect than when applied to sandy or clayey soils, destitute of inorganic matter, as has been proved by repeated failures, the cause of which was never understood. For the same reason, the principle adopted by farmers, which Liebig has recommended, of paying all the attention to supplying the land with the inorganic substances which are usually contained in the ashes of the plants grown, and forgetting, or rather denying altogether, the value of organic matter in the soil, is erroneous, and has already produced a multitude of mistakes and losses.

MEDICAL MEETINGS.

WE have before us Reports of Meetings at Bath, Hull, Manchester, Nottingham, and some other places. It is satisfactory to observe, that they have all been of a similar character, and with the same attributes, we have elsewhere spoken of, as belonging to the Meeting of the Provincial Medical and Surgical Association. Our crowded columns prevent our giving their proceedings a more lengthened notice, which is indeed the less necessary, as we have almost anticipated the details in reports of numerous other Meetings. The uniformity of opinion, while gratifying to the friends of the Profession, makes the reiterated narrative a little tedious.

IMPORTANT MEDICAL MEETING.

PROVINCIAL, MEDICAL, AND SURGICAL ASSOCIATION.

A special meeting of this numerous association, consisting of nearly two thousand members, was held at Derby, on Thursday last. Dr. Robertson, of Nottingham, graced the chair, and the principal speakers were, Dr. Hastings and Dr. Streeter (Worcester); Dr. Williams, and Dr. Hutchinsou (Nottingham); Dr. Brigstock, Dr. Baker, and Dr. Heygate (Derby); Dr. Edwards, of Chester; Messrs. Martin, Soden, Fearn, Hey, Teale, Garlick, Elkington, Daniel, Terry, Ceely, Thomas, Jackson, Craig, Evans, Wright (Derby); Turton (Sheffield); Thomas (Sheffield). Letters were read from Dr. Reed, Sir Thomas Wilde, Mr. Crone (of Norwich); Dr. Charlton (Newcastle); Mr. Higgins, Dr. Williamson, in approval for themselves, or Associations with which they are connected, of the spirit and character of the resolutions previously fixed, to be submitted to the meeting. The courtesy, which was not extended to the Medical Protection Assembly, of noticing its existence, was paid to the British Medical Association, and Dr. Webster on its part, and that apparently of its patron, Mr. Wakley, wrote a strong protest, not necessary to be further noticed. As the speeches necessarily resemble much the ordinary addresses we have noticed on this subject, from having to deal with the same topics, it will be sufficient for us to present our readers with the resolutions passed. Anything more judicious, or worthy of so important an Association, it would be difficult to fix on, even if Dr. Webster, of Dulwich, had not given them his condemnation.

1.—That the Association testify their satisfaction that a bill for the better regulation of Medical Education and Practice has been laid before the House of Commons, and that opportunity is afforded to the members of the medical profession for considering its provisions previous to its passing into a law.

2.—That this satisfaction is increased by observing, that an approach to an uniform standard of education and qualification, and the right to practice by all qualified persons, without respect to local privileges—principles for the recognition of which the Association has on various occasions contended, and especially in petitions to the Legislature, and memorials to her Majesty's Government,—are two of the great leading principles of the measure.

3.—That further to ensure the object of a sufficient uniform primary qualification for every medical practitioner, without which the equal right to practise every department of the profession ought not to be conceded, it seems desirable that the diploma of Licentiate of Medicine should be required of all who may hereafter propose to enter the profession, and previous to their being entitled to claim admission to register in any other grade.

4.—That these principles, if carried fully into effect, would confer a great benefit on the profession and the public, in the removal of many existing evils; and that, in thus providing the public with a supply of fully qualified medical practitioners, the Association are of opinion the Government would do much towards the remedy of abuses of which, for a long time past, there has been great reason to complain.

5.—That the Association view with alarm and deep regret that part of the bill which proposes to abolish all restriction on the practice of medicine by unqualified and unlicensed persons; and that, although there may be some reason to doubt the practicability of altogether preventing unlicensed practice by general enactment, the Association are of opinion that the illegality of such practice should be unequivocally declared, and some simple and effective means of restraint be adopted.

6.—That while the Association approve, with this exception, the general spirit and principles of the bill, they feel that in various details it may be desirable to introduce certain changes and modifications, which would improve the general efficiency of the measure, and tend materially to facilitate its practical application.

7.—That while the Association is sensible of the advantages which the profession will derive from a direct connection with the Government, they cannot but consider the proposed constitution of the "Council of Health" as deficient in not affording express representation, either of the physicians and surgeons resident in the provinces, or of the great body of general practitioners throughout the country.

8.—That some provision ought to be made, either in the bill, or in amended charters to be granted to the Colleges of Physicians and Surgeons, for a more direct acknowledgment of the representative system in the councils or governing bodies of these corporations.

9.—That in the absence of any provision for the admission of the general practitioners into a participation, on terms honorable to that body, in the corporate privileges of either of the Colleges of Physicians and Surgeons, it appears essential to the well-being of this numerous and influential body, as well as beneficial to the public interests, that they should be incorporated together, and that the interests of such corporation should be adequately represented in the proposed Council of Health.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY,
Nov. 12, 1844.—Mr. Stanley, President, in the chair.

Case of ulceration of the duodenum, in which the gall-bladder was filled with a colourless aqueous fluid, and contained numerous gall stones, by C. J. Roberts, M.D., Physician to the Welsh Charity, &c.—The author only saw this case a short time previous to death. The patient was attacked with violent vomiting on Tuesday evening, which resisted all the means employed to subdue it, and he sunk on the following Thursday at 2, p.m. On examination after death, the intestines were very slightly glued together by lymph: the inner membrane of the stomach had many ecchymotic spots on it, of a deep colour;—the duodenum was ulcerated through its entire length—the liver small, but healthy. The gall-bladder was distended, and at its apex there was a small vesicle, more translucent than the other portions of the bladder, looking as if from a rent of the two outer coats, and a protrusion of the inner one. On opening it, more than four ounces of a perfectly transparent fluid escaped, but, unfortunately, none of it could be collected for examination. There were more than one hundred gall stones in the gall bladder, about the size of peas. The kidneys and bladder were healthy. The author remarks, that cases where a number of gall-stones have been found after death, without their presence causing irritation, or their being suspected, are not rare; but that the total absence of bile, or rather its place being supplied by an aqueous fluid, is not common. He observes, however, that allusions are made to it by some of the older writers, as Fernelius, and Haller; and, also, that mention is made of an altered condition of the biliary secretion, by Andral, and by Drs. Graves and Stokes, as well as by Dr. Thomson, in his "Practical Treatise on Diseases of the Liver." He concludes by observing, that the most extraordinary part of the case is the fact, that the man never made any complaint of hepatic derangement during his lifetime. He was never jaundiced, nor had pain in the right side, notwithstanding one of the calculi was firmly grasped by the duct.

Case in which the vena cava inferior was obstructed from the commencement of the common iliac veins, and its cavity obliterated between the entrance of the emulgent and hepatic veins. By T. B. Peacock, M.D. This was a case of complete obstruction of the inferior cava, from the uterine and common iliac veins to the entrance of those from the liver. The obstruction in the former vessels, and the inferior portion of the cava, was the result of adherent masses of pale lymph, while above, the vessel was converted into a ligamentous cord. The right kidney was in an advanced stage of granular degeneration, and the left completely atrophied. The liver was also of small size. The author considered the disease of the vein to have been wholly unconnected with the death of the patient, and ascribed the general dropsy, under which she laboured during the last period of her life, to the condition of the kidney and liver. The circulation had been maintained by means of the branches of

the vena azygos. The author was of opinion, that the adhesions of the uterus to the adjacent organs, and the appearance of the veins as exhibited in the preparations shewn to the society, were conclusive of the dependance of the obstruction in the vein, on inflammation of the vascular tunics.

Mr. Stanley observed, that in this case there was an interesting point of anatomy, the collateral circulation having apparently been maintained by the vena azygos; which, after obliteration of the vena cava inferior had taken place, had become enormously enlarged. There was not an evident dilatation of the superficial abdominal veins, as is generally the case. The author, he believed, wished to direct attention to the symptoms which arose after the obliteration of the vein had occurred.

Dr. George Budd mentioned, as points of considerable interest in the case, the atrophy of the liver, kidneys, and lungs; and he suggested, that this atrophy might be the consequence of obliteration of some of the veins of those organs from adhesive inflammation. He remarked also, that we have a tolerably complete knowledge of the effects of adhesive inflammation of the veins of the limbs, but that the attention of pathologists had not been sufficiently directed to the same disease in the veins of the viscera. It is very common for branches of the vena portæ to be obliterated in this way, and the result is atrophy of those portions of the liver which the obstructed branches supplied. The surface of the liver, in consequence, becomes marked by deep fissures along the tract of the obstructed veins. Some of the veins of the kidneys are occasionally, though less frequently, obliterated in the same way, and the consequence is atrophy of the kidney, and irregularity of its surface—changes which were noticed in Dr. Peacock's case.

Mr. Stanley enquired of Dr. Budd whether he had ever noticed, in cases of adhesive phlebitis, occurring, for instance, in the veins of the arms, that the symptoms had gradually subsided, and, after a time, that the proper course of the circulation had been restored through them. He had seen two instances of this last summer at St. Bartholomew's Hospital, in one of which the brachial and axillary veins were affected, and in the other the popliteal. The symptoms of adhesive phlebitis were well marked, but, nevertheless, the circulation through those vessels was ultimately completely restored.

Dr. C. J. B. Williams agreed with Dr. Budd, that the subject of diseases of the veins was not yet exhausted in a pathological point of view, and, in illustration of this remark, he would cite the very interesting paper, submitted to the society by Mr. Paget, during the past year. He (Dr. C. J. B. Williams) had, within the last few weeks, seen a case which was illustrative of the diseases of the veins in the substance of the lungs. The case was, apparently, one of peripneumonia, but the difficulty of breathing, and the other symptoms, were much greater than could be accounted for by the extent of the disease which was discovered before death. The countenance was remarkably livid, and the lower part of the body was œdematous. On examination of the body after death, there was found carnification of the two lower thirds of the lung, which was of a deep-red colour. On cutting it across, Dr. Williams' attention was attracted by the large size of the pulmonary vessels, and by the size of the clots they contained; which, on a closer examination, were found to be adherent to the lining membrane of the veins. The intensity of the symptoms was thus explained by the diseased condition of the veins; but whether their obstruction was the cause or the effect of the inflammatory action, it was, perhaps, difficult to decide. The veins in other parts of the body were also examined; as Dr. Quam suggested that it was probably a case of adhesive phlebitis. The coats of the veins, generally, were easily lacerable, with smaller clots of blood, and points of atheromatous deposit, especially in the vena cava; but there was not any actual obstruction. The veins, however, did not present any indication of recent inflammation, but merely the generally softened and atheromatous condition of the coats. He (Dr. C.

J. B. Williams) could not help suspecting, that many cases were set down as instances of inflammation, which, in reality, were merely the result of clots of blood adhering to the inner coat, roughened by previous disease; as we know, that when the blood is surcharged with fibrine, as during the inflammatory state, for instance, it will very readily adhere to a part that had been previously roughened. Age may be regarded as a frequent cause of this roughness, which does not always depend on phlebitis. We must not lose sight of the fact, that coagulation of the blood may take place in many situations entirely independent of inflammation; and in this case it may not have been absolute phlebitis, but the deposition of fibrine in a vessel previously diseased, as sometimes takes place in the arteries.

Mr. Ferguson stated that it had fallen to his lot to meet with two examples of obstruction of the vena cava, one in the superior, and the other in the inferior. That in the superior cava had been in a subject in the dissecting rooms; that in the inferior cava had happened in private practice. The examination in the dissecting room enabled him to corroborate the description, given by Dr. Peacock as to the collateral circulation, for he had remarked the great enlargement of the vena azygos, and the branches which communicate with it, and had no doubt that this vessel was most important in carrying on the circulation in cases such as those under consideration. The other example was chiefly remarkable in consequence of the absence of any symptoms during life indicative of such a condition. The case was that of a female, who died three weeks after childbirth, and although she was seen by various parties who had great skill in the treatment of females under such circumstances, no one had any suspicion of the true state. He had been asked to examine the body, and it was only after they had failed to detect anything very unusual, that he looked closer to the parts in front of the spine, where he found the vena cava inferior completely obstructed by lymph, having, also, pus in its interior, as well as on its outer surface.

With reference to what had fallen from the president as to the re-establishment of the circulation in veins which had been affected with inflammation, he, himself, had frequently made similar observations. Opportunities of doing so had been common among surgeons of late years, and he doubted not that many in the room could make similar statements. In the present day, when the practice of obliterating veins was so common, it was noticed that in the attempts of the surgeon to induce inflammation in the veins of the lower extremity, in their enlarged and varicose condition, by passing needles under, and string over them, and when there was every indication of that process having been established, after the lapse of 10, 20, 40 days, or even more, the blood commenced to flow again through such vessels. He had frequently observed this, and had long been of opinion that instead of adhesive inflammation in the inner tunics of veins being a process of common occurrence and easily established, as was the current doctrine of the day, it was, in reality, rare, and by no means so readily induced as was generally imagined.

Mr. Stanley wished to draw the attention of the society to the question put forth by Dr. Williams, that obstruction of the veins is not always caused by inflammatory action, but from a roughened state of the inner coat.

Dr. Peacock did not altogether agree with Dr. Budd: he could not believe that the disease of the vein was prior to that of the kidney, nor was there any disease in the portal system to account for the atrophied condition of the liver. Phlebitis he regarded as a very common attendant on granular disease of the kidney, inasmuch that it might be regarded as a sequence thereof. The preparations on the table, he thought, would shew that the case was really an instance of inflammation, and not merely of deposition of fibrine on the inner coats.

Mr. Snow observed that, if he were not mistaken, the case was attended with symptoms of a diseased condition of the uterus, and he thought it not impossible that the obstruction of the vena cava

might have been caused by the extension of inflammatory action from the veins of the uterus. In that case he should be apt to regard the disease of the kidneys as a separate malady altogether, although of itself capable of proving a sufficient cause of inflammatory action in the vein. Mr. Snow was further of opinion that a similar explanation was applicable in Mr. Ferguson's case.

On the Classification, Structure, and Development of the Echinococcus Hominis, shewing reasons for regarding it as a species of cysticercus, by Erasmus Wilson Esq., Consulting-Surgeon to the St. Pancras Infirmary; Lecturer on Anatomy and Physiology in the Middlesex Hospital.—The author agrees in the opinion, now become general, of the universality of this curious entozoon in the sacs of the common acephalocyst, but differs with all preceding writers in regarding it as a fixed or pedunculate animal in its perfect state, as well as in its undeveloped form. The cases in which it were observed, was the common hydatid tumours of the liver. The little animal measures in its longest diameter from 1-200th to 1-125th of an inch in diameter, is scarcely distinguishable by the naked eye, and is enclosed in clusters of from one to two hundred in a proper membrane, which is developed from, and attached by a point to, the internal membrane of the acephalocyst. To give an idea of the number of echinococci contained within an hydatid tumour, the author counted their number in an acephalocyst of about the size of a hazel-nut. In this small cyst, he found forty clusters, several of which contained eighty individuals, and the entire number of separate echinococci was about one thousand. The animal is found in two states, namely, a contracted and an elongated state; in the latter, there is perceived a circle of hook-lets at the cephalic extremity, with four suckorial processes; then follows a cyst-like body or caudal portion, into which the cephalic portion is drawn in the contracted state, and at the caudal extremity is the peduncle. After giving a minute description of the structure of the animal, the author proceeds to describe the changes which take place in the creature after death, and gives a full account of the progressive stages of its development. The author considers the offices of the hook-lets and suckorial processes to be involved in obscurity, the creature having neither mouth, nor organs of progression. The identity of structure of the echinococcus with the cysticercus he considers to be complete, and proposes for it the name of *cysticercus pedunculatus*.

[The paper was accompanied by upwards of forty well executed figures, drawn to a scale.]

Dr. George Budd remarked that one of the most interesting results of the late researches on the echinococci, is the fact that seems to have been made out by M. Livois, that the echinococci are not, as was formerly imagined, mere parasites of hydatids, but are present in all hydatid cysts, that contain acephalocysts. He (M. Livois) states that he has examined eight hundred hydatids, and has found the echinococci in every instance. During the last winter he (Dr. Budd) examined a great number of hydatid tumours, obtained from the liver and lungs of sheep, and on opening them, small seeds like those of the mignonette, sprung out; these were echinococci, and were present in all of them. Dr. Budd had also opened seven preparations of hydatid tumours, taken from the human subject, which were in the museum of King's College, and in five of these, which had been in the museum for years, he had not any difficulty in discovering the remains of echinococci. In one of these, after great difficulty, he had succeeded in finding the teeth, which were the least liable to decay. In one of the two preparations in which they were not found, the acephalocysts had been expectorated, and were all broken; and in the other, there was a single large acephalocyst, which was turned inside out. It is probable therefore that in these two instances the echinococci had been washed away, so that Dr. Budd's observations, as far as they go, confirm the opinion of M. Livois, that the echinococci are always present in acephalocysts, and are in all probability the cause of hydatid tumours. Hydatids are very numerous in the livers of sheep, and the echinococci are found even in the smallest.

They are identical in man and in the lower animals, excepting that in man they are found floating in a larger and outer cyst, while they are altogether single in the lower order of animals.

STATISTICAL SOCIETY, Nov. 18th.—Col. Sykes, V.P., in the chair.

This being the first meeting of the session, Col. Sykes called upon Mr. Tooke, as one of the Delegates from the Society to the British Association Meeting at York, to announce the titles, merely, of the papers, read before the Statistical section of that Association; as the papers, in the form in which they were read, would be printed in full in the Society's Journal. The paper for the evening was by Dr. Balfour, of the Grenadier Guards, being "a comparison of the sickness, mortality, and prevailing diseases among seamen and soldiers, as shewn by the 'Naval and Military Statistical Reports.'" Dr. Balfour chiefly confined his observations to that portion of the navy, employed in the East India command—a command of great extent, stretching from the tropic of the cancer, to the 45th degree of south latitude, and from the 50th to the 150th degree of east longitude; the northern limit being the isthmus of Suez; the southern, the island of Tasmania. It includes all that part of the coast of Asia bounded by the Indian Ocean, the islands in that ocean, the British Possessions, and New Holland, and Tasmania, and the islands in the North Pacific. The operations of the Squadron are, however, principally directed to the shores of the Bay of Bengal, of the coast of Coromandel, and of the island of Ceylon; so that its service is chiefly intertropical. From a table of the amount of sickness, mortality, and invaliding in the two services respectively, from 1830 to 1836, inclusive, it appears, that the amount of sickness has been greater in the naval than in the military force; while, in the latter force, the deaths amounted to three times those of the former. Another striking difference between the two services, is in the amount of invaliding, which is nine times as great in the navy as in the army. Of remittent fever, one in eight died in the army; while only one in twenty-five died in the navy. From the more formidable and fatal diseases of the lungs, spitting of blood, and consumption, the sailor enjoys a considerable exemption; and the prevalence of consumption among the troops, serving in the peninsula of India, is lower than in any other British possession. The most prevalent and fatal class of diseases in the command, is of the stomach and bowels, the sailor enjoying a much greater comparative exemption from mortality, the ratio having amounted to scarcely one-fourth of that among the soldiers. Epidemic cholera has proved more prevalent and fatal among the military than among the sailors; and the proportion of deaths to cases has also been higher. The meeting was well attended, and the discussion animated; the leading speakers being the President, Dr. Guy, Mr. Neison, Mr. Corde, and Mr. Martin.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

(By EVAN THOMAS, Esq., House-Surgeon.)

Joseph Bridgeman, æt. 31, a cabinet maker, applied at King's College Hospital, on Sunday morning, Nov. 12th, on account of a pricking sensation, which he felt on the inner side of the left forearm, a little below the elbow joint; he had first perceived this, about two hours before, whilst in bed. On examination, I found a needle lying transversely over the pronator teres muscle, about two inches below its origin, both ends of which could be felt subcutaneous, but none of the intermediate portion. I made a perpendicular puncture, with a small double-edged scalpel, over its extremity, through which the point was easily made to protrude, and was readily removed with a forceps. How the needle came there, is a question, perhaps, not easily answered; the man had not the slightest recollection of having swallowed a needle, or of being pricked in any part of the

body; and, even supposing that he had swallowed it, one can scarcely see how a needle, or any other foreign body, could travel, unless in the blood-vessels, from some part of the throat or œsophagus to the forearm; the needle was about an inch and a half long, and as fine as an ordinary bristle, without losing any of its lustre; it was in the cellular tissue, and not beneath the fascia. Sir B. C. Brodie mentions numerous instances of a similar nature, but most of these were hysterical women, who, no doubt, had purposely introduced the needles, for the sake of deceiving their friends and medical attendants. The man seemed very anxious about it, and was afraid that he should not be able to follow his work; for this reason, I think it not likely that the man (having a large family to support) would introduce a needle into his own arm, for the sake of humbugging others. I recollect seeing a very rusty pin, upon the sheath of the common carotid artery, in a subject that I dissected in King's College, about two years ago. I have no reason to suppose that it had been introduced after death, for I made a very careful examination at the time. The above man is a cabinet-maker, and in the habit of repairing lady's work-boxes, when he has nothing else to do; the most probable supposition, perhaps, is, that, whilst at this kind of employment, a needle, from one of these, might fall into his shirt-sleeve, and in this manner find its way through the skin into the cellular tissue, and remain so without causing any inconvenience for a time. I examined the arm before I removed the needle, for any recent punctures, but could not find anything of the kind. If some men are subject to hysteria, he certainly did not appear like one; he had always enjoyed very good health; never had fits of any kind, and had lived temperately.

ROYAL HOSPITAL.—GREAT YARMOUTH.

The following somewhat singular case came under my notice the other day. John Abbs, aged 21, cook, aboard a vessel from St. Peterburgh, asked for my advice under these circumstances. A few days since, while aloft, furling the trysail, he struck his scrotum a smart blow, which, however, was not immediately followed by pain, sickness, or anything unusual; but the next day while carrying dinner down the cabin, he says his left testicle suddenly disappeared (never having done so previously); feeling somewhat sick and faint, he mentioned the fact to the master of the vessel, who gave him a slight anodyne and some aperient medicine, but up to the present time, (now about 10 days since the blow) the testicle has remained obstinately retracted. Could I not have felt it, in its new position, I should have been inclined to consider this a case of *congenital monorchis*; the general appearance of the scrotum, and apparently improbable history of the case, strongly leading to such a supposition.

THOMAS RISING, M.R.C.S.L.

13th, November, 1844.

UNREDUCED DISLOCATION OF THE HUMERUS.—Mr. Hancock states, in the *Provincial Medical Journal*, that there is a preparation in the museum of the Royal College of Surgeons, taken from a patient of the late Sir W. Blizard. The patient had suffered dislocation into the axilla, which was unreduced. The head of the bone lies between the scapula and the subscapularis muscle; the infra-spinatus and teres minor muscles are entire, but the tendon of the supra-spinatus appears partially separated from the greater tubercle; the glenoid cavity is absorbed on its inner side, and is quite denuded of cartilage; the capsular ligament is extensively lacerated, and its torn edges are covered with a kind of fibrinous fringe.

ERRATA FOR MR. BRAID'S "CASES OF NATURAL SOMNAMBULISM."—Page 78, col. 2, line 17, for "limper" read "limber," and in line 21 from bottom of column, for "pigments" read "figments."—Page 96, col. 1, 5th line of 4th paragraph, for "Glasin" read "Glasier;" in the 37th line of next column, for "the" read "three."—Page 135, line 7, for "an" read "any;" line 11, for "violence" read "volume."—Page 134, 2nd col., line 4 of 3rd paragraph, for "but short" read "but a short one."

GERMAN CHEMICAL SCIENCE.

(From our Correspondent, Dr. MUSPRATT, the Translator of Plattner on the Blowpipe.)

Dr. H. Böttger has lately published his researches upon the action of sulphurous acid upon different metallic salts, &c. In the course of his investigation, he obtained two remarkable double salts, the preparation and analysis of which I have abstracted from his brochure:—*e. g.* By boiling a salt of nickel with sulphate of ammonia, a yellowish precipitate is produced, which, when dried in the air, becomes black.

	Analysis of this Salt.		
	Theory.	Found.	
1 eq. oxide of nickel	469.67	22.78..	22.84 & 23.09
1 eq. ammonia	214.47	10.40..	—
2 eq. sulphurous acid	802.34	38.92..	36.23
5 eq. water	562.35	27.90..	—

20.48.83 100 00

Formula $\text{Ni. O, NH}_3, 2 \text{ S O}_2, 5 \text{ H O.}^*$

When a solution of sulphate of copper is decomposed by sulphite of ammonia, containing only a slight excess of sulphurous acid, a dirty greenish-yellow precipitate appears, which, on the addition of more acid, instantly disappears, and a beautiful green liquid is the result. If the sulphite of ammonia contains a large excess of acid, no precipitate is obtained in the cold. When this solution is heated cautiously, there separates at a temperature of about 140° Fahrenheit, a salt in the state of beautiful white small plates, which powerfully refract the light, and, when viewed perpendicularly in the liquid, display iridescence. At a higher temperature, these crystals are changed into a red gritty salt, which, under the microscope, appears in four sided prisms. The white salt is obtained very readily, if the cupreous solution is mixed with a great excess of sulphite of ammonia, and as much sulphurous acid as prevents a precipitate occurring; then warm the menstruum; place it in a corked flask for some time, and the required salt will separate.

Analysis of the Salt dried over Sulphuric Acid.

1.0.1518 gave	0.0847	Cu O,	=	50.15	p.c. Cu ₂ O
2.0.1826 ..	0.1022	Cu O	=	50.32	p.c. Cu ₂ O
3.0.3745 ..	0.4572	Ba O, SO ₃	=	33.58	p.c. S O ₂
4.0.2346 ..	0.2927	Ba O, SO ₃	=	34.32	p.c. S O ₂
5.0.3749 ..	0.0908	Pt.	=	4.21	p.c. N H ₃
6.0.4992 ..	0.1375	Pt.	=	4.78	p.c. N H ₃

	Theory.		Found.	
2 eq. subox. of copp.	1782.80	50.38..	50.15	50.32
1 eq. ammonia	214.47	6.06..	4.21	4.78
3 eq. sulphurous acid	1203.51	34.01..	34.32	33.58
3 eq. water	337.41	9.53..	—	—

3538.20 99.98

Formula $2 \text{ Cu}_2 \text{ O, NH}_3, 3 \text{ SO}_2, 3 \text{ H O.}^\dagger$

Giessen Laboratory, Nov. 7th, 1844.

ARTIFICIAL MESMERISM.

To the Editor of the "Medical Times."

SIR,—Having witnessed the performance of B. Eagle's child, before Alexis made his appearance in this country, I am able to testify to the fact of your supposition being correct, "that his letter is a hoax." At the same time I may state, that I satisfied myself on the occasion, that the answers were elicited by a method of questioning previously agreed upon.

The child was almost uneducated, but what would be called sharp, with large perceptive faculties, more especially calculation, which was rather largely developed. She was unable to answer any question unless her father perfectly understood the subject, or to do any more than a

* I prefer the following arrangement for the formula:

$\text{Ni. O, SO}_2, \text{NH}_4 \text{ O, S O}_2 + 4 \text{ aq. Trans.}$

† A new arrangement, $2 (\text{Cu}_2 \text{ O, SO}_2) + \text{NH}_4 \text{ O, SO}_2 + 2 \text{ aq. Trans.}$

certain routine, which was repeated each evening of exhibition.

Yours, &c.

W. H. MICHAEL, Surgeon.

Swansea, Nov. 15, 1844.

FELLOWSHIPS OF THE ROYAL COLLEGE OF SURGEONS.

MR. YEARSLEY'S LETTER TO THE COUNCIL, WITH REMARKS.

(To the Editor of the "Medical Times.")

Sir,—I am surprised you have not been more frequently called upon to give publicity to the manner in which the claims of many of the profession to the Fellowship were submitted to the Council, for it appears to me, that none of the communications addressed to you upon the subject, would be half so effectual in exposing the great injustice which has been committed, in but too many instances, or so certain of banding together, in unanimity of feeling and action (for the commendable purpose of obtaining justice), the eleven thousand practitioners, whose privileges have been so cruelly infringed upon, and whose feelings have been so grossly outraged.

I have been slow in intruding my own case on the notice of the profession, believing that claims, far more imperative than mine, have been submitted to the Council, and rejected. It would seem that these candidates have deemed it prudent, for reasons best known, and all-sufficient to themselves, to pocket the affront, *sub silentio*. But, as the profession must by this time know, I am not one to suffer insult to be added to injury with impunity. When an inflated member of the Council dared to utter gross exaggerations, and reiterated falsehoods, reflecting on my practice, I appealed from his calumnies to the tribunal of public opinion, and with an effect from which he still suffers. *En passant*, it may be observed, that the *esprit de corps* of the Council is not influenced by this individual, and, therefore, my exclusion cannot be laid at his door.

But there are some incongruities in regard to this said degree of Fellowship, as far as I am individually concerned, and in reference to family connections, which will, I trust, render that which I have to say interesting to your readers.

A few days prior to the publication of the *first list* of Fellows, it was reported to me by "one in the secret," that I should find my name omitted. Impressed with the feeling that if the Fellowships were impartially conferred, the degree would prove to be an honourable distinction, I considered it due to myself to call upon certain members of the Council, to ascertain how far the assertion of my friend was warranted, and if it were founded in fact, to remonstrate against such an act of omission on the part of the Council. One said, "If your name is not in the *first list*, no doubt it will appear in the *second*;" and another, who had been President of the College, was pleased to say, "If your name is omitted, it is unjust, for you have certainly improved the department of the profession in which you are more particularly engaged." Another said, "You are no doubt omitted in the *first list*, because you practise a *specialité*." Another said, "You give yourself too much publicity." By all, I was advised to lay my claims before the Council, and I did so in the following letter, combatting, as you will perceive, every objection which appeared in the minds of those of the Council I called upon, to have interposed in my election;—

TO THE PRESIDENT, VICE PRESIDENTS, AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS IN ENGLAND.

GENTLEMEN,—I have been given to understand that it is not your intention to include my name in the List of Fellows about to be elected by your honourable Council, pursuant to the provisions of our New Charter. I take it for granted that the great principle of that Charter has reference, in the selection of members for such a distinction,—to priority of membership—to moral and professional character—to professional attainments—and the exclusive practice of surgery.

As I have had the honour of being a Member of the Royal College of Surgeons for nearly six-

teen years, it cannot be asserted that I am ineligible in point of time.

I am, therefore, led to the conclusion, either that my name may have been passed over by an unintentional oversight; or, in consequence of some supposed, though unconscious, infraction of the rules and regulations of the College on my part, or of some misconception on the part of one or more of the Members of your honourable Council.

Some misapprehension certainly must exist, or so great an injustice towards me could not be even contemplated; for, if I be not misinformed, there are instances in which your choice has fallen upon Members of the College who are far my juniors in the profession, and certainly not my superiors in professional education, standing, or attainments; young men just emerged from their pupillage, and who can scarcely, as yet, have been consulted on their own account.

The time for announcing the new Fellowships is near at hand; so that the mere apprehension of finding my name omitted, carrying with it, as such a result must do, consequences prejudicial to my interests, induces me most respectfully to urge my claims on your favourable consideration.

Gentlemen, my College diploma bears date December, 1827, previous to which I had the great advantage of deriving my professional education from men of the highest distinction. My initiation into the profession took place at the Gloucester County Hospital, under my father-in-law, Mr. Fletcher, a man eminent as a surgeon and as such well known to you all.

In passing through the usual professional ordeal in London, as a student at St. Bartholomew's Hospital and its Medical School, I had the good fortune to be most favourably noticed by Messrs. Abernethy, Vincent, Earle, and Stanley; and I hold the testimony of these gentlemen of my having been a diligent and attentive student.

I subsequently prosecuted my studies in Paris, at the Hotel Dieu and La Charité, and I hold the certificates of Dupuytren, Roux, and Sanson of a long attendance on their surgical practice in those hospitals.

On my return to England, I was for several years in general practice at Ross, in Herefordshire, and so extensive were my professional avocations, that my health gave way and obliged me to retire; but I quitted Ross bearing with me the good wishes and esteem of my fellow practitioners in that town, as the enclosed document, signed by every one of them, will shew. During my professional career at Ross, I performed almost every capital surgical operation.

Precarious health eventually compelled me to abandon general practice, and limit my professional pursuits: and, therefore, for the last seven years I have confined myself to surgery to the entire exclusion of midwifery and pharmacy. I must further be allowed to declare that I have never, by connexion, nor by any other illegitimate means, derived any advantage from my prescriptions or practice.

I cannot suppose it possible that so injurious a measure as the omission of my name from the List of Fellows, should have arisen from an idea on the part of your honourable Council that my practice is specially devoted to one subject,—namely, that of aural surgery. Nothing can be more distant from the fact, as more than one of the Members of your Council must be aware; nor have I ever denominated myself an "aurist," but, on the contrary, have on all occasions repudiated the term. In disproof of any such imputation, you will allow me to refer you to my lately published Treatise on "Diseases of the Throat." A charge has been indirectly brought against me which I proceed to rebut, lest it should have operated to my prejudice in the opinion of any Member or Members of your Council. It has been said that I have availed myself of the services of the public press to an extent inconsistent with professional decorum; I utterly repudiate the truth or justice of any such charge, and did I not fear to encroach upon your time, I could as effectually disprove all such aspersions on my professional character, as I have disposed of a similar one in the *Provincial Medical Journal*, a copy of which I beg leave to enclose. That some

of my literary friends, in their anxiety to do me service, have mentioned my name in the public prints in terms beyond my desert, it would be ungrateful in me to deny; and it is not improbable that the favour thus shewn me may, by the recoil on the minds of some members of the profession, be injurious to me; but I respectfully submit that I should no more be censured, still less condemned, for these things, which were marks of kindness unsolicited on my part, than many Members of your honourable Council, whose good deeds have been in the same manner, and through the same channel, deservedly brought under public notice.

Having thus, as I trust, refuted every possible or probable objection which can be urged against the insertion of my name as one of the Fellows of our College, I must observe, that in point of zeal for the advancement of my profession by indefatigable study and research, I will yield to no man; and I flatter myself that my labours have not been altogether unrewarded by success; in proof whereof I beg to refer you to a series of my papers published in the *Medical Gazette*, in which the important fact is for the first time announced, that to morbid conditions of the mucous membrane may be traced "three-fourths" at least of the cases of deafness which are on record; a fact which, being generally admitted, must entirely supersede all treatment directed to the external meatus which has obtained since the time of Celsus; a fact, also, which has been subsequently and amply proved by careful pathological dissection. Permit me once more to refer to my Treatise on "Diseases of the Throat," (a copy of which I have the honour to enclose, and which contains some original views derived from unusual opportunities of investigation.

Gentlemen, my practice is extensive and ranges amongst the highest classes of the community, whilst my gratuitous professional services are never withheld from the poor; I have the good fortune to enjoy the favourable opinion of a large number of my professional brethren, and in my intercourse with them I may fearlessly affirm, that no act of mine has ever compromised the integrity of my character, or my professional skill. It is my pride to feel that I have been successful, because that success has been derived from the legitimate exercise of my profession; but you must all feel that success, however acquired, engenders invidious feelings in the minds of some—these again misrepresentation.

If, in the course of my practice, I have in any way deviated from the strict line laid down by the rules and regulations of our institution, it is only fair that I should be made aware of such a charge having been preferred against me, in order that I may instantly refute it, if untrue; or, that if capable of proof, I may more justly estimate the decision of the Council, and be prepared to submit to the decision. But if, on the other hand, no such imputation has been made or entertained, I feel convinced that a sense of justice will deter your honourable council from doing an act so prejudicial to my personal character, and to my professional interests, as that of omitting my name in the list of Fellows.

In conclusion, I have only to assure you, as I do with implicit deference, that if you can select from amongst the members of the Royal College of Surgeons, three hundred names of individuals who are my seniors in collegiate standing, and my superiors in respectability of character, professional reputation, attainments, or practice, I shall humbly and cheerfully bow to your decision; but if, in the result, I find that the names of men are placed over me who possess not these advantages, the painful feeling will force itself upon me that justice has not been awarded.

In perfect reliance on your fair, candid, and unprejudiced consideration of these my claims to the fellowship, I have the honour to remain,

Gentlemen,

Your very obedt. Servt.,

JAS. YEARSLEY.

In reply, I was honoured with a communication from Mr. Balfour, acknowledging the receipt of

my letter, and stating that it had been submitted to the consideration of the Council. The first list was at length published, and on looking it through, all idea of honourable distinction vanished from my mind—all disappointment I might otherwise have felt ceased—and all intention of making any effort to get elected on the *second* list was at once and for ever abandoned. Then came the memorable "statement," in which the "invidious" nature of the charter was openly avowed, and in which it was significantly stated "that the nomination of Fellows by the Council was only a temporary expedient, designed to provide, in the first instance, that *constituency* which will be supplied hereafter by Fellows on examination." Thus, to my mind, offering a direct insult to those they were pretending to exalt; for the clause may be fairly translated, "we want a few unscrupulous instruments to secure our own monopoly, and we will reward you for serving us, by a title which, in other societies, confers honour on its possessors." How palpably the dissection of the list confirms this view of the question!!

But in the outset of my communication, I spoke of family connexions who have been most unjustly placed over me.

Ten members of my family are medical men. Five of us are members of the College, four are physicians, and one, enjoying the highest celebrity and the most extensive practice of all, has no diploma of any kind or description. Nevertheless, he is a surgeon of greater eminence, and better known in the profession than the great majority of the Council. He has been surgeon to a large county hospital for 40 years, and is the author of works more called for in the college library than those of almost any other surgeon. Not holding the College diploma, of course he could not be made a Fellow.

Of the five members of the College, three have been made Fellows. One of them, a provincial general practitioner of great respectability, and deservedly in good practice, but still one who unites pharmacy with midwifery, related to me the circumstances under which he was elected a Fellow, and a fine exemplification his case affords of the "*great circumspection lest improper names should be inserted, and proper ones omitted*," which has been exercised by the Council. He wrote to one of the Council, who had probably been indebted to him for many a patient, to know what course he should pursue. In reply, he was advised to procure the testimonials of two or three practitioners in the neighbourhood, and forward them to the Council. He did so. In a post or two he received a communication from Mr. Balfour, requiring to know whether he practised pharmacy? My relative tore up the letter, and consigned it to the flames, *unanswered*, and all idea of the Fellowship had passed from his mind, when, one morning, to his astonishment, he found the diploma upon his breakfast table!!

The other two members of the College, elected Fellows, among my family connexions, are my juniors in age, as well as in collegiate standing. But they are *hospital surgeons*. And how came they *hospital surgeons*? The one by family interest, the other by his long purse. In thus broadly stating the facts, nothing can be further from my intention than the disparagement of these young men, who are admirably calculated, by superior education and acquirements, for the offices they hold. Still, on the other hand, it cannot be denied that had they been *ignoramuses*, they might nevertheless have been hospital surgeons, and as surely would they have been elected Fellows! The idea that any hospital surgeon in this country ever obtained his appointment by *professional merit alone*, is preposterous, nor can it ever be so until the admirable *concours* is established among us.

I am, Sir,

Your very obedt. and humble Servt.,

JAS. YEARSLEY.

15, Saville Row, Nov. 17, 1844.

THE WESTMINSTER MEDICAL SOCIETY.

The Westminster now is hopeless got,

All vital warmth hath fled below;

The reason's plain—the barren spot

Is covered with perpetual snow.

THE COLLEGE CHARTER.

(To John Sutton, Esq., &c. &c.)

SIR,—As a meeting by the requisition of the Medical gentlemen now in practice in your neighbourhood, is about to be holden, I have taken the liberty of calling your attention to some facts with which you are, probably, not altogether unacquainted, and to suggest, also, the best means of directing the attention and energies of your professional brethren. The circumstances and facts I allude to, are, the partial, unjust, and offensive conduct of the Council of the College of Surgeons of London, as regards the members of the College now in practice, and their selfish, and rapacious regulations as regards themselves. All of which disgraceful proceedings of the council demand an immediate appeal to the Government for such efficient changes in that body as to render it capable and worthy of the management of the large property belonging to the public, as well as the great interests of the profession at large, which, at present, it so contumaciously presides over.

It is well known, and unequivocally acknowledged, that there is, and has been, a combination of two persons, with their friends in the council, by which they carry all their measures, however preposterous and unjust, and that the highly respectable minority are swamped on all occasions; that, in short, the whole affair of the College of Surgeons of London has descended into a corrupt party business, and such as to demand, therefore, an immediate reform of the body, which can, probably, be best accomplished by increasing the number of members of council, from 18 to 20 now self-elected, to 45 or 50, which additional number of 25 or 30 members shall be appointed by the suffrages of the members of the College now in practice in England and Wales, or in the United Kingdom.

That a limited number of persons, however respectable, because they happen to be resident practitioners in London, should govern the whole body of surgeons of the kingdom, and receive the patronage and emoluments thereof, is as preposterous as if twenty members of parliament, or as many noble lords, were to be allowed to legislate for the whole kingdom. It must, however, be significantly brought under the notice of Sir James Graham, that he has perfectly misplaced his confidence in allowing all the medical government situations to be at the disposal of one person, whose position in the profession is owing to an hereditary family connection, and other fortuitous circumstances, and not, by any means, to his enlarged mind, or his cultivated understanding, or literary attainments; for out of his profession, not one of his own friends would ask his opinion upon the most trifling subject. And as to his well known coadjutor, he, who in early life tried to unsettle and demoralize the young and rising members of the profession, is now in his maturer years, most industriously and audaciously doing all he can to degrade his professional brethren.

I am, Sir,

Most respectfully, your obedient humble servant,
A MEMBER OF THE ROYAL COLLEGE OF
SURGEONS OF LONDON.

Nov. 11th, 1844.

ADVANTAGES OF MEDICAL CORONERS.

To the Editor of the "Medical Times."

SIR,—Will you give place in the columns of your truly medical journal, to a specimen of Mr. Coroner Wakley's conduct in the peripatetic court over which he presides, as a set-off against his self-lauded exertions for the honour and welfare of the medical profession.

Last week, in the neighbourhood of Staines, a young child sunk, after a few days, from the effects of a severe and extensive burn of the upper part of the body.

An inquest was held, and a verdict of "accidental death" brought in by the Coroner—literally by him—for he is the judge, jury, and witnesses, incorporated, like "Cerberus, three gentlemen at once," and, like that wakeful animal, allowing no

evidence to enter the judicial pandemonium, save through his triple skull.

In the innocence of my heart, and my ignorance of the vagaries of the Middlesex Coroner, I expected, as an inquest was considered necessary, my evidence as medical attendant, would be of some value in elucidating the cause of death. I had forgotten Mr. Wakley was a "hanger-on" to the profession, and that it would, therefore, be unnecessary to have two medical men in court. So it proved, and the verdict was declared in true Wakleyian style, without any reference to the medical attendants of the case under consideration.

Possibly it may be said, that this case was sufficiently clear without medical evidence, but I learn from the medical men in the neighbourhood, that it is almost his invariable practice to carry on the business of the court without reference to medical witnesses. Several cases, in illustration of his contempt of medical practitioners, have been related to me, which I would give here, but for the space they would occupy. The above displays the spirit that animates him.

I consider myself bound to lay this case before the profession; coupling it with the admirable *exposé* of Dr. Costello, they will be enabled to take the true measure of the man, who on all occasions trumpet-tongued—of the best brass—proclaims himself as the voice of the profession.

I am, Sir,

Your obedient servt.

T. MACKERN, F.R.C.S.I.

Staines, Nov. 19, 1844.

THE COMMITTEE OF THE MEDICAL PROTECTION ASSEMBLY.

(To the Editor of the 'Medical Times.')

SIR,—Being a member of the above Assembly, I am an occasional visitor at its committee meetings. I have read, with considerable interest, your strictures upon certain parties whom you suppose play the toady to Mr. Wakley. Now, as far as I am able to judge from what I have seen, and can glean from others, you are wrong—wrong even in regard to some whom you have so terribly lashed with your powerful and able pen; I will, therefore, give you a succinct and impartial account of what I have seen, and which, I believe, is generally observed by the knowing ones of the committee. The individuals who are the greatest toadies to, and worshippers of, Mr. Wakley, are Cooper, *imprimis*, Walton, *secundus*, and McCann, *tertius*. Their adulation is truly sickening. Every thing he says with these worthies is law. He is Pope, Mufti, and Lama all in one, to them. The men who oppose his crochety views are Ross, Simpson, Hillis, Lynch, Hunter, and last, though not the least urgent and honest in his opposition, is one whom you have flagellated pretty well—I mean Hodson Rugg. Now, when I first attended the committee, I went with feelings highly prejudiced, from what you had written against this gentleman, and I was not a little surprised to find how attentively every word that fell from him was listened to. All speak of him as a good-natured, independent, straight-forward, honest fellow. He certainly understands the question of Medical Reform, and is most indefatigable in the cause. A few weeks since, he told the committee that it appeared to him that there were two or three there who wished to have everything their own way, without allowing the rest of the committee an opinion, and boldly said that he for one would not submit to be led by any man, whether a journalist or not, unless convinced by something better than the *hoc volo, sic jubeo* of Mr. This or That. So much for Rugg. Now for a man of different kidney. Cooper is a loathsome lick-spittle to Wakley—toddles after him like a poodle-dog, hangs on like barnacles to a ship's keel, whispers in his ears, moves at his bidding, and is his humble valet at command. A few days since, the committee visited him with their marked displeasure. He would not give up some letters which he had taken home with him belonging to the Assembly. Three applications were made, the last of which was to the effect, that unless quick in his movements, he

would be expelled from the committee. This brought him to his senses, for he sent a few back, stating that the rest were of no consequence, and that he had destroyed them! Now, those that he sent were of little value; but those he kept back, and *did not* destroy, were of material consequence. Of course the committee were highly indignant at conduct so treacherous, ungentlemanly, and trueulent; and with the view of not having any further unpleasantness about the matter, treated him with silent contempt—sent him to Coventry.

I can assure you, Mr. Wakley is anything but all-powerful in the committee. His notions are crochety and far-fetched. I have heard it whispered, that, finding it not exactly under his control, he intends to break it up; but in this he will find out his mistake. We will watch how the cat jumps, and report accordingly. They would have gone on better if you had not broken from them. Truth, you see, must out. As it is, they will have to fall back upon you.

In my next letter, I will give you a sketch of the little bantam cock of a treasurer (game to the heels) Lynch, Ross, McCann, and Simpson.

I am, Sir,

Your obedient Servant,

VINDICATOR.

[We do not pledge ourselves to publish the sketches, but certainly have no objection to receive them. We have omitted some portions of the letter sent us by Vindicator, as giving facts at this moment a little premature for publication. Perhaps our correspondent will excuse a "small doubt," as to the fact of his entering the Assembly very lately. Our ears recognise in this letter a crow that had at one time some independent vigour.—Ed.]

GOSSIP AND NEWS OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, Nov. 11th, 1844: H. Browne, J. C. Forster, T. R. Trayer, W. B. Ferguson, J. P. Ramskill, J. Johnston, S. S. Brame, H. E. Cullen, S. Mossop, E. H. Vinen, R. Mannix, J. Squire.

APOTHECARIES' HALL, 14th Nov. — John Cooper Forster, Thomas Evans, William Collins.

UNIVERSITY OF LONDON—BACHELOR OF MEDICINE, 1844.—First Division: William Henry Allehin, University College; Henry Browne, King's College; William Thomas Edwards, University College; John Evans, do.; Robert Dawson Harling, do.; Edwin Hearne, do.; William Bird Herapath, Bristol Medical School and London Hospital; Benjamin Lancaster Jemmett, King's College; Frederick William Marshall, University College; Nicholas Parker, London Hospital; William Henry Parsev, King's College; Peter Redfern, 1, Surgeons' Square, Edinburgh; Charles Henry Felix Routh, University College; Godwin William Timms, do.; Henry March Webb, Guy's Hospital.—Second Division: John Hillier Blount, King's College; Henry Mills Cannon, do.; Robert Haines, St. Thomas's Hospital; Patrick Martin, School of Physic in Ireland; John Scoffern, Aldersgate.

We sincerely regret to have to announce the death of Dr. Abercrombie, who died on Thursday last, in Edinburgh, of a disease on which he had written a very excellent monograph—apoplexy. A pencilling of this eminent physician, and most distinguished of our recent medical authorities on Psychical Philosophy, will be found in our last volume, No. 252.

Mr. Clenden has been elected dentist to the Westminster Hospital. His unsuccessful opponent was Mr. Ghimes.

Dr. Keenan has been recently delivering some interesting lectures, questioning some of the Theories of Liebig.

A QUACK DOCTOR COMMITTED FOR MANSLAUGHTER.—(From the *Times*)—An inquest was held yesterday on the body of Mrs. Mary Harris (late of Aston Hall, Shropshire), before Mr. H. Churton, at Birkenhead, in consequence of the following certificate having been sent to the coroner:—"We, the undersigned medical officers of

Birkenhead, at the request of Mr. Booth, the constable, have made inquiries relative to the death of Mrs. Mary Harris, of Aston Hall, near Wem, and find that the deceased was attended by a person of the name of Port, an unqualified practitioner residing at Tranmere, who professes to cure cancer without the aid of the knife. She died, after the application of two plasters, under symptoms such as might be produced by the absorption of arsenic. B. VAUGHAN, M.D., T. C. FOULKES, Surgeon."—The coroner issued his warrant for the disinterment of the body, which, after some difficulty, was obtained, and a jury was empanelled on the 4th inst, but adjourned to yesterday, in order to give time for the necessary inquiries and analyses to be made.—The facts in the certificate, briefly stated, were given in evidence by Dr. Vaughan and Mr. Foulkes, and they were clearly of opinion, that there were no marks of internal disease sufficient to cause death, except such as were the effects of some irritant poison. The whole of the internal viscera were healthy, with the exception of the lungs, which were slightly emphysematous. On the right breast, there was a large slough, about the size of a breakfast cup, extending about one inch into the substance of the flesh, and in this breast was a tumour, not partaking of a malignant character, about the size of a hazel nut. (This was the part treated by Mr. Port for cancer.) The breast, the stomach, and its contents, as well as several other portions of the viscera, were removed, and placed in the hands of Professor Brett, of the Liverpool School of Medicine, for the purpose of being analyzed. Both witnesses were clearly of opinion, that death had been caused by some irritant poison, and that had arsenic been applied to the breast, it might have been absorbed into the system, and would have produced the appearances and symptoms which presented themselves.—Professor Brett stated, that he had made a careful analysis of the breast, the stomach, its contents, and the other portions of the viscera which had been delivered to him. He was, however, unable to detect arsenic in the internal portions of the body, or their contents; but, in the breast, he clearly discovered it. This he obtained by what is termed the silver test, Marsh's test not being delicate enough. He added, that, if arsenic had been applied externally to the breast of the deceased, it would be absorbed into the system, affect the stomach, and produce death; but that the period, between the application and the death would entirely depend upon the susceptibility of the patient, and other circumstances.—Mr. Port offered to produce a number of persons, who were in attendance, and who, he stated, had been cured of cancer by the application of the same plasters. He also offered to produce, before the jury, several cancers which had been extracted by them; but the coroner decided that such evidence could not be received.—The coroner, in summing up the case to the jury, said, if they believed the evidence laid before them, it was their duty to find Mr. Port guilty of Manslaughter.—The jury, after an hour's consultation, returned that verdict, and Mr. Port was forthwith committed under the coroner's warrant to take his trial at the next Chester Assizes.—[We understand the prisoner has amassed considerable property in the neighbourhood of Birkenhead by his practice as a medical man, vast numbers of persons having placed themselves under his treatment, including persons of rank and title, and much larger fees having been paid to him than would be given to regular and authorized practitioners. He at once admitted, before the Coroner, that he had no diploma as a medical man.]

SERIOUS CASE OF INFANTICIDE AT WOLVERHAMPTON.—An investigation is now going forward in this town, in which a lady of hitherto respectable character, together with a married sister, and a young surgeon, is charged as being implicated in a case of infanticide. On the 28th ult., the body of a female child was found dead in Queen-street, at the back of the house of Mr. Quinton, surgeon. It appears that, for some time previous to the finding of the body, Mr. Hildreth, printer, residing in the town, had paid daily visits to Mr. Quinton's surgery, always inquiring very particularly for Mr. Hildreth, Mr. Quinton's assistant. Mr.

Quinton interrogated his assistant as to the cause of these frequent visits, and was informed Mr. Hildreth wished him (Mr. Sheriff) to procure abortion "for a person of great respectability, secrecy being guaranteed, and money no object." Mr. Sheriff asked Mr. Quinton if he would attend? but that gentleman refused to do so. Mr. Sheriff informed Mr. Quinton that the party was Miss Railton, of the Post-office; and subsequently applied to Mr. Doubler, of the same place, to procure abortion for a party, describing her in terms similar to those he had used to Mr. Quinton, but omitting the name. Mr. Doubler also very properly declined to attend. Since the finding of the body at Mr. Quinton's, the suspicion attached to Miss Railton that the child was her's, and she was eventually apprehended by Colonel Hogg, of the county constabulary. She at first denied having had a child, but, since her apprehension, has made disclosures seriously affecting Mrs. Hildreth (her sister) and Mr. Sheriff, Mr. Quinton's assistant. From her statement, it appears that, on last Sunday three weeks, at Mr. Hildreth's house, at about 12 o'clock at noon, Mr. Sheriff went and performed an operation, and she was in dreadful pain and agony from the time he had done this until she was delivered of a child. The body was taken away three or four nights afterwards, and the material question in the investigation, is, whether the body found is that of the same infant. From the *post-mortem* examination made by Mr. Fowke, there appears no doubt that the child found upon Mr. Quinton's premises was born alive. Mr. Sheriff, Miss Railton, and Mrs. Hildreth, are in custody. Colonel Hogg and the police have been most indefatigable in their endeavours to further the ends of justice with regard to this mysterious affair.—A coroner's inquest, under the presidency of Mr. Phillips, one of the coroners for Staffordshire, has been held some days, and stands adjourned until Thursday next. In the present state of the inquiry, it is not deemed right to publish the evidence until the conclusion. It is almost needless to add, that the subject has created the greatest sensation in Wolverhampton.

BIBLIOGRAPHICAL RECORD.

FROM 9TH TO THE 23RD NOV.

Barth (M.) et Roger (H.) *Traite pratique d'Auscultation, ou expose methodique des diverses applications de ce mode d'examen a l'etat physiologique et morbide de l'economie, suivie d'un precis de percussion*, 2nd edit. 12mo. 6 fr.—Garisot (E.) *Rapports du Physique et du Moral de l'Homme*, par Cabanis, 4th edit. 2 vols. 8vo. 14 fr.—Desirabode (M.) *Nouveaux Elements complets de la Science et de l'art du Dentiste*, avec une Table Chronologique de tous les auteurs qui ont écrit sur l'art du Dentiste, depuis Hippocrate jusqu'à nos jours, gr. 8vo. 15 fr.—Serrier (Dr.) *Traite de la Nature des Complications et du Traitement des plaies d'Armes a Feu*; Ouvrage couronné (medaille d'or) par M. le ministre de la guerre en 1844; (Concours general de chirurgie militaire) 1 vol. in 8vo. Prix: 4 fr. 50 c.—Priehard (J. C.) *Appendix to the first edition of the Natural History of Man*, 6 coloured plates, 8vo. 3s. 6d.—*Medico-Chirurgical Transactions*, vol. 27, 8vo.—Todd's (R. B.) *Cyclopaedia of Anatomy and Physiology*, part 26, 8vo. 5s.—Malgaigne (J. F.) *Lehrbuch der Operativen Medicin, begründet auf normale und pathologische Anatomie*, gr. 8vo. 3 thlr.—Wagner (R.) *Lehrbuch der Zoologie*, gr. 8vo. 1 thlr. lief.—Wagner (R.) *Lehrbuch der Physiologie*, gr. 8vo. 3 thlr. 18 ngr.—Vogel (J.) *Icones Histologiae Pathologicae*, fol. 8 thlr.—Carus (C. G.) *Kunst krank zu sein zur Kunst gesund zu sein*, gr. 8vo. 11½ sgr.—Bock (C. E.) *Geriatische Sectionen des menschlichen Körpers*, gr. 8vo. 1 thlr. 8 gr.—Bornemann (J. C. T.) *Gebiete der Heilkunst*, gr. 8vo. 10 sgr.—Wollheim (H.) *Versuch einer medicinischen Topographie und Statistik von Berlin*, 8vo. 2 thlr. 26½ sgr.—Roehmann (L.) *Handbuch der Topographischen Anatomie*, gr. 8vo. 3 thlr.—Heidenreich (F. W.) *Elemente einer Medicinischen Physik*, gr. 8vo. 1 thlr.—Hensinger (C. F.) *Recherches der Pathologie Comparee* *Erstes Heft*, gr. 8vo. 2 thlr.—Beck (K. J.) *Abbildungen von Krankheitsformen aus dem Gebiete der Augenheilkunde*, Kupfertafeln, 3 thlr.—Hubener (E. A. L.) *Die Gastrischen Krankheiten*, gr. 8vo. 3 thlr. 15 ngr.—Kuttner (R.) *Medicinische Phanomenologie*, 8vo. 3½ thlr.—Horing (G.) *Ueber den Sitz und die Natur des grauen Staars*, gr. 8vo. 1 fl. 12 kr.—Munter (G. W.) *Geschichtlicher Aufschluss einer wichtigen Anatomisch-Physiologischen Entdeckung welche wesentlichen Einfluss auf die Physiologie des menschen hat*, gr. 8vo. 10 sgr.—Dieterich (L.) *Die Merkurialkrankheit in allen ihren Formen, Geschichtlich, Pathologisch, Diagnostisch und Therapeutisch Dargestellt*, gr. 8vo. 2 thlr. 15 ngr.—Phrenology, *Hand-Book of, familiarly explaining its Principles*, with illustrations on the best mode of Study, 3rd edition, 32mo. cloth, 1s.—Crowthor's (R.) *Practical East India Guide*, containing Full and Precise Instructions for the Equipment and Conduct of Civil and Military Officers in the Queen's and Company's Army, fep. cl. 6s.—Ballingall's

(Sir G.) *Outlines of Military Surgery*, 8vo. cl. 14s.—Knight's *Weekly Volume; Dialogues on Instinct, with Analytical Views of the Researches on Fossil Osteology*, by Lord Brougham, 18mo. sewed, 1s.—*Medical Profession: The Public and the Medical Profession, or a Few Words to all Classes of Society*, by an Old Practitioner, 8vo. sewed, 1s.—Parry (T.) *On Diet with its Influence on Man, being an Address to Parents, &c. or how to obtain Health, Strength, Sweetness, Beauty, Development of Intellect and Long Life*, cl. 8vo. 5s.—Ure's (A., M.D.) *Recent Improvements in Arts, Manufactures, and Mines*, being a Supplement to his Dictionary, 8vo. cl. 14s.—Ramsbotham (F. H.) *The Principles and Practice of Obstetric Medicine and Surgery*, in reference to the Process of Parturition, 2nd edition, enlarged, 110 engravings, 8vo. cloth, £1. 2s.—Shapter's (T.) *Remarks upon the Mortality of Exeter, together with Suggestions towards the Improvement of the Public Health*, 8vo. sewed, 1s.—Silver (E. D.) *The Pathology and Cure of the Principal Diseases of the Rectum and Anus*, 8vo. cl. 5s. 6d.—Deveraux (J. E.) *On Lord Warnecliffe's Catholic Bequest Bill*, part 1, 8vo. 1s. 6d.—Dibdin (C.) *The Selected Songs of Charles Dibdin*, with Illustrative Notes, and a brief Memoir of the Author, with a port. 24mo. cloth, 5s.—Farren, (G.) *The Liabilities of Members of Existing and Future Public Companies and Partnerships after the date of the Public Act 7 and 8 Vic. cap. 110*, giving also the Actual Duties, Penalties, and Responsibilities imposed on the Solicitors, Directors, and Shareholders, 12mo. cloth, 5s.—Fawcett's (Rev. J.) *Brief History of the Book of Common Prayer of the Church of England*, 12mo. sewed, 6d., cloth, 1s.—Finch, (J.) *The Natural Boundaries of Empires, and a New View of Colonization*, fcp. cloth, 6s.—Fisher's *Drawing-Room Scrap-Book*, 1845, by the Author of "The Women of England," 4to. 35 plates, bd. £1 1s.—Fisher's *Juvenile Scrap-Book*, 1845, by the Author of "The Women of England," 8vo. 14 plates, bound, 14s.—Fouque's *Tales and Romances*, vol. 1, Undine, a Miniature Romance, from the German, 24mo. sewed, 1s.—Forget-Me-Not, a Christmas, New Year's, and Birthday Present for 1845, edited by F. Shoberl, fcp. 8vo. 10 plates, bd. 12s.—Gambler's Wife, (The) a Novel, by the Author of "The Young Prima Donna," 3 vols. post 8vo. bds. 31s. 6d.—Glenny's (R.) *Garden Operations for every Month in the Year, with Lists of their Flowers, Fruits, Plants, and and other useful information*, 12mo. sewed, 3d.—*Glimpses of the Wonderful*, a Christmas Annual, square, engravings, cloth, gilt edges, 5s.

Metropolitan Mortality for the Week ending Saturday, November 9th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1072	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	255	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	10	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	154	152	157
Diseases of the Lungs, and of the other Organs of Respiration	300	312	286
Diseases of the Heart, and Blood-vessels	38	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	63	66	69
Diseases of the Kidneys, &c.	9	6	5
Childbirth, Diseases of the Uterus, &c.	20	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	6	6
Diseases of the Skin, Cellular Tissues, &c.	2	1	1
Old Age	69	74	71
Violence, Privation, Cold, and Intemperance	51	26	26

[ADVERTISEMENT.]

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

AT a SPECIAL GENERAL MEETING of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, held at the Town Hall, Derby, on Thursday, the 14th November instant, to take into consideration SIR JAMES GRAHAM'S BILL for the BETTER REGULATION OF MEDICAL PRACTICE throughout the United Kingdom.

Dr. ROBERTSON, of Northampton, President of the Association, in the Chair;

The following Resolutions were unanimously adopted:—

Moved by Dr. HASTINGS, of Worcester;
Seconded by Mr. SODEN, of Bath;
That the Association testify their satisfaction that a bill for the better regulation of Medical Education and Practice has been laid before the House of Commons, and that opportunity is afforded to the members of the medical profession for considering its provisions previous to its passing into a law.

Moved by Dr. WILLIAMS, of Nottingham;
Seconded by Mr. DOUGLAS Fox, of Derby;
That this satisfaction is increased by observing that an approach to a uniform standard of education and qualification, and the right to practice by all qualified persons, without respect to local privileges—principles for the recognition of which the Association has on various occasions contended and especially in petitions to the Legislature, and memo-

rials to her Majesty's Government—are two of the great leading principles of the measure.

Moved by Mr. HEY, of Leeds;

Seconded by Dr. BAKER, of Derby;

That further to ensure the object of a sufficient uniform primary qualification for every medical practitioner, without which the equal right to practice every department of the profession ought not to be conceded, it seems desirable that the diploma of Licentiate of Medicine should be required of all who may hereafter propose to enter the profession, and previous to their being entitled to claim admission to register in any other grade.

Moved by Dr. EDWARDS, of Chester;

Seconded by Dr. HUTCHINSON, of Nottingham;

That these principles, if carried fully into effect, would confer a great benefit on the profession and the public, in the removal of many existing evils; and that, in thus providing the public with a supply of fully qualified medical practitioners, the Association are of opinion the Government would do much towards the remedy of abuses of which, for a long time past, there has been great reason to complain.

Moved by Mr. TEALE, of Northampton;

Seconded by Dr. HEYGATE, of Derby;

That the Association view with alarm and deep regret that part of the bill which proposes to abolish all restriction on the practice of medicine by unqualified and unlicensed persons; and that, although there may be some reason to doubt the practicability of altogether preventing unlicensed practice by general enactment, the Association are of opinion that the illegality of such practice should be unequivocally declared, and some simple and effective means of restraint be adopted.

Moved by Mr. TERRY, of Northampton;

Seconded by Mr. POYSER, of Wirksworth;

That while the Association approve, with this exception, the general spirit and principles of the bill, they feel that in various details it may be desirable to introduce certain changes and modifications, which would improve the general efficiency of the measure, and tend materially to facilitate its practical application.

Moved by Mr. CEELY, of Aylesbury;

Seconded by Dr. BRISTOL, of Derby;

That while the Association is sensible of the advantages which the profession will derive from a direct connection with the Government, they cannot but consider the proposed constitution of the "Council of Health" as deficient, in not affording express representation, either of the physicians and surgeons resident in the provinces, or of the great body of general practitioners throughout the country.

Moved by Mr. WRIGHT, of Derby;

Seconded by Mr. TURTON, of Sheffield;

That some provision ought to be made, either in the bill, or in amended charters to be granted to the Colleges of Physicians and Surgeons, for a more direct acknowledgment of the representative system in the councils or governing bodies of the corporations.

Moved by Dr. STREETEN, of Worcester;

Seconded by Mr. W. JACKSON, of Sheffield;

That in the absence of any provision for the admission of the general practitioners to a participation, on terms honorable to that body, in the corporate privileges of either of the Colleges of Physicians and Surgeons, it appears essential to the well-being of this numerous and influential body, as well as beneficial to the public interests, that they should be incorporated together, and that the interests of such corporation should be adequately represented in the proposed Council of Health.

Moved by Mr. THOMAS, of Sheffield,

Seconded by Mr. EVANS, of Derby;

That the best thanks of the Association be conveyed to the Right Hon. Sir James Graham, Bart., for the trouble and attention which he has bestowed in the preparation of this Bill, accompanied by a copy of the foregoing Resolutions, and an expression of the hope entertained Association, that the measure may be, at an early period of the ensuing Session of Parliament, brought under the consideration of the Legislature, and, with such amendments as shall be necessary to render it acceptable to the great body of the profession and beneficial to the public, finally passed into a law.

Moved by Mr. CRANG, of Tinsbury;

Seconded by Mr. DANIELL, of Newport Paguel;

That a copy of the Resolutions be also forwarded to the Right Hon. Sir Robert Peel, Bart., the head of her Majesty's Government.

Moved by Mr. F. ELKINGTON, of Birmingham;

Seconded by Mr. GARLICK, of Leeds;

That the preceding Resolutions be recommended to the consideration and adoption of the several Branch Associations and Local Councils, and that the Members of the Association generally be requested to impress their representatives in Parliament with the importance of giving their best attention to the subject.

Moved by Mr. MARTIN, of Reigate;

Seconded by Mr. FERN, of Derby;

That a Petition, embodying the Resolutions passed at this Meeting, be presented to the House of Commons, and a similar one to the House of Lords; and that the Branch Associations and the Local Councils be recommended to adopt similar Petitions.

Moved by Dr. HASTINGS, of Worcester;

Seconded by Dr. STREETEN, of Worcester;

That the best thanks of the Meeting be given to Dr. Heygate, and the Members of the Association resident at Derby, for the excellent arrangements made to promote its objects.

Moved by Mr. SODEN, of Bath;

Seconded by Mr. TERRY, of Leeds;

That the thanks of the Meeting be given to the Mayor of Derby, for the use of the Town Hall.

Moved by Mr. SODEN, of Bath;

Seconded by Dr. BAKER, of Derby;

That the cordial thanks of the Meeting be given to Dr. Robertson, for the manner in which he has conducted the business of the day.

ROBERT J. N. STREETEN,
Secretary.

No. 271

SUMMARY.

Nov. 30.

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Lec. VII.—The Operation for the Extraction of Cataract—Case in point—This Operation only to be performed in Hard Cataract—Requisites for accomplishing it well—Different forms of Knives recommended—Mode of Procedure of the Chevalier de Graefe—Identity of his views with those of Mr. Guthrie—Shape of Hook, most convenient, for Lacerating the Capsule—Mode of Fixing the Eye for the Operation—Best Position in which to place the Patient—Regulations and Precautions to be adopted .. 173

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CLINICAL LECTURES ON SURGERY.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By GEORGE JAMES GUTHRIE, Esq., F.R.S.,
November 27th, 1844.

LECTURE VII.

On the Operation for the Extraction of a Cataract.

You may, perhaps, recollect a stout old gentleman in a brown great coat, and a green patch over his right eye, who called here last Wednesday, on his way home, to have an opaque lens removed from the anterior chamber of the aqueous humour, into which it had slipped from its natural position. He is an officer in the navy, and like many others, a poor one, and claimed my assistance accordingly. This I instantly agreed to give him, and to do his operation for nothing, in remembrance of *auld lang syne*; but as I could not promise to see him early in the morning, and late at night, for the fortnight afterwards, he agreed to make a present of a consultation fee of two guineas, when he was well, to each of the assistant-surgeons, who were to take care of him between them, as they visited the Hospital in turns. At their visit on Thursday morning at half-past seven, they found the nurse had set fire to the bed-curtains, and then run down stairs to call her mistress. The gentleman found the tester on fire, and tried to pull down the curtains not yet burned, but they would not come. There was no water at hand. The patient had jumped out of bed, put on his coat, pocketed his valuables, and ran down stairs; the doctors followed, calling upon all to come up, and help them to put out the fire; no one, however, would go near it; all wrung their hands, and called out fire, and so the house, in about two hours, was completely burned down. As the patient was shivering half naked in the street, they thought the best thing they could do was to bring him here to the Hospital. As soon as the old gentleman was comfortably lodged, he bethought him, that he must certainly be taken care of, and sending for Mr. Dasent, he told him how much he regretted the accident, not so much on account of himself, and the poor people who had been burned out, as on his and that of Mr. C. Guthrie. This puzzled the doctors, who began to think he wished to lay the blame of the fire on them, and they begged an explanation, when the old sailor quietly said, "I had laid on the table last night the little present I was to make you two gentlemen, when I got well, and it has been burned with the house; therefore, you see you cannot have it; and that is the reason I am sorry for you." When the two gentlemen came to tell me of the disaster, and its consequences, I could only beg them to take example from their patient, who did not appear to lose his foresight under any circumstances; he had not only got his eye-teeth about him, as the sailors say, but had cut his wisdom-teeth on board ship, where, at all events, he had learned "how to make the most of a bad accident."

A compliment is always satisfactory, more particularly when paid by a man, himself deserving of respect, and when the object is to shew that you have benefitted your fellow men. It was then

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most pleasing to me to be told by one of the best surgeons of one of the largest hospitals in the North of England, in my way from Scotland this autumn, that he was under great obligations to me for my pamphlet on the operation for cataract by extraction; it had confirmed his views on that subject, and had enabled him to operate with more confidence and success. I told him, that when I returned to London, I should once more give the result of my further experience, and that I hoped it would be found even more worthy of his attention. I shall take the pamphlet as my text-book, altering such parts as require it, until I have made the whole statement as near perfection as our art and our knowledge will permit at the present time.

An ancient professor has said, "that a man must spoil a potful of eyes before he could learn to extract a cataract well" a statement I have admitted to be true, provided the directions given at that time were implicitly followed. They were not clearly given, so as to enable a surgeon to understand thoroughly what he had before him, the difficulties he would probably meet with, and the way in which they were to be obviated. The gentlemen who formerly wrote, perhaps, told all they knew; it is possible, they did not tell quite ALL, or they may have deceived themselves in the manner of telling it. Whether this was the case or not, I cannot say, but of this I am quite certain, that it was impossible to operate with perfect success according to the directions which have been hitherto given, not excluding my own.

The operation of extraction ought only to be performed in cases of hard cataract, which may be easily distinguished from all others, by persons of moderate experience, it being impossible to mistake a hard cataract for anything else but what it seems to be and really is. The symptoms have been so accurately described by Mr. C. Guthrie in the preceding lectures, that it is unnecessary to refer to them.

The surgeon, who proposes to perform the operation for cataract by extraction, should have been accustomed to operations on the eye. He should have performed every other, several times over, before he approaches this—the *ne plus ultra* of perfection in such operations—and his hand should be so steady, that the point of the knife, when duly poised between the fore-finger and thumb, and slightly resting on the second finger, shall not be seen to move in the slightest degree for twice the time necessary for the performance of the operation; and no man should attempt it, unless his fingers and his nerves are of a conformation to admit of this being done. Practice in operating often gives a confidence, which overcomes this evil, when it depends on nervousness alone, which is the reason for the direction I have given, that it should be the last operation on the eye the inexperienced surgeon should attempt. If the defect or tremor is a physical inconvenience, the surgeon, who is the sufferer, should not operate by extraction.

The knife is the next important point. I now prefer, and recommend every one to use the triangular one, commonly called Beer's cataract knife, made with certain modifications, that have, from time to time, occurred to me and to the in-

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strument makers; and I now give you an account of this instrument—first, from Mr. Weiss, and, secondly, from Messrs. Philp and Whicker, the successors of Messrs. Savigny, Everill and Mason, the two houses I deal with, and, of course, recommend; although I cannot always rely that they will take all the care they ought to do, unless they are especially urged, and their attention drawn to it on each occasion. They always take as much, and, perhaps, rather more pains, than others; but where there is much demand, workmen will be sometimes careless; and there is no case in surgery, in which so much depends on the perfection of the instrument, as in this operation. In addition to the assurance given each time, that the knives have been carefully examined, there should be sent with each case, a piece of very fine, thin leather, made for the purpose, through which, when stretched moderately tight across, or between two fingers, the knife should pass, when held perpendicularly, without a scratch-like sound, or, indeed, any sound at all, when it may be said to cut well. If it requires any effort, or gives the least sound in passing through, it should not be used.

(*Mr. Weiss's Knife, 62, Strand.*)

It should be forged of the best cast steel, a quarter of an inch square, hammered cold, and filed to the proper shape; one and three-eighths of an inch long on the back, one and one-eighth long on the edge, and seven-sixteenths broad at the broadest part; it should then be hardened and tempered to a straw colour, and ground very carefully on a fifteen-inch stone—the size of the stone causing the knife to have a slightly convex surface. It is essential that the grinding should be very true, in order to avoid having hollows, or any irregularities in the blade, which, in operating, would cause the escape of the aqueous humour. Care should be taken to grind the knife gradually tapering towards the point upon the surface, in such a manner as to make it perfectly but slightly wedge shaped, so as to fill up the opening it makes; the point should be thin, but firm, and slightly ground away at the back; it should be glazed and polished on wheels corresponding in size with the grindstone; it should be set with a light keen edge, and it will not bear setting more than twice without re-grinding. The best handle is of ivory, of a flattened octagon form, four inches long, and a quarter wide.

(*Messrs. Philp and Whicker's Knife, late Savigny and Co., 67, St. James's Street.*)

The blade is of a triangular form, the angle commencing at three lines distance from the handle, and the remainder being thirteen lines in length. The back is in a straight line with the handle, and the extremity set a little forward, so as to form something like a needle point to facilitate the entrance. The thickness of the blade gradually diminishes both from the handle and the back towards the edge, which cuts well from the point to the angle. Thus its wedge-form fills up the cut on entering the eye, so as to prevent the aqueous humour from escaping during the operation.

Jager of Vienna, and Graefe of Berlin, aware of the difficulties attendant on the division of the cornea, have each invented a knife for the purpose of aiding in the removal of them. Jager's is a double

knife, one blade lying on the other, so that when it has passed through both sides of the cornea, the upper blade may be made to cut its way out. It did not appear to me, on the trials I made, to answer the purpose; but from the contemplation of it, I was induced to suggest to Messrs. Everill and Mason, of St. James's Street, one with two blades, the under of which should be blunt in every part, the upper, the usual cutting knife. This kind of double knife can only be used after the cornea is opened, when it may be carried across the interior chamber in any direction; the blunt blade raises the cornea, and presses back the iris, when the cutting blade, which is a sliding one, is to be advanced or pushed forwards, so that it may penetrate the cornea, and complete the punctuation, if that has not been previously accomplished; it afterwards cuts its way out, the blunt blade protecting the iris. The knife with which the cornea is opened, should be rather larger than the double one, so that the latter may enter easily, and in this way the operation may be safely completed, after the surgeon has failed in effecting the punctuation, in consequence of the escape of the aqueous humour; provided he has managed, in withdrawing the knife, to make the opening in the cornea large enough to admit the double-bladed one. I have often done the operation purposely in this manner, *viz.* by dividing one fourth of the cornea with the single knife, which can always be done without injuring the iris, and then by dividing the remainder with the double-bladed knife. I did this before I was as well aware as I am now of the best way in which all the difficulties I have alluded to are to be surmounted; but after due consideration of them all, I prefer dividing the cornea by one incision, or by leaving only the smallest possible piece uncut at the upper part, and having recourse only to the double knife to enlarge the incision, when it appears to be necessary. I have been able to complete many operations successfully by it, which could not have been well done by any other means. No young operator should be without one of these knives for each eye, and older ones will often reap great advantage from their use.

When the Chevalier de Graefe was in England, I invited him to the hospital, and requested him to perform an operation by extraction, in order to show me his mode of using a knife of his own invention, the extreme end of which is a little curved, so that when it has passed across the eye and through the cornea, it has, by its curvature, a greater power of drawing the eye outwards or downwards, if it should have turned inwards or upwards by that involuntary action of the muscles which the patient cannot often command, nor the surgeon control. It did this in the case on which he operated, and the aqueous humour escaped; I was, however, quite delighted to see that he then proceeded with his operation precisely in the way I recommend it to be done. I was satisfied that he knew as much as I did about it, and I was infinitely more gratified to perceive that he did not know more; that I had discovered already all that he knew perhaps long before me, but still that which is not before the public, and I beg thus publicly to acknowledge the satisfaction and gratification I derived from his visit. I had a knife made like his, and tried it on the first similar case that presented itself; but whether German steel is less brittle than English, which I believe to be the case, or whether I was awkward, which is very probable, the point of the knife broke in the eye, on the attempt to penetrate the further side of the cornea, to complete the punctuation. I was of course obliged to withdraw it, leaving the point sticking in the inside of the cornea, and to complete the division of this part with my double knife, by which it was easily and safely done. The point of the knife was now extracted; but it fell against, and stuck into, the iris. From this situation it required some address to remove it; the operation was, however, at last happily completed, and the man recovered his sight. The operations were both done on the left eye, and the cornea was divided downwards; they are now so much alike in appearance that they form a good pair, the pupil in each being directed downwards, or to the incision.

Mr. Scott has lately invented a small knife for

making the section of the cornea, convex on its cutting edge, and hollowed out on the opposite or blunt edge or back, with which, he is of opinion, he can divide the cornea with greater certainty, and more effectually prevent the escape of the aqueous humour, and the falling forward of the iris upon the cutting edge of the instrument. The instrument makers inform me, they cannot always secure so good a point to this curved knife as they can do to the straight instrument I have described, and as perfection in the point is one great cause of success, and its imperfection the most common cause of ill-success, whilst the knife I have described, when well made, is exempt from all the causes of failure, attributed to those formerly in use, I am of opinion that it maintains its character for pre-eminence, and ought to be preferred before all others. The surgeon, however, must know how, and be physically able, to use it.

The second instrument required, is a small pointed needle, or a hook for tearing or scratching the capsule.

The hooks sold in the shops were totally incompetent to accomplish the purpose intended, and those who used them must have altered them after they came into their possession, or suffered much inconvenience. I have taken some pains to correct this little irregularity, and to have the point of the hook placed at a right angle with the shaft of the instrument, so that when it is turned to the capsule, it may penetrate it without difficulty. This trifles constitutes, nevertheless, one of the greatest improvements in the instruments sold for the operation of extraction hitherto made. The other end of the handle, to which the hook is affixed, should have attached to it what is called a curette, an instrument very like a small marrow spoon, with which the lens may be assisted if it appears to be impeded in its progress, or the hook itself may be stuck into it.

The short rectangular hook may be advantageously exchanged for another, with a less curve, or resembling a needle slightly curved at the extremity, somewhat like that for depression, and commonly called Scarpa's, to the other end of the handle of which should be attached, instead of the curette, or grooved spoon, a thin flat probe, which will be found useful in adjusting, in many cases, the flap of the divided cornea.

The operation by extraction should always be done by making the incision upwards, and any deviation from this should be considered as an exception to the rule, caused by the great inconvenience which would attend its performance upwards, from the protuberance of the orbit, the sunken state of the eyeball, or from that fear which will sometimes so pervade persons, that they cannot be induced to turn the eye downwards, so as even to allow the pupil to be seen, much more to expose the upper part of the cornea. In such cases, the division of the cornea must be effected downwards, or downwards and outwards, which, if it can be done, prevents the edge of the flap of the cornea from being raised by the edge of the lower eye-lid, an accident which will not, however, occur so often as is supposed, if the incision should have been happily made. The real evil of the incision downwards is, that the edge of the flap will be raised more certainly, when the incision has not been happily made; and that when any accident occurs, of whatever nature, to prevent the adhesion of the incised parts by the first intention or the adhesive process, there will inevitably be a cicatrix of a greater or less extent, into and behind which the pupil may, and usually will, be drawn, so as to prevent vision. If such accidents should occur when the incision is made upwards, the lower part of the cornea is clear, and the iris behind it is sound, in which an artificial pupil may be made with the greatest advantage, a small pupil below being of much more advantage than a considerably larger one above. The irritation and distress arising from exactly the same accident upwards, is nearly as nothing, when compared with what takes place when it occurs downwards.

The position of the patient is of importance. Some operators prefer the recumbent. I always place the patient in a high-backed chair, with the head well supported, and capable of being turned

a little backwards; but, whatever may be the position preferred, it is advisable to adopt it always, if it can possibly be done. There is something in the habit of doing a thing; and a slight change from the usual mode of operating may lead to an untoward event, that might perhaps have been avoided. The surgeon should always operate with the hand he is in the habit of using commonly. I thought it necessary in early life to operate with both; and I once thought I could operate as well with the left as the right; and a man may learn to do this well, but unless he is naturally ambidexter, he learns it at the expense of many an unfortunate person, who pays with his sight for the acquirement of a very unnecessary dexterity, which is by much too dearly purchased, and at by far too high a price, to avoid a simple change of position. To prevent this dreadful evil, the surgeon should stand behind the patient when operating on the right eye, and before him when operating on the left. The manner of raising and fixing the upper lid has been described; it may be, however, as well to repeat it here.

The patient should be placed opposite a single clear steady light, without sunshine, and a northern light is the best, although it is not of any consequence what light it is, provided it is unaccompanied by the beams of the sun. He should be seated in an arm-chair, the back of which should be low enough to support the head when gently inclined backwards. A night cap fitted exactly to the head, so that it cannot move, should now be put on; the fore part should be turned up, if it comes too low down on the forehead, and the middle of a light thin spongy kind of linen bandage, two inches and a half wide, and just long enough to cross over the eyes and to pin on the sides of the head, should be sewed to the centre of it behind, ready for use.

For the operation on the right eye, the surgeon should place himself behind the patient, and he will usually find it necessary to stand on a stool, in order to raise himself to such an height, that he may readily lean over, and have his hands at perfect ease; and in that position and distance from his own head or chest, which is most convenient to him. The patient's head being a little inclined backwards, and duly, although gently and comfortably, supported by the cushion, or back of the chair, the surgeon leaning over from behind, brings the two fore fingers of the left hand over the forehead gently down on the eyelid, and raises it up slowly and tenderly, so as to fix it ultimately against the upper edge of the orbit; and to be able to retain it there so perfectly with the end of the fore finger only, that the patient cannot lower it or close the eyelid by any effort he can make. He should also be able to do this and to make a little pressure on the eyeball, in order to fix it at the moment the incision is begun. As soon as the index finger is in this position, the second finger leaves the upper, and lowers the under lid, pressing it towards the edge of the orbit below. The eye is thus completely exposed, and may be almost fixed between the two fingers. To do all this well, requires a certain degree of practice, but which is very easily acquired. It must be done very gently, very tenderly, and without giving pain, or almost uneasiness. The error usually committed, is in using too much force with the extremity of the fore finger, which gives pain, and makes the patient swerve; and it is an error of such great importance, that the surgeon must practice this part of the operation until he feels that he does it as a matter of art, not of force.

The left eye may be opened, and fixed in a similar manner; or the surgeon, standing before the patient, raises the upper lid with the side of the fore-finger of the left hand, and depresses the under lid with the thumb, the hand being over the nose. The pressure of the fore-finger tends to fix the eye at the same time, and to render it as immovable as possible, and this mode of proceeding I generally adopt in preference, for the left eye.

The eye being thus opened, and the eyelids retained asunder, the eye loses all the extreme sensibility with which it is endowed for its security and preservation in its ordinary state. Public opinion, which on medical subjects is generally erroneous,

although for the most part founded on professional authority, is, in no instance, more injurious than in relation to the eye. It pronounces it to be an organ of a very delicate nature, exquisitely sensitive, requiring the greatest delicacy of touch, and the utmost nicety of management; which opinion some oculists formerly found it convenient to support, and which the public may still continue to believe without any great disadvantage; but students in surgery must be taught otherwise. They must learn, that the eye is not so very delicate; that it will suffer more comparative violence, with less injury, than any other organ of importance in the whole body; that so far from being exquisitely sensitive, it is, when exposed in a healthy state, nearly the reverse, only becoming permanently so on the occurrence of inflammation; and that the ablest and most successful operators, are not, apparently, although they are, in reality, the most tender in their proceedings. The opinion of the exquisite sensibility of the eye has arisen from the pain which is felt on the admission of a small piece of dirt, or a fly, between the eyelids: but this occurs from a wise and preservative provision of nature, on account of the insensibility of the eye-ball itself. Let the eyelid be raised, and the same piece of dust applied to the surface of the eye, no pain, and scarcely a sensation, will be produced; remove the piece of dirt, turn out the lid, and whilst it is retained everted, place the piece of dirt upon it, no greater sensation will be induced than is felt when it is applied to the eye-ball.—The inference is, that both surfaces, when touched separately, are nearly insensible to this species of irritation. But let the same piece of dirt be put between the eyelid and the eyeball, and the sensation produced is exquisitely painful. To give rise to this sensation, it is necessary that the two surfaces should come in contact, and that the foreign body be grasped between them. If this were not the case, an irreparable injury would often occur to the transparent part of the eye before it would be observed; and if the raising of the lid, and the separation of the surfaces, did not nearly annul sensation, an operation could not be performed for cataract; for who could bear quietly the sensation which must arise from pushing a needle into the eye, if it were analogous to that arising from a fly, or a dry solid substance between the eye and the lids? The experiment may be tried in a very simple and conclusive manner by any one on himself, by merely keeping the lids apart by an effort of the will, when the end of the finger may be placed boldly on the eyeball without any inconvenience. Inflammation, by enlarging the vessels, gives rise to pain in the same way, and the sensation is, at first, as if some extraneous matter were interposed between the lids. I was the first to mention this fact, and to explain why it was so, although, I dare say, every body knew it just as well as I did; the only difference between us all being, that I was not afraid to tell the truth. I did it in the following passage, in the year 1823, in the Introduction to the first edition of my work on the Operative Surgery of the Eye:—"In regard to the difficulty supposed to attend the performance of operations on the eye, it partakes of the same error, and has been supported for the same reasons. The sensibility presumed to exist in the organ naturally led to the conclusion, that the operations required to be performed upon it must be difficult of accomplishment; and the science of optics, in showing the beautiful arrangement of its structure, and the complexity of its functions, induced a belief that the slightest alteration in its composition must be fatal to its mechanism: but this is not found to be the case. Few persons can, however, duly estimate the liberties that may be taken with the eye, until they have seen several operations performed; when the false ideas they have imbibed will be completely removed, and new feelings will arise, in admiration of the benignity of the Creator, who, in rendering the eyeball nearly insensible, enables it in its quiescent state, to undergo those operations which are frequently necessary for the recovery of sight."

If the extreme sensibility of the eye was not removed by the separation of the lids, it would be impossible to perform an operation upon it; no

person could submit to it, however firm and courageous he might be; and those who were once afflicted with cataract must have remained blind for life. The sensibility of the eye after the separation of the lids, is so comparatively dull, that nothing beyond uneasiness is experienced on touching its surface; many persons are, nevertheless, extremely agitated, when this is done for the first time; the eye rolls in every direction, and is drawn forcibly backwards into the orbit with a considerable effort. If the patient be kindly spoken to, and soothed into a little quietude, the eye is seen to advance again, the muscles which have retracted it are relaxed, and it may now, by gentle pressure, be fixed, although oftentimes not so steadily as to prevent its turning inwards at the instant the operation is commenced. Where persons are naturally irritable or nervous, I always separate the lids, and fix the eye two or three times at an interval of two or three days, and touch the eye with a probe, which removes their fears and renders them more quiet, and capable of undergoing the operation with less alarm and distrust.

The object gained by the operator's fixing the eye, and, in fact, doing the whole operation himself without assistance, is unity of purpose; an advantage which every one soon learns to appreciate, and there are none so awkward that they cannot in a short time acquire it. If they cannot, they should not do these operations. I do not mean to say that an able assistant does not answer the purpose nearly as well; but an able assistant is not always to be had, and it is more difficult to teach an assistant than to learn the art one-self, and it can always be acquired in the performance of the numerous minor operations on this part. The other eye may be advantageously left uncovered: it will follow the motions of the one to be operated upon.

Mr. C. Guthrie afterwards operated very successfully by extraction, on the eyes of an old woman, on whom the operation had been deferred on account of a severe cough, and Mr. Dasent removed three squints by operation. J. F.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

WE now come to *affections of the liver*. We might have been led to imagine that the liver is not so obviously exposed to disease as the alimentary canal. The alimentary canal is at any rate especially exposed to the various crudities of food, and so forth, passing through it; and, likewise, the character of its secretions is sometimes found acrid and irritating, and this leads to mischief. However, the liver is found to be affected, not only by modifications of its secretions, but likewise by external causes, and through the medium of the circulation. The liver is one of the great secretory glands of the system. All kinds of matter, however introduced into the circulatory current, have to pass through the vena portæ, and through the liver, and thus exercise a direct effect upon this viscus. In this way, alcoholic liquors are liable to disorder the functions of the liver, and also every other class of irritating and poisonous substances. The liver is also subject to derangement, not only of a direct, but likewise of a sympathetic character, in consequence of any disorder affecting the duodenum, or the stomach. I have mentioned already that, both in gastritis and in duodenitis, the functions of the liver are very apt to be disordered, and it would appear that there is a sort of natural relation subsisting between the duodenum and the liver, inasmuch as the process of chylification can only be carried on, by a due balance being maintained between these two organs. So, likewise, various indigestible foods, passing through the duodenum, will cause either an excessive flow of bile, or else disorder and interruption of the secretion. The chief external influences which affect the liver, are heat and cold.

It is well known that, in warm climates and seasons, the liver is peculiarly apt to suffer, and its function to be disordered. Such a state is exhibited in cholera; while, at other times, its function is apt to be arrested by inflammation, especially when induced by extreme heat, whether artificial or natural. That the temperature is the direct or exciting cause of the disease, is not clear. This may possibly be due to the change that takes place in the blood, whether arterial or venous, not being complete, the blood, in a warm temperature, being more stimulated than usual, while, in a cold temperature, it becomes more venous. Now, as the liver is chiefly supplied from the venous blood, it is highly probable that the difference in this respect will affect its function, and, when the blood becomes more arterial than usual, the function may be deranged; or this may be from the effect of the heat itself. And, again, extreme cold is known to produce disorders of the liver, likewise. I need only refer to the late very cold weather, which, in my own experience, produced many cases of disorder of the constitution, generally connected with an enlarged, congested, and inactive state of the liver. This is the very common effect of a sudden transition from heat to cold.

Now, the first disease which we shall consider, under the head of inflammatory affections of the liver, will be *hepatitis*,—of the acute form. We find, in books, hepatitis described as a very distinct disease, attended with symptoms of inflammation, and disorder of the function of the liver; but we have found, at least in this country, that this affection is more obscure than it is commonly supposed to be, and far less distinct in its character. It is often not easy of recognition, on account of the absence or obscurity of the inflammatory symptoms. The symptoms are commonly those of fever, with more or less gastric disorder, sickness and vomiting, and various other symptoms, either of duodenal or gastric derangement; and, with this, there is commonly pain, tenderness, and fulness in the right hypochondriac and epigastric regions, and an increased dulness, on percussion, over these regions. The pain is frequently felt low down on the right side, along the margin of the right loin, and extending sometimes to the back, being increased on the movement of full inspiration, or on pressure under the ribs; there is also, frequently, a sensation of dragging, caused by the patient lying on the left side. The right side is generally too tender to lie upon, but the uneasiness is still greater if he be on the left side, and commonly, therefore, the patient lies on the back. The pain is very various in degree. Sometimes it is felt in the right shoulder: this is commonly described as being characteristic of hepatic affection. In many cases, such a pain is present in connection with affection of the colon. The enlargement in the right hypochondriac region is one of the most important symptoms; it is perceptible by admeasurement, and occupies the entire anterior part of that region; it extends into the abdomen, and the liver may be felt there on pressure; but, to be quite sure of the character of this fulness, it is necessary to apply percussion. Now, the hepatic dulness, in the natural state, varies considerably. It varies, as we have found, in certain diseases of the chest. In emphysema, the lungs press downwards, and almost cover over the liver, and scarcely any dulness at all is observed; and sometimes, in healthy persons, with broad and expanded chests, the lungs overlap the liver to a great extent, so that the natural dulness, otherwise perceptible in the region of the liver, often varies from a line of, perhaps, two to three and a half inches, or more, in breadth, extending from the epigastrium to the margin of the false ribs. The breadth of this band may, sometimes, be pretty fairly covered by the hand; lower down, the liver is altogether overlapped by the intestines, and the sound will there be more of a tympanitic character. Now, with regard to the height to which the dulness reaches:—this varies considerably in different subjects. It may be perceived on strong percussion, reaching up to the fourth rib on the right side,—sometimes even higher. Occasionally, the enlargement is downwards, and extends across the epigastrium, as low down as the umbilicus. It may reach from the

hypochondriac region almost down to the iliac region. At any rate, it is frequently found from two to four inches below the margin of the ribs. If there be a displacement or enlargement of the liver upwards, it pushes the diaphragm along with it, causing a considerable amount of dulness in the right side of the chest, and the necessary effect of this is to produce a pressure on the lungs, and not only dulness on percussion, but other signs of disorder in the respiratory function. The dulness will be perfect as high as the fourth rib. In the back, though less in degree, the sound reaches to the angle of the scapula, and even passes into the axilla. There is a sound of dulness, here, on the presence of which the diagnosis of enlarged liver depends. You have to diagnose this from effusion into the pleura, and pulmonary consolidation: either of which may greatly simulate it. Now, effusion into the pleura may be distinguished in the following manner:—effusion into the pleura congregates chiefly at the lower part of the chest, the lung not being so much compressed in the centre as around its margins. On the other hand, the liver, by its enlargement, compresses more the central portions of the lung, but leaves the outer margin uncompressed and lapping over against the walls of the chest. Now, the effect of this is to modify greatly the sound on percussion. There is a perfect dulness over the enlarged liver, where it comes in immediate contact with the surface, but, as you get a little higher, the dulness is not so perfect; and, if the percussion is well-applied, a degree of resonance will be perceptible in the more superficial parts. You perceive, that there is a layer of the lungs overlapping the liver, and this is still more perceptible as the layer is thicker, and higher up. Now, the opposite thing takes place in the case of liquid effusion in the pleura. The lungs are pushed away, and percussion produces a purely dull sound. The sound is very different in character. The respiratory murmur is also attended by a whiffing noise, owing to the compression causing a great resistance to the air on entering. Compare that with the opposite side, and you will find a remarkable difference. What effect would you expect from a large tumour, pushing up, not only the diaphragm, but compressing the central portions of the lung? Why, it would produce tubular respiration, by the condensation of the texture caused by this body rising up; and the same effect takes place by compression of the centre of the lung by the liver. The superficial character of the pulmonary stroke-sound, likewise, and the absence of crepitation and of ægophony, which are present in the case of liquid effusion into the pleura, will also tend to distinguish it. These signs are, then, of much importance in the diagnosis between hepatitis and other affections of the chest, attended with hepatic derangement.

The enlargement, then, takes place downwards or upwards. It also takes place outwards. This assists materially in the diagnosis. It is a very marked sign, when there is fulness in one portion of the chest that does not correspond with the other or opposite side; especially when such fulness is attended by dulness in the region of the liver, and also a bulging out of the ribs. There is another circumstance, too, that often guides us, but which at the same time, may mislead us; and that is, the presence of inflammatory symptoms. There may be enlarged liver without inflammation; but where inflammation does exist, it very commonly extends from the liver, or from its peritoneal covering, to the diaphragm and its pleural lining, and thence to the concave surface of the lungs. Enlargement alone does not constitute a criterion of hepatitis. Enlargement with dulness may exist in congestion, and in various structural diseases, and we must look, therefore, to the presence of fever and heat of the skin, more particularly in the region of the liver and the abdomen, and to the state of the pulse. A friction-sound may, in some instances, be met with in the region of the liver itself:—a slight rubbing, produced by the action of the diaphragm on the upper surface of the liver; but, more commonly, it arises from a degree of plenitude affecting the lower margin of the lungs. Often, there is, with hepatitis, nausea

and vomiting, and, in some cases, there is jaundice, but these are somewhat uncertain symptoms. Sometimes, there is some diarrhoea present, and, occasionally, a dry cough, from the extension of the irritation or inflammation to the pleural surface of the diaphragm.

Terminations of the Disease.—The tendency of the disease, in the acute form, is either to terminate by resolution, by suppuration, or to pass into the chronic state. The symptoms of resolution are: subsidence of the pain, the heat, and the fever, and disappearance of the swelling. The symptoms of suppuration occurring, are: chiefly, subsidence of the heat and the fever, but no subsidence of the swelling; and only a partial subsidence of the pain. At least, the pain may subside, but not the tenderness in the region of the liver. The pulse, too, remains very quick. There are frequent rigors, as in other cases of suppuration. The skin of the countenance, and of the body generally, exhibits a pallidity, sometimes accompanied with a hectic flush on the former. Where abscesses are formed, there is a remarkable disposition to oppose the action of mercury. This is not so commonly observed in this country, as in hotter climates. The suppuration may be in the form of circumscribed abscesses, or else forming one large abscess, and becoming encysted by the formation of a strong coat of lymph. The formation of simple abscesses is, perhaps, more common. The abscesses may open in various directions; either into the intestinal tube, causing vomiting or purging, with the discharge of a quantity of purulent matter, a case of which kind came under my care in this hospital, where the abscesses opened into the colon; or they may, sometimes, open into the duodenum, and, sometimes, into the gall-bladder, or, even, pass through the diaphragm into the pleura. Sometimes, the lung and the pleura form adhesions to the diaphragm, and abscesses have thus discharged themselves, into the substance of the lung. An abscess may pass through the substance of the lung, causing pleuritic perforation, and, in this case, you find it will communicate with the large bronchiæ, and there is, then, a large quantity of purulent matter coughed up. Sometimes, it communicates with the sac of the peritoneum, and, in one case, it was known to open into the pericardium. It is more rarely that it opens outwardly, and discharges through the integuments. A case occurred last year, which was presumed to be abscess of the liver. There was considerable enlargement of this organ, and, ultimately, the abscess pointed in the loins, below the margin of the ribs, on the right side. An enormous quantity of very foetid pus was discharged, from two different places, and the patient eventually recovered, and is now living apparently well. There were strong attempts to commence a discharge from the lungs by cough. The best mode of discharge must be considered as that by stool. Several cases have recovered in India, where this has been the case. In spite of the abscess opening outwardly, the patient may sink; in fact, he may sink in consequence of the drain thus established: again, if it opens into the peritoneum, it will produce peritonitis; if in the pleura, pleuritis; if in the substance of the lung, it may produce suffocation; even opening into the intestines, it may cause enteritis, or death by exhaustion. A few cases are recorded of recovery from abscess of the liver. Annesley, in his work on the diseases of India, records several cases of recovery from hepatic abscess, in one of which, after death, cicatrices were found to exist in the liver, accompanied by false membranes around it, &c. There was one case happened last session in this hospital, in which there were abscesses of the liver, attended by disease of the lung. The surface of the liver appeared to be completely covered with cicatrices. The chief appearances, in recent cases of abscess of the liver, are a softer and redder state of this organ than usual; it is, also, very much enlarged. The presence of abscess, in a few cases, may be diagnosed by fluctuation, perceptible in the region of the liver, or below the ribs, and this is accompanied by extensive dulness. In the cases I have seen, however, this could not be recognised, for abscesses mostly take place in the convex portion of the liver, in the hollow of the dia-

phragm, and, therefore, we are unable to detect it by the test of fluctuation. I do not know of any certain physical signs for determining the existence of abscess. However, the various signs of inflammation and perforation of the different viscera, might lead to the suspicion of the presence of an abscess; for instance, the increasing pain in the direction of the pleura, accompanied by a troublesome cough and difficulty of breathing, with increased dulness on percussion, over the region of the pleura, and the friction-sound, also, probably being present. Should the abscess communicate with the lung, we shall likewise have consolidation of this latter organ, and large quantities of purulent matter expectorated. Taking into account the history of the case, the previous existence and long continuance of pain and swelling in the right side, together with the subsequent occurrence of cough and purulent expectoration, the diagnosis may often be made out with tolerable facility.

The exciting causes of hepatic disease, besides hot climates and seasons, and stimulating liquors, are: blows on the side—sudden suppression of diarrhoea—and obstruction of the gall ducts by calculous concretions. Mercury, also, has been known to produce it.

The treatment must be antiphlogistic;—venesection, in the early stage of the disease, or cupping at the side to a large amount, which, in some cases, answers better than venesection, by drawing away the blood from the immediate neighbourhood of the parts, which must be done till the fever decreases, as well as the pain in the region of the liver, the tenderness, and the swelling. Purging is a good remedy. Calomel purgatives, followed by salines, answer very well. Blood-letting, if repeated, should be local; cupping may be several times repeated, and, for some time afterwards, purgatives should be administered. Mercury is a remedy of great value; but it is questionable whether it is so useful in the acute as in the more chronic form of hepatitis. It is considered as a stimulant to the liver, and some practitioners, in India, have raised a question whether it is not injurious, and whether it does not do more mischief by its stimulating property, in such cases, than it does good. It is only, however, in India, that its efficacy seems to be questioned. It is useful to combine it with tartarized antimony and James's powder, and also to administer saline aperients. When the symptoms of enlargement continue, it will be useless to persist in this treatment. Under these circumstances, the diet should be much more generous. It is necessary to maintain the free action of the bowels and to give occasional doses of mercury, after attacks of acute hepatitis, because the inflammation is apt to remain in a lower degree, and to go on to the chronic form, or to pass into structural disease. Therefore, mild mercurial doses should be continued.—Chronic hepatitis, or hepatic congestion, are common effects of the acute disease.

Hepatic congestion—presents but few symptoms, they being mostly signs of disturbed circulation; very few symptoms are referable to the liver. Besides the signs of weak circulation, there is chilliness of the surface, cold extremities, &c., which are very common signs in connection with congested liver. The other symptoms which occur, are usually those of duodenal dyspepsia, arising from imperfect digestion of the food, the appetite being perhaps considerable, with disturbance merely in the process of digestion, scanty and high coloured urine, and the stools exhibiting more or less disorder, being sometimes paler than usual, and sometimes of a darker colour, with a want of the natural, bilious, yellow tinge, which is characteristic of the healthy evacuations. These symptoms often occur in connection with congested liver, without any pain in the side. In many cases, however, there will be found a constant pain in the side. There is, likewise, a feeling of dragging at the right side, and, as the disease goes on, there is a sallowness of the skin, almost amounting to jaundice, which is also manifested in the white of the eye. The skin is generally dry, but, at times, bathed with cold perspirations: the tongue is loaded with a white or yellowish fur, and there is a bitter taste in the mouth;—the evacuations are dis-

ordered, in the manner I have mentioned, and the heat and pain extend from the right side towards the epigastrium, and the right shoulder blade. The liver is generally of a very enlarged size, as may be tested by percussion, accompanied by great tenderness of this organ. If the disease goes on, generally speaking, there are more or less febrile symptoms developed; and bilious or gastric fever declares itself, accompanied with attacks of shivering, vomiting, and giddiness. The urine appears high-coloured and scanty, being largely tinged with bile.

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. CORRIGAN, M.D., Consulting Physician to the Richmond Hospital, Lecturer to the Dublin School of Medicine, &c.

(Continued from page 110)

At our last lecture, Gentlemen, we left off when commencing to speak of the various terminations to which sthenic lesion of the function of circulation is liable. These, as I have told you, are but two: resolution and mortification. Resolution takes place in an inflamed part, when, by the interference of art, or the efforts of Nature herself, the part affected returns to its usual state of health, without any change in the organisation of it: while mortification, as the term implies, means the actual death of the part affected, whether it be a limb, or an internal organ. Mortification is divided into two varieties: dry and moist. Dry gangrene, or gangræna senilis, as it is scientifically termed, in general attacks persons advanced in life; to this, however, there are exceptions, as instances are on record, where it has come on in young persons; it is caused chiefly by a mechanical hyperæmia of the capillaries of the part affected, which is generally the foot, or some one of the toes, in consequence of the languor of the circulation produced by old age. The arteries of the part continue to pour their contents into the capillaries where it remains for want of contractile power in the latter to expel it, becoming stagnant, and producing, as I have already said, mechanical hyperæmia, and, eventually, death of the part, which becomes black and dry like charcoal, constituting real dry gangrene. In the other variety of mortification, however produced, whether as the result of specific action, as in gangrenous erysipelas, or of excessive hyperæmia, caused by accidental injury, we invariably find the vessels of the part making some effort at self relief, by pouring out, through their parietes, some portion of the serous and albuminous ingredients of the blood; thus, giving rise to subcutaneous effusion, if the hyperæmia be deep seated in the surrounding muscular tissue; or to bullæ on the skin, if it be superficial. However, the effort made is seldom successful, unless assisted by art; the inflammation proceeds in its work of death, to end eventually in the destruction of the part: and to this finale, the term moist gangrene is applied.

With these few remarks on this subject, allow me to turn your attention to the consideration of the treatment of the different varieties of the lesions of the function of circulation. Of the sthenic variety, we have examples in the acute or sthenic meningitis, acute pleuritis, or peritonitis. Of the asthenic, in the various modifications of scrophula, whether they present themselves in the shape of glandular enlargements, phthisis, or scrophulous ophthalmia. Of the mechanical hyperæmia, we have examples in narrowing of the left auriculo-ventricular opening, or in melænotic congestion of the vessels of the intestines, caused by cirrhosis of the liver. In our treatment of sthenic hyperæmia, as in acute pleuritis, we use blood-letting, tartar emetic, purgatives, mercury, in fine, every measure which can be resorted to for diminishing the undue quantity of blood in the vessels of the affected part. This is all that is necessary for us to do, to remove the disease in most cases, because, in the sthenic hyperæmia, the vessels have not lost their contractile power; they are merely in a state of

over-distention, and when the distending power is removed, their contractility returns, and the disease is overcome. In the management of asthenic hyperæmia, in which, in addition to over-distention, the vessels have lost their power of contracting, it may be necessary for us to bleed; but if we do so, it is locally—merely from the neighbourhood of the part affected—that we practise this evacuation, in order that, by lessening the force of the distending current, we may allow both our local and internal remedies better opportunities of restoring the tonicity and healthy contractility to the vessels, which they had previously lost. In mechanical hyperæmia, from narrowing of the left auriculo-ventricular opening, producing pulmonary hæmorrhage, we bleed from causes entirely different: these are, first, to remove part of the excessive quantity of blood which the auricle contains,—by this means lessening the venous congestion of the lungs; and, secondly, in order that, by gradually lessening the mass of circulating fluid in the auricle, we may endeavour to allow the distended auricle time to accommodate itself to circumstances. In intestinal hæmorrhage, or melæna from cirrhosis of the liver, we also bleed gradually and moderately—not that this bleeding can produce any effect on the contracted liver, which is the cause of the congestion of the intestinal vessels, but for the same reason as we bled in the heart affections, that we may take off some portion of the distending fluid, and, by so doing, give the vessels an opportunity of contracting. Thus, to recapitulate: we bleed in sthenic hyperæmia, to produce an effect on the system at large, so as to allow the distended vessels an opportunity to re-acquire their elasticity which had been suspended, not lost; in the asthenic, we bleed locally, if at all, that by removing the congestive cause, we may thus assist our internal remedies in their efforts to restore that contractility to the vessels, which they had previously lost; while, in the mechanical variety, where an insurmountable obstacle to our curative efforts exists, we bleed so as to give temporary relief to the overloaded vessels, thus giving them a chance of accommodating themselves to circumstances.

In speaking of the treatment of the different forms of hyperæmia, I would have entered more into detail, exemplifying more fully and particularly the treatment to be pursued, by citing forms of each variety, but that I consider it preferable to give you now the elements of each form, waiting until, in the course of the season, we come to examine diseases *seriatim*, to give you, then, more minute information upon each variety of lesion of the function of circulation. I have not spoken of the treatment to be adopted in cases of mortification, as this subject falls more within the province of the surgeon than the physician; and, when it attacks internal organs, our best directed efforts are, mostly, unavailing. Allow me, after this short digression, to return to my subject. Before I conclude my observations upon the lesions of the function of circulation, I must request your attention to the consideration of a subject closely allied in its nature to inflammation, and which, like it, has been divided into a similar arrangement to the latter, by the famous Andral: I allude to hæmorrhage. For a long time, the most erroneous notions prevailed, as to the state of the vascular system in parts, from which hæmorrhage proceeded; and no less discordant were the means recommended for the suppression of the hæmorrhage. It was thought, until lately, that the bleeding in hæmoptysis was caused by rupture of the bronchial vessels; and that the same state also existed in that dreadful disease—melæna, where blood is ejected from the stomach, and discharged, also, from the intestines: but later experience has proved, that most frequently the blood transudes through the parietes of the vessels, while, at other times, these latter may be ruptured. In the intestinal hæmorrhages of patients who have died from typhus fever, or, as our French neighbours erroneously style it, "*gastro-enterite*," the utmost nicety, in *post-mortem* examinations, cannot detect the least evidence of ruptured vessel. The same is true of persons who have suddenly died of bronchial hæmorrhage; here, generally speaking, where the practitioner, in his search for the ea

of death, would naturally expect to find the mucous membrane, lining the bronchi, red and congested, how often is he not disappointed in his *a priori* opinion as to the state of affairs, by very often finding the membrane in question grey and paler than natural. The industrious student, well acquainted with, and deeply read in, elementary works on medicine, wishing to render himself thoroughly and practically conversant with the most minute details of his profession, turns to consult the pages of some celebrated periodical, where he meets a monograph on the treatment of some one of the class of hæmorrhagic diseases: we will suppose it—*purpura*—under some of its various forms, or that it is bleeding from the lungs, stomach, uterus, or intestines. He then reads an account of the treatment, which has proved successful in *all the cases* treated by the writer, and which consists in the administration of quinine, astringents, and wine. We will suppose him, after a lapse of two or three months, again consulting the pages of the same periodical, looking over its last number, when, to his astonishment, he finds another plan of treatment, as opposite as the Antipodes from the former, loudly proclaimed by another writer, who asserts that, in a very great number of cases of the same disorder, treated by him *with marked success*, the remedies found to have been most efficacious, were: blood-letting, the exhibition of calomel, and purgatives; in a word, the strict adoption of the antiphlogistic regimen. He is bewildered at witnessing such different means of treatment recommended, and naturally becomes distrustful, either of the veracity of the writers, or of their diagnostic acumen. How is this? Surely both cannot be right; yet both are right, and both are wrong; the difference of recorded opinion consists in the reporters having seen their cases in different phases of the same affection. You have been already informed of the relation which hæmorrhage bears, in its nature, to hyperæmia; and all we have to do, to reconcile these conflicting opinions, is to suppose, what has really taken place, that the writers had successfully treated, with different remedies, varying forms of the same disease. Independent of the causes of hæmorrhage, before cited, as exosmose, and rupture of vessel, there is also another cause, from the blood having undergone some peculiar change, by which its properties are entirely altered; though in what the change consists, we know not. This peculiar state of the blood is to be met with in fevers of a putrid type, giving rise to extravasations of blood beneath the cuticle. These *purpuræ*, as they are called, must not be confounded with the maculæ, or stigmata, which we so frequently find accompanying the typhoid, or gastro-enteric, fevers, and which are of the same nature as the efflorescence of measles or scarlatina, being merely so many clusters of congested capillary vessels, which, owing to some inexplicable cause, present themselves to our view. I have found the following simple test always perfectly satisfactory, in discriminating between both:—

Press steadily with the finger-tip on one of the suspected spots, taking care that it is situated in a part possessing some solid support beneath,—as the ribs, sternum, or ossa ili. If the spots are maculæ or stigmata, the pressure upon the congested vessels temporarily empties them, and the skin for a moment acquires its natural tint; whereas, if they are hæmorrhagic, or purpura, the blood, being poured beneath the skin in the cellular tissue, cannot be dispersed by this means, but remains there until convalescence endows the absorbents of the part with renewed vigour, and thus enables them to restore it again to the mass of the circulating fluid.

We often find this condition of the blood produced by the poison of mercury. We shall see a person seeking admission to the hospital, who has been taking mercury, and who has caught cold whilst under its influence; but this is not enough to produce it;—to these circumstances there must be added some, as yet, unknown idiosyncrasy, or peculiarity of constitution. We shall, on admission, find such a person labouring under an eruptive disease, called "*mercurial eczema*." This consists, at first, in an inflammation of the skin, closely analogous to scarlatina,

and, succeeding which inflammation, we have numerous vesicles, or bullæ, appearing; these eventually become so many depositories for extravasated blood. So great is the tendency to this vascular weakness, that the slightest attrition of the surface by the bed-clothes, pressure on the nates, caused by the recumbent position, or the superincumbent weight of one leg over the other, is quite enough to produce these hæmorrhagic spots on parts previously unaffected. If the tendency to bleeding stopped here, all might be right even yet; but we frequently find that hæmorrhages from the intestines, nose, ears, eyes, and mouth, quickly destroy the wretched victims of this disease, and render them the most frightful spectacles that can be presented to the eyes of the medical man, thoroughly conversant though he must be, with all the awful effects of disease which dog the steps of wretched humanity.

But another subject, connected with lesion of the function of circulation, claims our attention. Now, Gentlemen, this is vicarious hæmorrhage; but I think it were well that we, for the present, pass this by, and allow it "to bide its time" till a more fitting period. We now come to the second division of my subject, viz.: "lesion of the function of nutrition, or secretion." You must allow me here again (even at the risk of proving tiresome by repetition,) to call your attention to my former division of the whole system into three functions, viz.: those of circulation, nutrition, and innervation. We have just concluded the discussion of lesions of the function of circulation; let us now consider that of the function of nutrition, or secretion.

Of this functional lesion, the subdivisions are but two; namely, adhesive inflammation, as it is termed, and its sole concomitant, ulceration. Writers speak of the term, adhesive inflammation, as if the operation, by which nature produces this, were referable to an increased action of the circulatory function, as well as to that of the nutritive. Perhaps an instance or two will serve to render me more intelligible, and impress the matter more firmly on your memory, when I assert that you can, and often do, have inflammation, if you chose to call it so, going on in some one or other of the three different functions of a part, without its necessarily implicating any of the other functional agents of the same part. The cases I am about to describe to you, are not fictitious, or supposititious, but such as you will meet with almost every day; and with the first of them, some of my present class, who have gone through the Whitworth Hospital to day, may not be wholly unacquainted. A person comes to consult you for oppression of breathing, and slight or trifling cough: you find the pulse natural, or, perhaps, a little quickened; you make some other enquiries, but still you cannot make out a clue to guide you through the labyrinth; you have nothing to assist you in forming a correct diagnosis, save what help you may derive from the signs before enumerated: namely, quickened pulse and oppressed breathing. You say, "Poh! this fellow's nervous! I'll order him some tonic, and all shall soon be well again." You act on this supposition, while, even at the time you are doing this, the bag of the pleura may be three-fourths full of purulent matter, without having a single inflammatory symptom (as its characters are laid down in books) to guide you in your efforts to ascertain how matters stand. Upon what does this secretion of purulent matter depend? Surely it is not caused by lesion of the function of circulation; we have seen that it has been scarcely, or not at all, disturbed. To what else can it be due? Not to lesion of the function of innervation, for the formation of adventitious matter does not come within its range. But one cause now remains for us, to which to attribute the mischief, and that is—the function of nutrition or secretion. We will next suppose one of you to be attending a patient who has been slightly complaining of some affection of the abdomen, which he cannot well describe; he has been complaining for some little time, but not to such an extent as would warrant you to suppose him labouring under a fixed disease. Matters continue progressively from bad to worse; he has been under your care for twelve months, or

perhaps better, without receiving any benefit from you, when effusion takes place into the abdomen, and your patient dies.

If you are allowed to make a *post-mortem* examination, you will find, to your great surprise, that effusion of lymph, to an enormous extent, has taken place, part of which, becoming organised, has formed adhesions between the peritoneum and intestines, which have become the nidus for the development of tubercle, while the remaining fluid effusion is the cause of your patient's dropsical abdomen. You are astonished at not having found, during the progress of this case, a single symptom which might lead you to infer what the mischief was that, working silently but surely, destroyed your patient. You will, perhaps, after this be inclined to think that all diagnosis of disease depends upon chance; if you do, you are mistaken. During the epidemic prevalence of scarlatina, some years since, among us, we had ample opportunities of witnessing the fact, that lesion of one particular function may exist, independently of the others. Numbers of children, convalescent after the distemper, were suddenly stricken with coma, or convulsions, and perished, owing to the effusion of lymph, either between the membranes of the dura and pia mater, or upon the brain itself. In no case, were there any symptoms premonitory of the mischief about to ensue, save slight drowsiness, and retching. Warned at length, by numerous examples, when leaving the hospital, I usually gave the resident pupils the following directions. "Should you find any of these patients become affected with drowsiness orretchings, bleed them immediately; or, if not, coma or convulsions will soon remove them from your care." It may be remarked here, that this tendency to effusion on the brain was greater in those children who were not affected with effusion in the subcutaneous cellular tissue of the lower extremities.

We now come to consider ulceration and its varieties. When the activity of the absorbent system is greater in any part than that of secretion, or reparation, ulceration takes place rapidly. This variety is styled the phagedenic or eating ulcer. When, by the activity of the absorbents of a part, ulceration has been established, and that the process of reparation is greater than that of destruction, this is called the healing, or simple, ulcer; and when, in an ulcerated part, the lesion of the function of innervation exceeds that of the other two, a new variety is formed, called the irritable ulcer. Suppuration, or suppurative inflammation, as it is termed, is another variety of lesion of the function of nutrition. With it we have not much to do at present, but when we come to consider diseases in detail, and where we shall find this variety of lesion forming part and parcel of the disease, then we shall proceed to investigate the causes which have given rise to this pathological appearance. Before I quit this subject, allow me to draw your attention to a particular form of this inflammation, as exemplified in the disease called "rupia prominens." I must, *en passant*, remark, that I see no advantage to be derived from attending to the many varieties into which systematic writers have subdivided rupia. This form of rupia is generally caused by the poisons of syphilis and mercury acting upon a scrofulous constitution, and is liable to appear on any part of the body, but principally affects the face and the upper and lower extremities. It has its name from a Greek word, signifying "limpet-shell," from the strong resemblance the disease bears to the latter. It is curious to trace the progress of this affection through all its stages. Its first appearance is in the shape of a small pustule, which breaks, and gives exit to the matter contained within it, which, on being exposed to the air, dries, and forms a scab. Underneath this scab, the suppuration goes on, and gradually extends the original circumference of the pustule, producing a ring of ulceration, attended with suppuration, which may be plainly seen on removing the incrustation, or scab, covering it. The ulceration goes on underneath, while successive layers of scabs, thrown up one above the other, accumulate, until the whole assumes the form of a linear, pyramidal figure.

OBSERVATIONS ON THE USE OF PRESSURE, AS A MEANS OF DISTINGUISHING RESPIRATION AND INFLATION.

By WILLIAM A. GUY, M.B., Cantab,

Professor of Forensic Medicine, King's College, and Physician to the King's College Hospital.

I am indebted to Dr. Henry Browne, the Physicians' Assistant to King's College Hospital, for the following well-described, and very interesting case, in which artificial respiration was employed with the effect of freely distending the lungs of a still-born child:—

Mrs. Bradshaw, residing at 15, Clements-lane, an out-patient of King's College Hospital, was attended, during her confinement with her first child, by Mr. James Duncan. When first summoned, at three a.m., on the 18th instant, Mr. Duncan found that the os uteri was only partially dilated, though the liquor amnii had come away at midnight. At 5 p.m., the os was fully dilated, and the nates had apparently been stationary for three hours at the outlet of the pelvis; the face of the child being turned forwards, the ischia in the left oblique diameter, with the right tuberosity the most advanced.

The physician's assistant was now called in, who gave an infusion of a scruple of ergot, and ten grains of borax, which dose was repeated in an hour. The pains speedily became more efficient, and at 6½ p.m., the nates were born, and in about ten minutes the shoulders and head. The mouth and nostrils were immediately cleansed, the nates percussed, and the face and chest sprinkled with cold water. The bones of the head were quite loose, the face was not congested, nor the lips livid. As the cord did not pulsate, it was immediately divided, and the body placed in a warm bath, where the following plan of artificial respiration was persevered in for ten minutes, but without producing any visible effects. The nostrils were secured by the fore-finger and thumb of the left hand, and the right hand grasped the chest and abdomen with the thumb and three fingers, whilst the fore-finger compressed the pharynx through the thyroid cartilage. The grasp of the right hand being relaxed, the lungs were then distended by blowing with the mouth (after taking a deep inspiration), directly into that of the child. Compression was next made, and the process repeatedly continued during the time specified.

The body was examined twenty-two hours afterwards. The whole surface of the lungs, on both sides, were of a bright rose colour, and were covered with developed air-cells, readily seen by a magnifying glass of small power, like closely arranged, regular, microscopic sudamina. The substance of the right middle lobe, and the edges of all the lobes, were of the same colour; distinctly crepitated; and, on sections being made, frothy serum was squeezed out on pressure. The lungs, with the heart attached, floated buoyantly. All the smaller portions, taken indiscriminately, also floated freely, and on submitting some of these to pressure, by twisting between the folds of a towel and kneading, they could not be made to sink till reduced to mere shreds. There was not a trace of emphysema. No comparison was made with lungs that had respired.

I have only to add to this case, that the lungs were submitted to my inspection, with a request that I would state my opinion whether respiration had, or had not, taken place. I gave it as my decided opinion, that the lungs had received air, but added, that I could not take it upon myself to say whether respiration had taken place, or they had been inflated, but that I thought the latter supposition the more probable. Now, this case is very interesting in a medico-legal point of view; for, in the first place, the absence of congestion of the face, and lividity of the lips, and of pulsation at the cord, together with the history of the labour, show that the child was still-born; in the second place, it establishes the possibility of successful inflation by the mouth; and, lastly, it throws light upon the true value of the test of pressure, as a means of distinguishing respiration and inflation. I propose to make a few observations on the last two points—the possibility of inflating the lungs of a still-born child by the

mouth, and the value of pressure as a test of respiration. Both these questions are important, and neither of them can be said to be satisfactorily answered, unless the facts and arguments, which I have recently advanced, shall be held to outweigh the strongly expressed conviction of a contemporary writer. It is important that these questions should be submitted to the test of experience, for that alone can decide between the very opposite views which have been entertained.

1. Can the lungs of a new-born infant be successfully inflated by the mouth?

This question has a two-fold bearing, on the practice of the accoucheur, and on questions of infanticide: but it is with the latter alone that I have now to do. It is very remarkable that a decided difference of opinion should be found to exist between medico-legal authorities as to this simple matter of fact. Mr. Taylor, after quoting Dr. Albert, to the effect that the lungs while lying in the chest cannot be so filled with air, either by the mouth or by means of a tube, as to be rendered buoyant in water—an assertion founded upon his own experiments—goes on to state the results of attempts at inflation, of which the effects have been brought under his own notice. “Having had,” he says, “several opportunities of examining the lungs of children in which inflation had been resorted to, not for the purpose of creating an objection to the hydrostatic test, but with the bona-fide intention of resuscitating them, I may here state the results. In some of these instances, a tube had been used, and in others the mouth. In the first case, it was found on inspection, that only about one-thirteenth part of the structure of the lungs had received air. In the second, no part of the lungs had received a trace of air, although inflation had been repeatedly resorted to; the air had passed entirely into the abdomen. In a third, attempts were made for upwards of half an hour to inflate the organs; but, on examination, not a particle of air was found to have penetrated into them. In a fourth, no air had entered the lungs; and, in a fifth, although a small portion had penetrated into the organs, it was readily forced out by compression. In repeatedly performing experiments on dead children, the results have been very similar; the lungs, after several attempts, were found to have received only a small quantity of air.” The conclusion which Mr. Taylor draws from these facts is, “that the lungs of a new-born child may be inflated, *in situ*, although with some difficulty; and that the quantity of air which they receive, under these circumstances, is inconsiderable.”—*Manual of Medical Jurisprudence*, p. 461. From this opinion of Mr. Taylor’s, as from others contained in the chapter on Infanticide, and in other parts of his Manual, I am obliged to dissent, and I believe that the following paragraph from my recently published work will be found nearer the truth. “It is now generally admitted that the lungs of an infant may be inflated to a greater or less extent through the mouth, without having recourse to any instrument. It is generally thought that such inflation must needs be extremely imperfect; and, in the majority of cases, the opinion is undoubtedly correct. Schmitt, however, succeeded in more than one instance in completely inflating the lungs in this way; and in two cases, so perfectly, that not even a single point was to be found in either lung into which the air had not penetrated.”—*Principles of Forensic Medicine*, p. 142.

The case which I have communicated goes far to strengthen my own conclusion, and the result of Schmitt’s experiments; and I have no doubt that, were inflation always practised with the care and skill displayed in Dr. Browne’s case, and by such experienced hands as those of Schmitt, cases of successful inflation would be more numerous than they are. It is difficult to attribute Dr. Albert’s repeated failures, both with the mouth and tube, to any other cause than want of skill; and the occasional and partial success of some of the attempts recorded by Mr. Taylor must, I think, be assigned to the same cause.

It is but reasonable to expect occasional, and perhaps frequent, failures, even where inflation is practised by the most skilful hands, for as the most healthy lungs of well formed infants some-

times remain unexpanded for days, or even weeks together, so may equally healthy lungs resist the most skilful efforts at inflation. Hence the difficulty, which I have elsewhere mentioned, of completely distending the lungs of still-born children when removed from the body, without, at the same time, rupturing the superficial air cells.

It should be borne in mind that this question is partly a simple question of fact and science:—Can the lungs of the still-born infant be in any one case distended by inflation practised by the mouth?—and partly a medico-legal question:—can a mother succeed in inflating the lungs of her child? It is with the first question alone that I am now dealing, and I cannot but think the conclusion, at which I had arrived, on the authority of Schmitt, receives strong confirmation from the case above reported. When one man fails where another has succeeded, we are apt to conclude that the former may have been deficient in knowledge or skill; and the failure of the one can never be held to disprove the success of the other.

The possibility, then, of complete inflation of the lungs of a new-born infant, by the mouth, must be held to be placed beyond a doubt.

2 What is the value of pressure, as a means of distinguishing respiration and inflation?

This very important practical question is also well illustrated by Dr. Browne’s case; but, before I allude to the inference to be drawn from it, I will state the opinions of Mr. Taylor and myself on this question. Mr. Taylor’s views may be gathered from the following passages of his work. “If respiration,” he says “has been perfectly established, and the lungs are well filled with air, it is impossible so to expel this air by compressing the divided portions of the organs, as to cause them to sink in water. It has been asserted, that it is equally impossible to force the air out of lungs that have been artificially inflated; but it is highly probable that, in these cases, the lungs have been inflated to a maximum degree when removed from the thorax, a case in which much difficulty is certainly experienced in expelling the air; but this is not the form in which the objection can ever present itself in a case of infanticide. If the lungs be inflated in the ordinary way, i. e. while lying within the thorax, there is never, according to my observations, any great difficulty in causing them to lose their air by compression, a result which has been repeatedly demonstrated to the Medico-legal classes at Guy’s Hospital. Although no reliance can be placed on the effects of compression in respect to cases of imperfect respiration, yet it appears to me that when, with great weight of the lungs, there is great buoyancy in water, the fact of their not losing the air contained in them, and not sinking after firm compression, ought to be considered as a good corroborative proof of the child having breathed.” Again, “the experiment of compression will distinguish all cases of complete respiration from those of artificial inflation; and, if for this circumstance alone, it ought to be regarded as an adjunct, occasionally useful in these investigations.” And again “I presume that, in the present day, no practitioner would trust to the floating of the lungs as a sign of respiration, before he had ascertained that the air contained in them could not be expelled by compression.”*

My own view of the value of this test of pressure, is embodied in the following passages:—“Hence, then, it is established by fact, and admitted by one of the proposers of the test of pressure, that the test does not distinguish imperfect respiration from imperfect inflation. On the other hand, my own experiments have proved, that lungs, completely distended by artificial inflation, cannot be made to sink by degree of pressure short of that which will destroy the texture of the lung; and that lungs, so distended with air, differ from those which have breathed completely, only by requiring somewhat more pressure to make them sink.” “It follows, then, that the test of pressure does not distinguish imperfect respiration from imperfect inflation, nor complete inflation from complete respiration. If pressure is of any use, it must be in conditions intermediate between the two ex-

trêmes of imperfect and complete distension. In such cases, if, on submitting the buoyant portions of the lungs to pressure, the air, contained within the air-cells, can be expelled, and the lungs be made to sink without destroying, or injuring, their texture, we may be justified in stating, that such portions of lung have been inflated.*

Between Mr. Taylor’s views and my own, then, there is this difference, that he affirms, while I deny, that the test of pressure can distinguish lungs which have been fully developed by respiration, from those which have been completely distended by inflation. Now, Dr. Browne’s case strongly confirms my own view, founded upon experiments on lungs inflated out of the body, and removes the objection urged by Mr. Taylor against such experiments. In this sense, that case has a very high value. The two extremes of inflation and respiration are removed beyond the reach of the test of pressure, and it is only to an intermediate degree that it can be applied. In excepting this intermediate degree of distension, I would be understood to do so only so long as I am not in possession of experiments calculated to show the effect of pressure upon it. It is not improbable that further experience may condemn the application of pressure to this average state of the lungs, as it has already done to the two extremes.

If this subject had not been one of great practical importance, I should not have requested the insertion of so long a dissertation upon it. It is only by such cases as that which I have communicated, and by discussions founded upon them, that the true value of these tests can be ascertained.

ON THE DURATION OF THAT PART OF HUMAN LIFE CONNECTED WITH MENSTRUATION, WITH GENERAL REMARKS ON THAT IMPORTANT FUNCTION.

By CHAS. CLAY, M.D., Manchester.

(Continued from page 146.)

THE influence of climate will now be considered, not only on the commencement of the menstrual function, but also in respect to its duration, and cessation or decline, as well as its peculiarities when present. In touching this part of the subject, I shall be as general as possible, stating the opinions of the profession, and of careful observers generally, both at home and abroad. I have already stated that isolated cases, or even a small number, taken together, even though strongly confirmative of opposite opinions, are not yet to be received as sufficient for the establishment of a new doctrine. It is the averages of large numbers only, which must be looked to on such subjects, otherwise, there is great liability to be misled. After consulting a list of authorities, which to enumerate would be tedious, but which illustrate the prevailing opinions for two or three centuries back (independently of ancient writers,) and up to the present time, one great fact is as surely pointed out, as the most commonly known, and well attested, point in medical science,—viz.: *That the average of tropical climates exhibits the function of menstruation in very early years; whilst that of temperate latitudes shews a more advanced age, and northern nations a still further advancement of years, before the menstrual function appears.* The following table will pretty nearly shew what has been, and is, the prevailing opinion of writers, generally, on this question:—

	From the Age of
High tropical climates.....	8 to 11
Abyssinia, India, Asiatic and European Turkey.....	9 .. 11
France, Italy, Spain, Portugal.....	11 .. 13
British Islands.....	13 .. 15
More northern climates (Iceland, Lapland, Greenland, &c.....)	17 .. 20

Now, what is the conclusion to be drawn from this general table? why, that it carries conviction along with it, and but little comment is necessary. Those climates situated on the equator, or very near it, exhibit the function of menstruation at

* *Manual of Medical Jurisprudence*, pp. 462, 464, 465.

* *Principles of Forensic Medicine*, pp. 137, 139.

remarkably early ages; whilst, on the contrary, in the high northern latitudes, a considerable age is acquired before it is observed; and what is more, the intermediate climates shew intermediate ages, and though, in the temperate climates, cases may and do occur, partaking of the extremes of both hot and cold climates, still they are not to be looked upon as the foundation of a different principle. If isolated examples were proofs of a general law, instances might be quoted of infantile menstruation, not only in this, but also in other, and perhaps colder, regions. Dr. Campbell mentions a case of menstruation at a little more than three years of age; to what an absurd length these facts might lead us, if taken singly. On the contrary, cases occur in almost every climate that never menstruate at all. With respect to what is termed infantile menstruation, I am disposed to believe too much credence has been given to vaginal discharges during the infantile period, from their supposed similarity to that of menstruation, when, perhaps, they have no claim to such a definition. Independently of medical writings, there are strong proofs of precocity in the past history of nations. The celebrated Mahomet married the beautiful Ayesha, when she arrived at her ninth year. Now, when the character and motives of this celebrated religious enthusiast are looked at, and the example he proposed to form to the world, it is a fair presumption that Ayesha was considered as being arrived at that period of life when marriage was justifiable; in other words, she had menstruated. A circumstance like this might excite surprise, if there did not exist abundance of authorities, stating it to be common to marry from nine to eleven in such tropical climates. The early betrothments of royal and noble families in the British Islands, in ancient days, have been cited as instances of precocity in this changeable and often cold climate; but the very reverse is the fact. Betrothment certainly implies the present inability of the parties to fulfil an engagement which is subsequently to be completed: thus, betrothment might, and no doubt did, in some cases take place, whilst the parties were in their infancy. Sir C. M. Clarke mentions a case that exhibits the influence of climate, as strongly as an isolated case could possibly do; Dr. Blundell refers to it, in his "Principles and Practice," viz.:—"A child went to India at six years of age; at the age of nine she menstruated, and continued to do so regularly for some months, until she returned to her former home in a more temperate climate; on her arrival, the function ceased, and did not re-appear till after twelve years of age." As far as this case goes, it is very conclusive. All writers, with one or two exceptions only, agree that climate has a most decided influence on the system; it would, indeed, be an endless task to quote the vast variety of authorities expressing the same opinion. It was acknowledged, and stated as a well attested fact, by the most careful and acute observers of ancient medical philosophy. This fact has borne the rigid scrutiny of centuries, and is equally allowed by the best modern authorities. In the very same journal, and the very next paper to Mr. Robertson's, I find the opinion of Dr. Charles Bell recorded in the following words:—

"The development of the uterus is very gradual, and the period at which it reaches maturity depends not only on climate, but on habits. In temperate climates, the female organs of generation seldom attain their perfect form, and the full possession of their peculiar properties, before the fourteenth year; but in tropical climates, this state of perfection is attained at a much earlier period." This opinion is, in fact, the opinion of the profession and of the world at large.

Morbid obstructions to menstruation are certainly not to be regarded as proofs of the absence of maturity; if the community of workers in high temperatures be examined without prejudice, the influence of heat will be observed, but not so decidedly as if the same temperature surrounded them when absent from the mills. The effect of conversation and habits, arising from congregating in large masses, is equally apparent.

I confidently challenge a hundred, or a thou-

sand, taken promiscuously out of mills of high temperature, and compared with a similar number from an agricultural district, of similar ages: feeling certain, from extensive observation, that the menstruators, and those suffering from the effects of obstruction (otherwise capable of menstruation), would be found in far greater numbers, and at much earlier ages, among the factory workers than among the agricultural population. If we follow the question to its opposite extremity, the same fact is confirmed—*early to commence, early to decline*. The cessation of the menstrual function is proportionably early, and the duration of life itself not a little influenced; they look aged before years have accumulated to warrant such an appearance. To find a really old person in a factory, is a rare circumstance,—indeed, it is equally rare to find such at their homes.

Müller says, that Jewesses menstruate earlier here than others; if so, it would be one argument in favour (at first sight) of constitution, rather than climate; but it may be asked, what is there peculiar in the constitution of a Jewess more than in others of the same locality? Again, may not this peculiarity be accounted for (to a certain extent) on hereditary principles? I have known many families remarkably illustrative of early menstruation, and others as remarkable for late appearance of the same function; it is a very common observation: "that an early menstruating mother is copied by her daughter, and *vice versa*," for one or two descents this may be probable, and it is equally probable that Jewesses, shewing this tendency, may be the daughters or granddaughters of females who have menstruated early, very probably in consequence of being inhabitants, at the time, of a warmer climate, the effects of which are not entirely obliterated for a considerable time, though gradually modified to the temperature in which they at present exist.

Dr. Goodison, surgeon to the 75th regiment, a medical officer, some time resident in the Grecian Islands, confirms the opinion given by Mr. Strong; or rather, Mr. Strong's evidence confirms that of Dr. Goodison, as Mr. Strong's work appeared in 1842, whilst Dr. Goodison published his in 1822. The Dr. says:—"The Greeks marry early; there are instances of girls commencing the cares of a family at eleven years of age, many at twelve, and most at sixteen."

The missionary informant of Mr. Robertson, however, does not hesitate to express his non-medical opinion,—"*that Dr. Goodison's statements are worthless*." He is certainly an egotist of no mean order, who fancies no one can speak or write truth but himself, or those he appoints, so as to be worthy of credit (Zaviziano, for instance.) It appears strange that the evidence of English residents of the highest respectability, and of English medical men, all possessing the best means of procuring information, and having no motives of interest to make false statements, is to be summarily rejected; and yet the world is to place implicit confidence on a missionary, whose name and motives are almost equally unknown, as well as on the evidence of a Greek physician, who shines in contradicting himself and his colleagues on questions of general import, on which it is difficult to conceive there could exist two opinions.

The missionary admits that an Englishman married a Greek girl at the age of thirteen, which was spoken of as an unusual occurrence, but he supposes the age as unusual. Now, the circumstance might excite notice from other causes: perhaps, that of preferring a Greek, to his own countrywomen, was really the matter of conversation. It is quite clear, that evidence of a different character must be had, before reliance can be placed upon it, in a subject of so much importance; twenty-six cases from one locality, and thirty-six from another, some of which are inapplicable, can have but little weight in an argument of this nature. Information of a more general character must be had, and from the best sources. Missionary opportunities of observation must necessarily be limited, independently of their prejudices against early marriages as a moral consideration. The numbers and respectability of authors, maintaining the influence of climate, deserve a better refutation.

The Rev. Dr. Robinson, in his "Archæologia Græca," confirms the views of Bishop Potter; so, also, Godwin, in his "Historiæ Romanæ," and in his "Rites and Customs of the Hebrews," and Rous, in his "Archæologia Attica," with many other historical writers of eminence, support the multitude of medical testimonies as to the effects of climate,—producing proofs resting on the laws and customs of the nations treated on; this is evidence of much greater value than that of a few individuals with limited spheres of observation.

I have already shown a condensed view of the commencement of the menstrual function, and, I believe, pointed out clearly, that the effects of climate are undeniable, throughout the known world. It remains for me now, to show its effect on the other stages of menstruation. All authorities that I have consulted, agree to the following general statements, viz.:—

In the Northern latitudes: menstruation is slight in quantity; at long intervals, existing only for a few hours; seldom more than five or six times in the year; and in these climates, during the summer months, the intervals are shorter, and the quantity greater.

Temperate regions: menstruation much more in quantity; at shorter intervals; as much as 10 or 12 times in the year, and continuing on the average from 2 to 4 days.

Tropical: menstruation profuse; lasting on the average, six to eight days; occurring 16 to 18 times in the year.

If these are facts, and it is presumed they are, as they are maintained by every medical authority of eminence, it must be admitted that the effects of climate are so apparent, that the only surprise is, that the position should ever be doubted. In the islands of Sumatra, Java, and Borneo, women frequently die of profuse menstruation. It would, perhaps, be very difficult to find even a few cases of menorrhagia in Lapland, Iceland, or Greenland. Again, it may be asked, is not the frequency and extent of menstruation, and its consequences, in tropical climates, one reason for plurality of wives? a custom which, together with that of frequent ablution, proves the point at issue, viz.: that high temperatures promote proportionably frequency and quantity of menstruation.

Again, if I turn to the reports on the decline of the same function, I find the same regulation superintending this, as the former, point of consideration. That is, the function of menstruation declines in:

Tropical Regions	about from 35 to 40
Temperate	do. do. 43 to 50
Northern	do. do. 50 to 55

Of course, there are many cases, in every climate, that will form exceptions to these general averages. For instance, Dr. Campbell, of Edinburgh, mentions cases of menstrual cessation at 32 and 36, whilst the average of the climate would be near 50. On the contrary, I have attended cases of labour in the 50th, 51st, and 52nd year. Haller mentions cases, where menstruation still existed at 56 and 60. In tropical regions, cases of cessation are recorded at 18. Early, profuse, and frequent menstruation must necessarily affect the duration of life, but this is counterbalanced by a superabundant population. On the contrary, in high northern latitudes, where the means of existence are scanty and precarious, and the population thin, the probabilities of conception are reduced numerically with the periods of menstruation; polygamy, too, is unknown. In these cold regions, the childbearing period is extended over a longer space, as will be seen in the following figures, drawn from the foregoing inquiries on the commencement and decline of this important function.

Temperate regions.	Decline from 43 to 50 years.
	Commence do. 13 to 16 years.
	30 34
	Average 32 years.
Northern latitudes.	Decline from 50 to 55 years.
	Commence do. 17 to 20 years.
	— —
	33 35
	Average 34 years.

Tropical.	Decline from	35 to 40 years.
	Commence do.	8 to 12 years.
		27 28
	Average	27½ years.

Thus, it will appear that the average duration of the childbearing period will be in the :—

Temperate	32	} Years.
Northern	34	
Tropical	27½	

As this paper has already extended to a greater length than I originally intended, I shall be brief in my concluding remarks. I think every one, conversant with this subject, will, on reflection, admit, after the perusal of even this imperfect sketch, that climate has a marked influence on the maturing of the human system, and that its effects are particularly seen in the characteristics of the function of menstruation, from its first appearance, during its continuance, and at its cessation. The laws of nations in respect to marriage, the wise sayings of philosophers, the habits and customs of the inhabitants of every region, abundantly confirm the hosts of medical opinions on this subject. The pages of history, sacred or profane, ancient and modern, furnish proof upon proof, until we are tired of the repetition. I will, however, add one more: the Vestal Virgins of the Romans were chosen from the age of six to eleven years, a fact that is indicative of precocity: the possibility that menstruation might occur so early as six, and the common occurrence being from nine to eleven years, in all probability, led them to fix their choice from six to eleven years. In the frequent ablutions of the tropical nations, we see acknowledged the effects of climate on menstruation, which, from its frequency, required the necessarily increased means of cleanliness. The rigid observance of excluding females from society, during menstruation, arose from its frequency and excess, and the same frequency and profusion might have originated the custom of polygamy. In fact, proofs accumulate as the subject is inquired into; but it is not necessary to pursue the subject farther. Menstruation may be considered as the means of nature to reduce the tendency to plethora, to which the female system is prone, and thereby increase the aptitude for conception. I believe females more readily conceive immediately after a period of menstruation, than at any other time; and in cases of pregnancy, if the time is reckoned from the end of the first week after menstruation (rather than the midway between the periods), I believe the result would generally be more correct.

If early menstruation leads to early cessation, and both to a shorter duration of life, it becomes a question of importance in effecting assurances on lives, and deserves the attention of those who interest themselves in such questions.

EXPERIMENTAL INQUIRY, TO DETERMINE WHETHER HYPNOTIC AND MESMERIC MANIFESTATIONS CAN BE ADDUCED IN PROOF OF PHRENOLOGY.

By JAMES BRAID, M.R.C.S.E.

For the "Medical Times."

In a paper in the *Medical Times* (No. 258), I intimated my intention of instituting a series of experiments, on a plan which I considered better calculated for testing phrenology than any which had been applied during the hypnotic mesmeric sleep; I shall now very briefly detail the result of the experiments performed for that purpose.

In the above paper, I explained the reasons which led me to consider that none of the experiments which had been performed for this purpose, during the mesmeric or hypnotic conditions, should be held as proof, either for or against phrenology. I especially contended for this on the ground of the undoubted fact, that, through the laws of sympathy and association, it was quite possible to excite various and opposite feelings from the same points, according to circumstances.

In the *Medical Times* for the 13th of January,

1844, I explained, as one of the peculiar features of the excitability of the nervous system induced by hypnotism, that the mind is liable to manifest itself as entirely absorbed in whatever individual passion or emotion it may be directed to; and, moreover, that an idea being excited in the mind, associated with contact with ANY part of the body, whether head, trunk, or extremities, by continuing such contact, the mind might be rivetted for an almost indefinite length of time to the same train of ideas, which would work themselves up into more and more vivid manifestation, according to the length of time afforded for that purpose. It thus appeared to me that, by availing ourselves of these peculiarities, we might very readily determine the relative forces of the different emotions and propensities. For example, by exciting the various passions and emotions in succession, through auricular suggestion, and by fixing each new idea by mechanical contact with the same point of the patient, as the suggestion and fixation of the ideas would be the same in all, provided an equal length of time was allowed for each to develop the force of its manifestation, any difference in the relative force could only be attributable, on phrenological principles, to a corresponding difference in original development as regards size, or to greater or lesser activity of the respective organs, arising from the degree of exercise of corresponding portions of the brain. Then, again, by comparing the relative forces of the manifestations realised by such experiments, with the known character of the individual; provided they both coincided, by again comparing them with what a practical phrenologist should determine, simply from the cranial developments, as to what ought to be the character of such individual; if the latter was found to correspond with the former, then would hypnotism be a proof in favour of phrenology; but, if they differed, it would prove just as much the contrary.

On the 3rd of August, 1844, in the presence of a number of scientific friends, including Sir T. Willshire, Bart.; Mr. Jewett, of Oxford; Capt.; Thomas Brown; Mr. Sowler, Barrister (of this town), &c., &c., after explaining my views and intended mode of proceeding, we commenced as follows:—We had the heads of five patients examined by Mr. Bally, an eminent phrenologist of this town, and the relative forces or values of the phrenological developments of each carefully noted on his printed forms. Each of the subjects was then hypnotised, separately, in another room, in the presence of the gentlemen already referred to, when all the leading emotions, denoted by phrenological organs, were excited successively, in the following manner, the resulting manifestations of each being carefully noted.

I considered that putting a ring on the same finger or thumb of a patient was the most convenient and least objectionable mode of fixing the ideas suggested. This, therefore, was the mode of procedure. On each occasion I spoke aloud to this effect:—Now, gentlemen, you will see that the moment I place this ring on his (or her) finger or thumb, as the case might be, you will observe that he (or she) will think of devotion, at the same time putting the ring on the finger or thumb indicated. Immediately the emotion was manifested; and, having afforded it a certain time to develop itself, its relative force was determined on, and accurately noted on a blank form. The ring being removed, the patient, who had been kneeling, now arose; and, another idea was then excited and fixed in the mind in the same manner. This new idea, having been allowed time to develop itself in the same manner, and its relative force determined and recorded as in the former case, we passed on to others, until, in this manner, we had tested all the emotions and propensities, which we deemed of most importance. The same plan was adopted with all the five subjects.

Our next object was to compare the results thus obtained by this process, with Mr. Bally's phrenological record. I must not omit to add that the forms on which Mr. Bally had recorded the relative values of the organs, previous to the patients being hypnotised, had been put aside, so that we might not be biassed in our estimate of the manifestations by our knowledge of the phrenological development. On comparing the two

records, the result was certainly unfavourable to phrenology, for in no instance did the manifestations accord with the value or force set upon the several organs, in more than four out of thirteen leading characteristics; whilst, in one case, there was no coincidence whatever, proving, at all events to our minds, that phrenology can gain no corroborative aid either from mesmerism or hypnotism. The manifestations were quite as characteristic when excited by auricular suggestion, as by muscular suggestion, or manipulating either the head, trunk, or extremities.

On comparing the known character of the above individuals, with what was developed and recorded of them during hypnotism, there was a remarkable coincidence. Similar results have also been realised in several other patients whom I have tested in the same manner, since. Nor is it at all surprising that such should have been the case, and that phrenology should not derive any direct and decided support from hypnotism and mesmerism, as had been anticipated. In the latter condition, even granting the organology of phrenologists to be strictly true, the hypnotic and mesmeric manifestations will accord rather with the acquired energy and activity than with the mere size of particular organs, or separate portions of the brain. On the contrary, phrenology merely contemplates the estimating what ought to be the value of certain tendencies, by the size of the organs which answer to them. Moreover, although it is true that a muscle increases considerably and visibly in size by exercise, it does not follow that separate organs of the brain must increase in the same ratio (or in any ratio at all), with particular qualities of the mind.

Mere size is not sufficient to determine the force of function. Much of the perfection and force of function may depend on the perfection of structure, arising from practice and habit, giving greater proclivity to act in a particular manner. I am aware that instances are referred to, where extraordinary corresponding changes have taken place in the form of the head in individuals, who have been actively engaged in new pursuits; but I suspect that such constitute the exceptions, not the rule. I believe that great changes may take place in the moral and intellectual powers, without any appreciable corresponding change being manifested in the external form of the skull. For example, every one knows that a moderate sized eye may be as useful for correct vision as a very large one; and it is also an undoubted fact, that the eye may be greatly improved in accuracy of function by practice, and consequent greater concentration of its powers; but who will maintain that there is thus induced a positive and appreciable enlargement in the size of the organ of vision?

No one will dispute that the brain is the organ of the mind; nor will any dispute the power of moral and religious training in changing character, whether they hold that the mind manifests its powers through the brain as a series of distinct organs, or parts, adapted for separate purposes, or as a single organ, and consequently, as a servant of all work. In whichever mode this is to be viewed, experience proves that there are antagonist powers and principles in our nature, and that it is indispensably requisite that we should endeavour to "cease to do evil" in order that we may "learn to do well." Whether corresponding changes in the size of the brain, and form of the skull take place, *pari passu*, with such changes in the mental and moral condition, I do not pretend to be competent to decide; but, as already stated, I strongly suspect that great changes may take place in the moral and intellectual powers and tendencies, without any appreciable corresponding changes being manifested in the external form of the skull.

This, then, seems to be the true position and relation between the two sciences. Phrenology professes to determine character, according to the relative sizes of particular parts of the brain, and not according to the different degrees of activity of these parts, independently of size. The latter is an extent of refinement to which it does not pretend to have attained. The manifestations realised by mesmerism and hypnotism, on the contrary, display the energy acquired from habit or practice, as well as

(or rather than) the *original proclivity* to particular trains of thought and action. However well adapted, therefore, the latter mode may be for determining the force of the relative existing tendencies (and, therefore, might be useful as an adjuvant to phrenology), if taken alone, it is calculated rather to *oppose* than *corroborate* the deductions from mere cranial development. Thus, granting, for the sake of argument, that all the separate organs of phrenologists were satisfactorily established, the *extreme activity* of one function or propensity, *superinduced by habit and practice*, and the dormancy or sluggishness of others *from want of exercise, might, or, rather, most probably would*, give manifestations quite at variance with existing development, estimated by the *relative sizes of the different organs*.

This very circumstance, however, proves, that hypnotism or mesmerism might be made a valuable adjuvant, for enabling the phrenologist to estimate character more correctly and certainly than by phrenology only. He would thus, at once, be furnished with a key for determining how far habit, practice, and other concurring circumstances, have been at work in *aiding or counteracting original predisposition*. This has always been a very difficult point for phrenologists to determine; perhaps it has been the greatest difficulty they have had to contend with. I would, therefore, recommend them to avail themselves of hypnotism or mesmerism as valuable auxiliaries for this purpose; but, if they seek for more from them, I suspect that they will find, that the genuine manifestations, brought out by hypnotism or mesmerism, are more likely to contradict than to support phrenology.

In conducting the experiments detailed in this paper, the greatest care was taken to guard against every source of fallacy. I should be glad if others would repeat them, *with equal care*, on a greater number of patients, and record the results. The method indicated is so simple and obvious, that any one having time and inclination for prosecuting the enquiry further, may very easily do so. I beg, however, to offer one parting remark, which, if not strictly attended to, will render such experiments utterly worthless. The auricular suggestions must be given in every instance, in the same form of words, excepting the indispensable change of the name of the new emotion to be excited, and also, as nearly as possible, *in the same tone of voice*. If a different degree of force of utterance is used in any instance, it will, in a considerable degree, modify the character of the subsequent result. And no whispering or hints should be given, as to the degree of force which may be expected to manifest itself in any instance. Neither should they know, before being hypnotised, the relative values of their phrenological developments.

3, St. Peter's Square, Manchester,
9th Nov., 1844.

THE USE OF CREOSOTE.

To the Editor of the "Medical Times."

SIR,—I have great pleasure in confirming, by the reports of the following cases (treated by myself), the propriety of the course recommended by Dr. Thorsen, in an article, contributed by me, to your valuable journal, vol. X., page 467, in which it was mentioned, that the author had frequently treated *Teleangiectasia* in children, and that no remedy he employed exhibited such excellent effect as *creosote*.

During the preceding year, he had treated three cases with this remedy with the happiest results. He ordered the *creosote* to be more or less diluted, according to circumstances, and to be applied two or three times a day to the affected part. "After the remedy had been used for some time, exoriation, ulceration, and gradual decrease of the affection ensued, and ultimately smooth and soft cicatrices were formed." Now, Sir, I have had

no opportunity of trying the remedy with children; but the first case, which presented itself to me, was that of a Miss S—g, of St. James Street, Oxford Street, who had the right side of the forehead and face covered with a large red mark, which extended as far as the chin. The eye was also very much swelled. She applied to me on the 27th August, 1844, and stated, that she had suffered, during four years, with hæmorrhoids; that she had taken many different remedies; that, latterly, mercurial pills (!) had been administered to her, and that, while taking them, she caught cold, when this red mark suddenly came on. It is true, this was not a perfectly similar case to those mentioned in your journal; but, knowing the chief effects of *creosote* to be decomposition of the blood by separation and coagulation of its albumine and fibrine, I considered it indicated here, and administered it as follows: *Creosoti, spir. vin. aa. ʒss.*; to apply it twice a day, externally. But, as this could not be considered as an external disease only, the patient having suffered from hæmorrhoids, and (if I may use the expression), from mercury, and as she also complained of occasional constipation, I thought it prudent to prescribe previously to, and during the use of, the *creosote*, the following powder: *R. Flor. sulphur., pulv. senn., aa. ʒss., crem. tartar. ʒiss., sacchar. alb. ʒiij., ol. anis. gutt. iij.*—*M. ft. pulv., divide in partes xxiv, sumatur una bis die.* While taking these powders, and before the employment of the *creosote*, the painful tension of the face gradually diminished, but the discolouration remained without change. I, therefore, proceeded to employ both together for some time, and when the swelling and irritation of the eye and face had quite subsided, I continued the *creosote* alone. The application caused no pain whatever; its usual operation being to form a crust, which gradually fell off, the skin beneath appearing a little clearer on each successive removal of crust. On an average, two crusts were thrown off every week, each crust carrying with it some portion of the extravasated and stagnated blood. By the 24th of October (two months from the commencement of the treatment), the patient was completely relieved from the unsightly disfigurement which had annoyed her for six months, resisting all the remedies tried against it. It was only by close examination, that I could still observe some slight traces of the former mark, which, by this time, must have disappeared with the rest.

I have another case now under treatment, (Mrs. P—s, of Mercer Street, Long Acre), in which the patient was born with a purple mark, equally extensive with that described in the former case, but affecting the left side of the face. As this affection did not arise from any internal cause, I had no occasion to institute any general treatment (the patient being in perfect health, young, and recently married), but proceeded at once to employ *creosote*, as in the case of Miss S—g. It was first applied on the 2d October last, and, in three weeks, the mark was greatly reduced in extension, and much paler in colour; it is, at the present time, reduced to half its original size, and I have little doubt that, by the end of the year, the discolouration will be totally effaced.

Those of your readers, who may be desirous of judging for themselves, I shall be most happy to introduce to the above-named ladies, who, thankful for being relieved from a disfigurement which they thought themselves destined to bear for life, have expressed to me their willingness to oblige, by affording an opportunity for personal inspection to any medical gentleman of known respectability.

I have, also, recommended *creosote* for the removal of the scars left by scrophulous ulcers, in a case which was cured under my care; and my patient writes me, that the skin has desquamated several times, and that the scars are greatly improved in appearance. This, however, may be mere fancy, and not having seen them myself, since the external application of *creosote*, I shall content myself with suggesting the use of that remedy in these cases, without answering for their removal, or even for a great diminution of their size; but I will not conclude this letter, without mentioning the beneficial effects which I frequently

witnessed from *creosote* (employed in the form of ointment), in cases of burning and scalding. I really think no external application can restore the skin to a healthy condition so rapidly as *creosote*. The reason is obvious. By promptly decomposing the part with which it is brought into contact, a species of deposit is formed on the external surface, and thus the subjacent healthy parts are freed from the inflamed and irritating particles, and, under the influence of this deposit, their tendency towards the natural progress of cicatrization is increased. It is well known, that the great danger, in extensive scalds, lies in the contraction of the pores of the skin, and of the external mouths of the absorbent vessels. Insensible perspiration being thus stopped, all the matter, usually passing off by transpiration from the internal organs, and passing through the skin to the exterior, must return to the vital organs, and cause such constant irritation as will produce violent fever, and, ultimately, death.

The sooner, therefore, this contracted and swollen state of the mouths of the vessels can be removed (without irritation of the parts), the more will the danger diminish.

About four years ago, a young lady, 19 years of age (in Munich), was scalded with some boiling turpentine (while secretly preparing some varnish) on her face, part of the right breast, her back, one arm, and part of her legs. Her mother, who came to her aid, was still more severely scalded, and died in the course of a few days. The state of the daughter was considered hopeless. But, after three months of most careful attendance and watchfulness, she was cured, and this we all ascribed to the use of *creosote*, which had been employed under the form of an ointment, in gradually increased proportions. I need hardly mention, that she, at the same time, took internal remedies, to counteract the morbid symptoms which appeared during the course of her treatment. Several times, she seemed about to expire from weakness and exhaustion, when musk, quinine, acids, &c., were administered, and always had the desired effect of rousing nature from this depressed condition. This patient was under the treatment of Dr. Ottinger, who, seeing that she could only be saved by unremitting and lengthened care, invited several young physicians to watch her alternately, day and night, till she was out of danger. This was done with the greatest readiness, and we had the satisfaction of seeing our efforts at last crowned with success.

I ought not to omit, here, another very important use of *creosote*, or rather of a substance in which it largely predominates, *tar*, viz.: against *herpetic diseases*. When in Munich, I witnessed the cure of a most obstinate and inveterate tetter, which covered the whole of one arm so completely, that not a particle of sound flesh could be seen. The patient took the strongest *anti-herpetic* remedies (even *arsenic*) in vain. At last, his physician gave him *pure tar capsules*, which caused the tetter to disappear completely in the course of five weeks. But whether the disease did, or did not, reappear after the discontinuance of the tar-capsules, I have had no opportunity of ascertaining since I left Munich. I give the fact as it occurred, leaving my medical brethren to make such use of it as their experience may suggest. Apologizing for having taken up so much of your valuable space,

I remain, Sir,

Your most obedient Servant,
SIGISMUND SUTRO, M.D.

3, Great Marlborough Street,
Nov. 20, 1844.

PROGRESS OF FRENCH SCIENCE, FROM OUR OWN CORRESPONDENT.

Paris, Nov. 21, 1844.

Operation for the Radical Cure of Hernia. By Dr. Jobert De Lamballe.—The following method has been frequently employed by this skilful operator, and with complete success. After reducing the intestines, one, two, or three pins, according to the size of the hernia, are passed through the skin, hernial sac, and spermatic chord, the spot at which

* From *telos*, the end; *aggos*, the vessel; and *ektaino* to extend: extension of the ends of the absorbent vessels, and stagnation of blood therein, caused by obstruction in their circulation, or by some sudden extravasation.

they enter being at some distance from that at which they come out; the twisted suture is next applied, moderately tightened, and left *in situ* eight or nine days, until the cuticle is slightly excoiated. At this period, a thick layer of plastic lymph has been deposited, and obliterates the hernial sac, by the adherence of the opposite internal surfaces with each other, and with the spermatic chord. This is sufficient to prevent the egress of the portion of the intestine, but, in order to obviate all accidents, Dr. J. De L. makes the patient wear a truss for some time after the cure.

While on this subject, I will relate: 1^o A case communicated to the *Société de Chirurgie* by Dr. Robert, surgeon at *Beaujon* Hospital; and 2^o The mode of treatment proposed by M. Buchkeister, of *Hamburg*, in strangulated hernia, without having recourse to an operation, and which was published by him in the *Zeitschrift fuer gesammte Medizin*.—1^o Dr. Robert's case. Mrs. —, aged 46, the mother of seven children, affected for the last twenty years with a left inguinal hernia, which she attributed to the fatigues she had undergone, while in service. She remarked that it increased after each accouchement. Notwithstanding her infirmity, she neglected at first to wear a truss, and when she decided upon so doing, she found it of no use. In September, 1841, she entered *Beaujon*, the tumour being about the size of the head of a new born infant, and descending as low as the corresponding labium; when reduced, the inguinal ring was found large enough to admit four fingers united, the canal no longer existing. Several trusses, made expressly, having failed, and the patient being incapable of doing any work, Dr. R. decided upon performing the operation recommended by Professor Gerdy. Consequently, the skin and sac having been invaginated into the inguinal ring, two sutures were placed as high as possible, and not removed until nine days had elapsed, a circumstance which ought always to be strictly observed, unless some serious accident occurs, as the inflammation the thread thus produces is deeper, and the diminution of the diameter of the ring greater. As soon as the wounds, resulting from the threads, were healed, a bandage was applied and the patient left the hospital. Two years after (1843), she came to *Beaujon* on account of a violent lumbago, and on examination the ring was found to be not more than one-third of its former size; when standing without her bandage, the parts protruded, but the hernia was not larger than an egg; the skin covering the labium was flaccid and wrinkled. A second examination, made in August, 1844, confirmed the above statement; the cure may, therefore, be considered as complete.—Drs. Chassaigne, Danyau, and Laugier related cases in which this operation produced fatal consequences.—2^o *Treatment for Strangulated Hernia*.—Venesection, if the patient is young and vigorous; after which, administer: R. Rad. belladonnæ, fol. bellad. aa. grs. vj. Aquæ puræ ʒvj. Coque ad dimid.; deinde cola, et adde aquæ puræ q. s. pro enema. Should some hours elapse without any beneficial result ensuing, it must be repeated, and if necessary a third must be had recourse to, the dose of the root and leaves in the last being increased to grs. x.; externally, ice on the tumour. In several cases, symptoms of poisoning supervened, but did not cause any serious consecutive accidents, although no antidotes could be administered. If, after the reduction of the hernia, the abdomen is painful, cold water must be administered; warm poultices applied on the abdomen, and, every fourth hour, an enema of almond oil given; should the night be disturbed, and if the next day there be symptoms indicative of inflammation: as a red tongue, pulse small and rapid, forehead hot, thirst, &c., in addition to the cold water, small doses of calomel (grs. ij. to grs. iij.) must be prescribed every third hour, and, if needful, blood must be drawn freely. After the hernia is reduced, and the patient well, a bandage must be worn, though M. B. does not consider that of much use.

Encysted Ovarian Dropsy.—Dr. Cazeaux, in his thesis, at a late *concours* at the Faculty of Medicine, after mentioning the inutility of internal remedies in the generality of cases, passes in review the different surgical methods had recourse to,

viz.: tapping, incision, extirpation.—1^o *Tapping*. Three cases are here recorded; in the first, the operation was performed by Professor Dubois; the patient recovered, the liquid having been absorbed subsequently to inflammation of the cyst. For several months after, a local dragging pain, indicative of an adherence, was experienced, where the operation was performed; the tumour now offers no fluctuation, is firm, and about the size of the fist; during the operation, in order to avoid the syncope, which sometimes follows too rapid a diminution in the size of the abdomen, a bandage was applied and tightened as the liquid flowed out. The other two cases ended fatally by peritonitis; in one, Prof. Trousseau, ere he operated, sought to obtain an adherence between the two layers of the peritonæum; to effect this, he introduced several needles into the interior of the cyst, leaving them in the part from 12 to 24 hours, according to the intensity of the symptoms they produced; such as, local pain, increasing on the least motion, or even by breathing; thirst; mouth dry, parched; skin hot; pulse frequent; agitation; dysuria or ischuria. Five different times, the needles (one of them was lost in the part, and found quite rusty at the autopsy; this accident was caused by the heat of the body melting the wax head of the needle, and the Professor, to prevent its renewal, had glass ones adopted) were introduced, and a fortnight after the first application, on making the patient draw a long breath, a depression took place on the spot, showing that some adherence existed; five ounces of a ropy, reddish yellow, liquid were then removed; two platina wires were placed in the opening, instead of the canula, and a bandage put round the abdomen. This was done on the 17th of February; on the 19th, the platina wires having been moved about in the interior of the cyst, peritonitis declared itself, followed by a fresh effusion, to such an extent as to render the removal of the liquid again requisite; and, finally, it proved fatal, notwithstanding the most active remedies. At the *post-mortem* examination, besides the pathological signs of intense peritonitis, the cyst was found to be perforated in the right fossa iliaca. In the second, the trocar was introduced *per vaginam*. Twelve cases have been recorded, in which this method was adopted, and the result is,—six successful: Ant. Dubois, quoted by Delpech (1815), Naumann, Arnott (1839), Ogden (1840), Schwabe, Professor Stoltz, quoted by Dr. Hertz;—three deaths: Vermandois (1803), Recamier and Michon;—one relapse, Nonat;—three doubtful. To resume: it may be concluded, that tapping in the usual way, or *per vaginam*, ought not to be performed, except when the quantity of liquid is so great as to inconvenience the patient; and that the latter mode ought to be preferred, whenever the cyst is unilocular, and can be felt by the touch.—2^o *Incision*. Ledran, who performed it for the first time in 1737 (*Mem. Acad. Royale de Chirurgie*), states, that it ought to be had recourse to, in cases where suppuration has taken place in the interior of the cyst:—when the cyst is very voluminous, because, then, there may be small ones in its interior, and, therefore, it cannot be emptied by tapping; also, because they are often re-produced in a very short time, and prove fatal. Modern surgeons, without adopting all these conclusions, still consider the incision as indicated, when the tumour is multilocular and not very large; and, in order to prevent the effusion of liquid in the peritoneal sac, Dr. Taignot recommends the method employed by Dr. Recamier, in tumour of the liver, namely: the application of two or more bits of caustic potass, where the incision is to be made. Dr. Begin, to open the abdominal parietes, makes a penetrating wound, through which the tumour protrudes, and, when the adherences are formed, he opens it. This method has been successfully performed in two cases of hydatids of the liver by Dr. Begin, but as yet it has not been employed in ovarian dropsy. To resume: this operation, though not without its danger, presents some chance of success, especially in multilocular cysts of a middling size; and, of the different methods, that of Dr. Begin ought to be preferred.—3^o *Extirpation*. After recapitulating the history of this method,

the author asks: Which is preferable: the larger or the smaller incision? and replies, the former in unilocular cysts with thin and supple walls, where there are no degenorescences nor adherences, and a liquid not very thick; the latter, when these circumstances exist; finally, as to the question, whether it ought to be performed: he answers that, though it ought not to be rejected, still it must not be had recourse to, save as an exception.—*Annales de Chirurgie*.

Double Vagina. Case communicated by E. Combes, M.D., to the *Société de Médecine de Toulouse*.—N—, æt. 26, strong and healthy, of a lymphatico-sanguineous temperament, menstruated at fifteen, and was pregnant for the first time in May, 1843. Dr. C. being called in, on the 8th December, found, on examination, that the genital organs presented the following peculiarities: labia majora very little developed; nymphæ very large; os externum surrounded by soft flaccid tissues, of a blueish tint; vagina single anteriorly, to the extent of 1½ inch, after which it was divided by a membrane attached to the urethra and the vesico-vaginal septum, and extending downwards as low as the fossa navicularis, so as to form anteriorly a sort of crescent; at the upper extremity of the two canals thus formed, two cervixes uteri seemed to exist, which led to the supposition that the internal organs, or, at least, the uterus, were double, a conclusion which a subsequent examination proved to be erroneous. Labour pains came on, tho 13th January, 1844; both vaginæ were lubricated with a viscous liquid; the two necks appeared to be united, presenting a dilatation from 2½ to 3 inches in diameter; child's head in the right occipito-cotyloidian position; pains feeble. Nothing indicated a speedy accouchement, and Dr. C., fearful of the consequences, left the patient for a moment to seek the aid of a colleague; but, whilst absent, the pains became intense, succeeding each other with rapidity, and during one of them, the patient felt something give way, and the child was born immediately afterwards. The after-birth came away spontaneously, and no consecutive accident occurred. Three weeks after, when examined by the touch, and with the speculum, the disposition of the parts was found as follows: inferior two-thirds of the vagina in its normal condition; upper third divided into two parts by a thick septum, covered by the mucous membrane on both sides, and directed from above downwards, and somewhat obliquely from right to left; adherent superiorly, and ending inferiorly in a crescent-like edge; the left division, through which the fœtus had escaped, was larger than the right; at the upper extremity of the former, was the cervix uteri, still open; the latter ended in a *cul-de-sac*, and in it was an elevation somewhat similar to a cervix.

On the treatment of ulcerations of the neck of the uterus, by iodine cauterizations.—A young woman entered Dr. Cullerier's ward, at the Hospital du Midi, affected with a red fungous ulcer of the cervix uteri, about the size of a shilling. Cauterization, with a solution of nitrate of silver, having been employed without any beneficial result, Dr. C. prescribed as follows: R. Iodini, Iodur. potass. aa ʒv. aquæ distill. ʒx. M. The ulcer was cauterized on the 10th July with this solution; intense pain succeeded, which yielded gradually, and disappeared entirely on the next day, emollient poultices alone having been applied on the hypogastrium. The cauterizations were then repeated twice a week without causing the least pain. In the beginning of August, cicatrization commenced and was complete on the 1st September. Catamenia appeared while the patient was in the hospital, but were not quite so abundant as before her illness. (*Gaz. des Hopitaux*.)

Academy of Sciences. Sitting of the 18th Nov.—Baron Ch. Dupin in the chair. Received "Astronomical Observations made at the Radcliffe observatory, Oxford," in the year 1842, by Manuel J. Johnson, M.A.—"Radcliffe Observer," Vol. II—"A Chart of Sacred Chronology shewing, in parallel columns, the Greek and Hebrew numbers from the Creation to the End of the Jewish War, A.D. 73"—"A short essay on the Scientific Measures of the Mundane Times, and on the general reasons for rejecting the Hebrew and receiving the Septua-

gint Chronology," by the author of a chart of Sacred Chronology.

Professor Piory presented a copy of the fifth volume of his *Traité de Médecine Pratique*. In this volume, the author describes the diseases of the digestive canal, of the salivary glands, and of the liver. The new facts announced are:—1° the existence of accumulations of fæces, discovered by means of plessimetry, indicating the necessity of purgatives;—2° the peculiar species of asphyxia caused by the enormous development of the digestive canal;—3° the almost instantaneous diminution in the size of the liver, affected with sanguineous congestion, when venesection is performed;—4° the diminution of the same organ, though less rapidly, when purgatives are administered;—5° the means of recognizing, by plessimetry, whether the obstacles, which prevent the flow of the bile, exist in the ductus choledochus, ductus hepaticus, or in the liver itself;—6° plessimetric methods by which the precise situation of the different abdominal viscera may be ascertained;—7° the utility of auscultation in the diagnosis of diseases of the œsophagus, and of tænia;—8° the cure of sphacelated ulcerations by means of an alcoholic solution of creosote;—9° researches as to the most convenient spot for opening the intestinal tube in diseases of these organs;—10° finally, the utility of prescribing animal food in many cases, in which antiplogistics, emollient tisanes, and abstinence, have been ordered.

Researches on the Composition of the Blood in a Healthy Person, and during Disease: by Drs. A. Becquerel and A. Rodier.—From their researches, the authors conclude:—I. The composition of the blood and its modification, may be explained by a certain number of laws or general precepts.—II. In health, four causes may be cited, to account for the variations observed in the composition of the blood: of these, one especially is all-powerful—sex; the others are not so important; they are: the age, the temperament, the food.—III. The following table indicates the difference resulting from sex, though it must not be considered as constant:—

	Male.	Female.
Density of the blood, fibrine removed	1060.2	1057.5
Density of the serum	1028.	1027.4
Water	779.	791.1
Globules	141.1	127.2
Albumen	69.4	70.5
Fibrin	2.2	2.2
Extractive matter and uncombined salts	6.8	7.4
Fatty matter	1.600.	1.620
Seroline	0.020.	0.020
Phosphuretted fatty matter ..	0.488.	0.464
Cholesterine	0.888.	0.090
Saponified fat	1.004.	1.246

	Males.	Females.
Chloruret of sodium	3.1	3.9
Soluble salts	2.5	2.9
Phosphate of lime	0.334	0.354
Iron	0.565	0.541

The influence exercised by the sex is essential, and thus it is met with in disease; but, in order to be able to form a positive conclusion, the composition of the blood in the healthy male and female must be compared with that drawn from the same individuals when sick.—IV. Though the facts, relative to the age, are not sufficient to be considered as quite conclusive, it may, however, be stated, that the influence is exercised principally on the globules. In the male sex, it is but trifling, their quantity being at its maximum from twenty to sixty years old. In the female, the influence of age is principally limited by the appearance and cessation of the catamenia. Before its appearance, and even when it flows in an irregular manner, the quantity of the blood-globules is inferior to what it will be at a later period; as soon, however, as this important function is fully established—the woman enjoying good health—they increase in number, and remain at their maximum so long as this function lasts, to decrease again when it ceases. In both sexes, from forty to sixty, the cholesterine begins to increase, and continues to do so, as the individual grows older.—V. The

temperament also exercises an influence, the globules being generally more abundant in strong and robust individuals. This, however, needs new facts for its support.—VI. Alimentation exercises a positive influence, though it is impossible to say to what extent. It is, however, certain that unwholesome and insufficient food causes the number of globules to decrease, and the result obtained by abstinence in diseases confirms this opinion.—VII. Pregnancy has a notable influence on the composition of the blood, which may be expressed thus: considerable diminution in the quantity of globules; slight diminution of the albumen; fibrine and fatty phosphuretted matter somewhat increased; water more abundant.—VIII. The changes of the blood, appreciable by chemical analysis, are almost always caused by disease, and may be classed under eight heads, or laws. These modifications, when once produced, cause in their turn a certain number of alterations.—IX. 1st Law. The development alone of a disease produces a notable modification in the composition of the blood; such as: diminution of the globules and albumen (somewhat less of the latter); increase of the phosphuretted fatty matter, cholesterine, and phosphate of lime. These modifications are greater in acute diseases, and are more and more marked as it lasts longer; though perhaps they ought to be attributed as much to abstinence as to the disease itself. The diminution of the globules may be carried to such an extent as to produce anemia.—X. 2nd Law. Venesection modifies considerably the composition of the blood; and this is greater when it has been frequently repeated. These changes are: diminution of the globules and albumen; no influence on the fibrin, except perhaps in dangerous cases of typhoid fever: and even then, ought not this rather to be attributed to the disease?—XI. 3rd Law. Plethora, and the accidents which accompany it, are caused by an increase in the quantity of blood contained in the vessels, and not by that of the quantity of the globules: since it may be observed when they are few in number, as in chlorosis.—XII. 4th Law. A diminution in the quantity of globules, corresponding to as much as lb. ij. of blood, is frequently observed, coinciding with the state of the system called anemia, whether as an essential character, a complication, or the consecutive phenomenon of disease. Very often, a considerable diminution of the quantity of the globules is accompanied by an increased proportion, not only relatively, but likewise absolutely, of the fibrin. As to the iron, it being a constituent part of the globules, it follows that, whenever these are fewer, that diminishes in an equal ratio.—XIII. 5th Law. The development of a phlegmasia produces, in the composition of the blood, remarkable modifications, viz.: augmentation of the fibrin (a fact announced by Professors Andral and Gavarret); a notable diminution of the albumen; increase of the cholesterine.—XIV. 6th Law. The proportion of the normal fibrin may decrease, and even its physical properties be changed, in certain diseases, which may be classed under two heads: 1° typhoid fever, typhus, eruptive, and intermittent fevers, &c., and cases of poisoning; 2° unwholesome and insufficient alimentation, complicated with bad hygienical conditions, as scorbutus. In all these cases, even the most serious, the diminution of the fibrine does not necessarily take place; and though the law which presides over this diminution is still unknown, still it may be affirmed that, in cases which are, if not identical, at least very analogous, there is at times an increased, sometimes an equal, or at other times a smaller, proportion of fibrine, than in the normal state.—XV. 7th Law. When a secretion is suppressed, or merely diminished, it often happens that one, or several, of its constituent parts are concentrated in the blood, where they are found in greater quantity than usual. It is thus, that cholesterine is increased in cases of abstinence, accompanied by constipation, as there is a diminution in the biliary secretion;—also, in icterus. In the latter, there is not only augmentation of cholesterine, but likewise accumulation of fatty acids and colouring matter.—XVI. 8th Law. The albumen of the serum decreases considerably in three cases: 1°—in Bright's disease; 2°—in certain diseases of the heart,

complicated with dropsy; 3°—in puerperal fevers of a serious nature. New facts are, however, necessary, to establish this law beyond a doubt.—XVII. The principles, just laid down, shew the composition of blood in a healthy person, and the changes which it undergoes during disease,—opinions confirmed by the study of each disorder. This is the only general conclusion which can be drawn, as to the composition of the blood in each disease, for, on account of the numerous details, it is impossible to sum up the facts contained in the memoir.

On Dressing Wounds by Occlusion.—Dr. Jules Guerin presented an apparatus of gold-beater's skin, invented by him four years ago, by which the surface of the wound was preserved from the action of the air, and made to possess the advantages presented by sub-cutaneous wounds. This, said he, is a proof that my apparatus is not, as has been asserted, a species of eupping-glass, but, on the contrary, a supple, flexible membrane, which yields to the pressure of the atmosphere, and becomes thus adherent to the spot on which it performs the part of an artificial skin.

On Organic Alkalies.—Letter addressed by M. Ch. Gerhardt to Professor Dumas. Two years ago, the author presented a memoir giving the composition of strychnine, caseine, piperine; and the transformation of quinine, strychnine, and cinchonine, into a new acid, called, *quinolène*; in the present, he continues his researches on brucine. When nitric acid is added to pure brucine, it assumes a red colour, and an inflammable odorous gas is formed; the temperature increases; but, if heat is employed, no traces of nitric acid gas are disengaged. The mixture solidifies on cooling; is of an orange colour: soluble in water; nearly insoluble in æther and cold alcohol; somewhat more so in warm alcohol; this last solution deposits crystals on cooling; formula $C^{21}H^{23}N^3O^8 = C=75-H=6.25-N=87.5$. The gas, which accompanies the red compound, presents all the characters of nitrous ether; is colourless; soluble in water, very soluble in alcohol; has an odour of rennet; burns with a greenish white flame, and disengages nitrous acid gas. An equivalent of brucine, and two of nitric acid, contain the elements of an equivalent of the red compound, and one of nitrous ether: formula, $C^{23}H^{26}N^2O^4 + 2NHO^3 = C^{21}H^{23}N^3O^8 + C^2H^5NO^2$. The red compound, left several hours in nitric acid, becomes yellow.

Researches on the Organization of the Liver in Man and the Mammifera: by Nathalis Guillot, M.D., Physician of the *Hospice de la Vieillesse* (women). The author, having succeeded in injecting various coloured liquids into the liver, has been enabled to study the mutual rapport of the extreme divisions of the hepatic veins and artery, the vena portæ, and biliary duet; and concludes: 1° that no anastomosis exists between the trunks of the different vessels which ramify in the parenchyma of the liver, and it is only by the minute divisions that the vessels communicate with each other; 2° that the hepatic veins end in an infinite number of cauls, which, by their union, form a sort of tuft, whose dimensions and aspect vary in the different kinds of animals. The extremities of the hepatic veins form, by their mutual anastomoses, a tissue, in which the venous capillaries compose regular polygonal spaces. It is round this tissue that, in each hepatic granulation, the last divisions of the vena portæ, the hepatic artery, and the biliary duets, are to be found; 3° that the smallest ramifications of the hepatic artery divide, before their termination, into a great many small branches on the biliary duets, surrounding principally the smallest; 4° that the last divisions of the vena portæ do not reach the tissues formed by the hepatic veins, until they have been in contact with the biliary duets, and after having run through collections, more or less considerable, of these duets; 5° that the biliary duets, which alone I have been enabled to inject as far as their most minute ramifications, surround, either as a net work, or in thick bundles, all the superficies of each of the tufts, formed by the hepatic veins, and present, with the vena portæ, the following rapport:—All the ultimate ramifications of the biliary duets spread themselves on the surface of each of the ramuscles of the vena portæ: the former

surrounding and covering the latter. These biliary ducts, accumulated on the surface of the ultimate ramifications of the vena portæ, and only where this vein communicates with one of the parts of the circumference of the tuft, formed by the hepatic veins around each granulation of the liver. By this mode of distribution, the biliary ducts form, with the hepatic artery, a double net-work, around the final ramifications of the vena portæ; 6° that the biliary ducts, after having been distributed in tufts, or numerous ramifications on the surface of the last ramuscles of the vena portæ, unite in branches of some size very variously disposed. Sometimes, these branches end in trunks, which carry the bile out of the liver; at other times, in species of sinuses, which surround each hepatic granulation. In the latter case, it is from these sinuses that the excretory ducts arise.

Analysis of the Bones of a Skeleton, supposed to be Fossil; by M. Lassaingne.—About a month ago, the bones of a man were discovered in a quarry, at Pantin, near Paris; part of them were analysed, comparatively with those of individuals buried in that neighbourhood, in 1814, after the battle fought near the walls of Paris; the result was:

	Bones of the Skeleton.	Bones of persons buried in 1814.
Moisture.....	20.0	20.0
Organic matter ..	11.0	15.0
Phosphate of lime	45.1	40.5
Carbonate	21.6	15.8
Sulphate.....	2.3	0.5
Traces of oxide of iron ..	argillous sand	8.2
	100.0	100.0

On the Nature of the Corpora Lutea, and their Connection with Fecundation: by A. Raciborski, M.D. In this memoir, the author concludes, that the difference sought to be established between the corpora lutea, according as they proceed from a periodical expulsion of the ova, or that following fecundation, cannot be admitted in the generality of animals; for they offer, in both cases, a corpus luteum almost alike. Mules, though deprived of the reproductive power, present, in their ovaria, marks of the spontaneous expulsion of the ova, and these marks are similar to those found in other animals after fecundation. This was evident from the examination of the ovaria of a mule, five years old. In women, the monthly expulsion of the ova possesses, it is true, peculiar characters, easily distinguished from those subsequent to fecundation. But it is not less true that, in both, a character is common, viz: the concentric hypertrophy of the granular layer, which differs merely in its degree of activity. It may, therefore, be concluded that, instead of dividing the corpora lutea into true and spurious, it would be far better to divide them into complete and incomplete, or imperfectly developed (v. the work published by the author, *De la puberté and de l'âge critique chez la femme, et de la ponte periodique spontanée chez la femme et les mammifères.* 1844.)

Academy of Medicine. Sitting of the 19th Nov. Dr. Ferrus in the chair.—After the adoption of the *procès verbal*, the President informed the Academy that, on the 26th inst. a *comité secret* would be held at 4 p.m. to hear the reports of the commissions.

Discussion on Professor Velpeau's report on Dr. Malgaigne's memoir.—Dr. Guérin: the attention with which my explanations were listened to, in the former sitting, and for which I here tender my thanks, would render further proofs unnecessary, were it not that the honorable reporter insisted on the erroneous arguments brought forward by the committee; a reply is therefore necessary, in order to do away with all errors. I stated that the 24 cases, quoted by the author, were taken indiscriminately from the 155 contained in my statistical table; and that they belonged to the category of the 98. To this, the reporter replied: 1° that the 24 patients were taken only from among those received and treated by me in the Children's Hospital; and 2° that, of these 24 patients, the committee did not find one cured; consequently, it affirmed the assertions of the author of the memoir to be exact. My answer is, first:—that I made no distinction between the out-and the in-patients in my statistical table, and it is easy to conceive that the former are far more numerous, the affection

being of a kind which does not oblige the patients to keep in bed; the only difference which I was under the necessity of making, is, that I kept in the Hospital those whose deformity rendered mechanical remedies absolutely requisite; these, however, were but few, on account of the limited number of beds in my wards. It is, therefore, evident that it is impossible to affirm, that the patients were out-or in-patients: that the treatment was complete or incomplete, a fact admitted by the author of the memoir. *Secondly*:—If, as I imagine, I have proved that the foundations are erroneous, this objection falls of itself; and as I admit 131 not cured, evidently the committee must prove that the patients are not in the category, ere it can assert that my statistical table was incorrect. Having thus replied to these two arguments, I will briefly speak of the particular cases mentioned:—that of the young girl, Thierry, (not cured);—that of the girl, Célina Lefevre (she died of typhoid fever, while under treatment);—that of the girl Pauline Dumont (now in the country, who was affected previous to her entry with spontaneous luxation of the femur; consequently, this accident cannot be attributed to the operation). Now, they were all three included among the patients whose treatment was incomplete. But it has been asserted, that other cases can be quoted: but this is not extraordinary; and it is only, when more than 131 are enumerated, that it can be proved, that my assertions are incorrect. Having thus replied to the primary arguments of the committee, I will now proceed to answer those brought forward in the preceding sitting. Professor Roux requested me to shew a case, in which the patient was cured; after mature reflection, I acceded to the request; and, consequently, I called this morning on our honorable colleague, with a patient whom I considered as cured. Professor R., after examination, stated that such was the case, and I would feel obliged by his expressing his opinion before the Academy.—Professor Roux: I prefer replying when Dr. Guérin has ended.—Dr. Guérin stated how much he wished it to be done immediately.—Professor Roux: Drs. Guérin and Louis called on me this morning with a young person, about 17 years old; on examination, I found the vertebral column straight, and consequently concluded that, if a deviation had existed, the cure was perfect. I made several objections, which I consider right, that the Academy should know.—Dr. Guérin: I desire previously.... (Interruption)—Professor Roux, continuing: I presented several objections:—that my opinion could only be asked as a colleague, not as a member of the committee; that it would have been better had the patient been presented to the committee, and then to the Academy; that I could not assert that the young girl had been crooked, and if so to what extent; that I did not know if she was included in the table made by Dr. Guérin, consequently, that I could not form any positive conclusions. To these objections, no explanations were given.—Dr. Desportes: Did you perceive any cicatrices?—Professor Roux: I did not examine her sufficiently.—Dr. Guérin: I thank Professor Roux for the answer he has just had the kindness to make, and I beg the Academy to observe, that the young person was in no respect deformed, and yet she is included, by the author of the memoir, among the twenty-four cases seen by him. What induction is to be drawn from this fact? First, that the author of the memoir was wrong in stating that no patient was cured; and, secondly, that the committee ought not to have asserted that that statement was correct. But to what end does all this tend? To two points: the first scientific; the second I will designate under the denomination of—the other object, as really I know not what qualification to give it. The scientific end is, to examine whether myotomy is—dangerous: the committee itself admits that there is no serious danger, and that suppuration seldom, never might be said, takes place;—useful: the committee considers it may be so sometimes; consequently, it does not agree with the author of the memoir, but rather with the partisans of rachidian myotomy;—rational: here, again, the committee says, it is so when there is a species of cord stretched from one

spot to another; this exists oftener than is supposed: the difficulty is to find the chord. Thus, it is evident, that the committee differs greatly in opinion with the author of the memoir. As to the other object, I hardly know how to speak of it; my susceptibility was blamed, and regarded as exaggerated, as no one, similarly situated, would refuse to explain the facts announced by him; but, in the present case, what has taken place? I published a statistical table, which was asserted to be false, for none of the cures therein announced were regarded as true; now, I proved then, that not more than seven patients had been seen; since then, twenty-four have been taken and from what I have just said, it may be perceived how far they may be relied on. In conclusion, I may say, I have sacrificed my health, my fortune, my tranquillity, rather than yield to injunctions which I considered as unjust; and, were it to be done again, I would not act otherwise. (These words were pronounced with considerable emotion.)—Professor Moreau explained why he had interrupted the speaker, and would be happy could Dr. Guérin convince his opponents, that their opinions are erroneous.—Professor Roux wished to be clearly understood, that he had in no-wise any personal animosity against Dr. Guérin, the object being solely the advancement of science.—Professor Velpeau: I regret to hear Dr. Guérin state, that the committee is hostile to him; such is not the case, and surely the doubts, as to the exactitude of the results obtained by him, cannot be so construed. Dr. Guérin quotes Miss F. Lechorer; now, here, the author of the memoir is not so faulty as stated; since he said, that she was the straightest. As to the opinion of the committee, it was never affirmed that she was seen, for she refused; but that, from all the information that could be obtained, it was probable that she had been benefitted the most from the operation. As to the statistical table, I do not think it exact in the enumeration of the cures and ameliorations; thus, of 14 cases of lumbar abscess, there were four cures obtained, by repeatedly emptying the tumour, and five ameliorations, the disease being converted into an inoffensive fistula; of 11 cases of effusion into the articulations, eight cures, three ameliorations. In the former, this is hardly probable: the cause of the disease being situated at a distance; and, in the latter, several were subsequently amputated. As to cases of deformed callus, Dr. Malgaigne wrote two letters to Dr. Guérin for information, but was refused. But, it is stated—that the 24 cases, mentioned, did not belong to those declared cured; we did not say so; only that they were still deviated, and that they were among the 34 treated in the hospital;—that the cases received in the hospital were all serious, however, was not always Dr. Guérin's opinion, since he states, in a letter, that the operation was performed several times in the second and third stages, and followed with constant success;—that the patients in the hospital were none of them included among the successful cases: to prove this, Dr. Guérin has only to bring forward the fortunate 24, which I really expected would have been done;—that the members composing the committee are hostile: this is not the case, unless our asserting that, which he states, to be erroneous, be thus construed;—that the opinion of the committee coincides rather with him, than with the authors of the memoir: though desirous of such an event, still, I am sorry to say, this is not the case; for instance, Dr. G. said that he had cured several patients: we could not find any; and, as to its utility, it could not be considered as very useful, since, by mechanical means, five patients were cured out of 10, and by myotomy, only 24 in 155. Finally, as to my having neglected to quote Dieffenbach, it was, as I have already stated, because I had written, and had not at that time received an answer; since then, it has reached me; and in it Dieffenbach states, that he has performed it once only, and without any beneficial result.—Dr. Begin regretted this discussion, and that Dr. Guérin did not, like Larrey and Broussais, accede to the request made him; but he did not think that, notwithstanding his refusal, the conclusions, proposed by the committee, ought to be adopted: conse-

quently, he proposed replacing them as follows: thanks to the author; insertion of the memoir in the *Bulletin*, for the information it contains.—After a tumultuous and agitated discussion, in which several speakers were heard, and two votes declared doubtful, the ballot was asked for; and the result obtained was, for the conclusions, with the suppression of the words—for the information it contains: Ayes, 41; Noes, 26.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.,
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the Doctrine of Digestion (continued from p. 163.)—As chyle exhibits a perfectly clear colour, if the biliary duct be tied, whilst it usually appears milky on account of the free fat contained in it, bile is shewn to be essential to the formation of fat. Impeded biliary secretion always causes considerable emaciation. Even diabetes seems to be produced by some irregularity in the biliary secretion (probably from the presence of some abnormal acid), the kidneys being generally unaffected, but the liver frequently degenerated, and the fæces being usually of a pale colour. Hæser stated to the author, that he had cured a case of diabetes by means of the administration of fresh bile. Chevallier found, in a case of phthisis, only two per cent of solid residue in the bile, whilst ten per cent exist in the normal state. In most cases, diabetes complicates itself with tuberculous. The circumstance of the absence of a gall-bladder in animals with very long intestinal canals (pigeon, parrot, ostrich, German marmot, camel, horse, sloth,) might tend to prove, that, whenever chyme remains for a long time in the bowels, a constant supply of bile is necessary. An important question is, what becomes of the bile, after it has answered the purposes of digestion? For, it is ascertained, that it is not entirely discharged per anum. The part which is not evacuated, must either be absorbed by the portal vessel or by the absorbents of the chyle. If absorbed by the former, bile would make a constant circulation, which cannot be readily imagined, and, in the chyloferous vessels, no bile has ever been directly discovered. It is not necessary that chyle should possess a yellow colour in case it contain bile, as colourless bile may be prepared. For, if you treat the fresh gall of a calf with a little weak muriatic acid, filter quickly, and expose the fluid to a temperature of 30° R., the yellow fluid becomes clearer and clearer, and, within a few hours, a deposit of a greenish colouring matter is separated, the liquid ultimately becoming perfectly clear and transparent. Further digestion produces no change in this acid liquid. If you neutralize it with potash, it displays the taste of unaltered bile; evaporate it, while in this state, and it will be transformed into the usual resinous mass. Mixed with oil, it forms, like the fresh gall itself, a milk-white emulsion. Thus it is seen, that colourless bile may be received into the chyle. This observation throws also some light on the formation of biliary calculi: for these mostly consist of deposited colouring matter; and, since bile often happens to be abnormally acid, the precipitation of colouring matter is easily explained from the above. What is the further destination of bile, it is difficult to explain. Does it form a food for respiration (Liebig), or is it eliminated by other excretions. The anatomical and pathological phenomena of the liver stand in a direct relation to respiration and urinary secretion; this is shown by the following formulæ:—

Biliary acid = $C_7H_4N_4H_{132}O_{22}$

$C_{72}H_{112}O_{12}$ = Cholidinic acid
 $C_4N_2H_{14}O_{10}$ = Taurine
 N_2H_6 = Ammonia

$C_{76}H_4N_4H_{132}O_{22}$

$2 \text{ tau.} = C_8H_4N_2H_{28}O_{20}$ { $C_2N_4H_8O_2$ = urica.
 $2 \text{ oxy.} = O_4$ { C_6O_{12} = carb. ae.
 $H_{10}O_{10}$ = water

$C_8H_4N_2H_{28}O_{24}$ $C_8H_4N_2H_{18}O_{24}$

e.—The pancreas stands undoubtedly in a near relation to the biliary secretion, the pancreatic duct being always near the biliary duct, and even opening into it (in the elephant, camel, sheep and horse). After its extirpation, greater voracity has been observed. It is improbable, that the pancreas assists in the formation of fat, for fat is found where no pancreas is to be discovered, for instance, in bees. Perhaps, it serves to the complete solution of the combinations of proteine. f.—Cæcum. We know nothing of the changes which food undergoes in this portion of the intestine. Animals which live on raw foods have a very large cæcum. As an acid is secreted in the cæcum of several animals, it was always supposed (but not proved) that a supplementary digestion took place in it. That the hydrurets of carbon are of great importance for the animal organism, is shewn by their being largely contained in all nutriment. But they seem to have no other tendency but to be transformed into fat, which is to be found in all organs in equally definite proportions as albumine and fibrine. The chemical possibility of the transformation of amyllum into fat is proved; it seems to be analogous to that of alcohol into carbonic acid, and might be called the *fatty fermentation*. The lactic, carbonic and acetic acids, sometimes developed by these metamorphoses, cannot be the ultimate organic tendency of transformation of amyllum. More recent experiments decidedly show, that, neither in fresh chyme, nor in blood, can any considerable quantity of lactic acid be found; it cannot be conceived how a substance, which so speedily combines with bases and is burned into carbonic acid, should contribute to the formation of fat, or of adipic acid. Pathological phenomena and experiments show, that sugar may be received into blood and serve as food. The importance of fat to the animal body must be considerable. The reception of food is limited, but that of oxygen constant and uninterrupted. Thus, for the protection of the organised and organizing matter against the invading oxygen, a substance is required, which combines more easily with oxygen, than the combinations of proteine, which compose the principal mass of the organism. The substances fulfilling that destination (called means of respiration by Liebig) are fats and analogous substances. The tendency of oxygen is to cause a metamorphosis of the organic residue; it embraces the material conditions for rendering the depurative substances innocuous, soluble, and fit for excretion; for it is shown, that the consumption of oxygen is not proportional to the organic transformations. In typhus fever, small pox, &c., where the secretions are overloaded with combinations of oxygen, the quantity of absorbed oxygen is not increased in an equal proportion. Blood only reddens slightly when exposed to the air, though the quantity of exhaled carbonic acid be threefold. In pneumonia, pleuritis, and tuberculosis, on the contrary, only inconsiderable metamorphosis is shown to exist by the state of the urine. But the invasion of oxygen is so heightened here, that we even see albumine enter into higher degrees of oxydation. Mulder found that the *crusta pleuritica* contained *tritoxide of proteine*. To prevent such injurious effects of oxygen, seems to be the chief tendency of fats. The deposited fat forms a store of easily transformable substances, offering sufficient matter for oxydation, as soon as the organic residua are elaborated as excretions. Fat seems to be first saponified, and then to enter into further transformation, oxydation, &c.—Professor Hoffmann in *Hæser's Archiv*.

On the nature of the redness in Scarlatina.—The author, who had an opportunity of observing the effects of primary scarlatina on the dura mater of the brain, and of metastatical scarlatina on the coats of the stomach and small intestines, gives the following view on the uniform and peculiar scarlet colour of the cutis, dura mater, and inner coat of the intestinal tube. This redness must undoubtedly be ascribed to a heightened intensity of the congestive process in the capillary vessels. The larger capillaries are filled with a quantity of undecomposed blood-globules, but the finer with the colouring matter of the blood without the blood-globules (congestion of hæmatine). For, as the hæmatine may be separated from the

globuline by dissolving the blood-corpuscles in water, such a separation is not at all improbable in the capillary vessels of the organism. It may, at the same time, be supposed that, by the *discedent* property of the blood in the papillæ of these textures, another epidermis may be secreted, by which desquamation is accomplished after scarlatina. The different variations of redness, from the clear red colour of the stomach, to the brown red in the lowest part of the ileum, may be explained, by the hæmatine being rendered of a scarlet colour through the muriatic acid of the gastric juice, and brown by the alkaline properties of the intestinal secretions. If this separation of hæmatine and globuline be found correct, it must be concluded, that the primary cause of scarlatina lies in the morbid state of the blood. Physicians might thus find a hint for the utility of abstraction of blood. In cases of so called inflammatory scarlatina of children, the author frequently ordered small venesections with decidedly good, and never with any injurious, effect, though he could not find in any case the production of inflammatory crust on the blood.—Dr. Schweich of *Neuwied in Roser's Archiv*.

NOTICES TO CORRESPONDENTS.

A Subscriber, (Mayfair.)—*Medical publishing is like most other businesses now-a-days, the most showy being perhaps the least secure. The respectable London publishers our correspondent enquires about are, (to give them alphabetically) Baillière, Longman and Co., Renshaw, Sherwood and Co., Simpkin, Marshall, and Co.*

A Subscriber (Donhead), suggests legislation in the affair of assistants. He complains that they are ill paid, ill served, ill educated; that they occasionally poison their patients by their ignorance; and when they succeed at last in entering the Profession, are a disgrace to it, from their want of a gentlemanly education. He proposes, therefore, that they should be examined, registered, and a minimum salary, fixed for them by law. Our opinion is, that, if it were practicable, no medical man should be at liberty to have an assistant not fully qualified as a medical practitioner. The assistant almost invariably practises as a medical man, and it is in that capacity his services are received. Why should his competency, therefore, not have been officially decided on? The salaries of assistants would protect themselves with such an arrangement.

A. Z.—*Dissertations for the Fothergillian medal may be written in English or Latin, and must be delivered to the Registrar on, or before the first day of December, with a sealed paper, containing a motto, corresponding with one written on the essay. The dissertation must not be in the handwriting of the author; and if he become known to the committee, or any member thereof, prior to adjudication, his essay will be excluded from competition. Any person may compete for the prize, whether a Fellow of the society or not.*

Royal Medico-Chirurgieal Society.—*A correspondent complains bitterly of the manner in which the papers are read at this society. He observes that they are often unintelligible to the gentlemen present in consequence, and suggests that a salaried officer should be employed for the purpose.*

Griffith's Mixture.—*This being so destructible a compound, its administration is attended with much uncertainty, owing to the ferri sulph. being so quickly converted into peroxide. To guard against this accident, a correspondent suggests the following mode of administering it, viz.: dissolve the ferri sulph. in pure water by itself, and the other constituents as directed; and, on its being administered, direct it to be mixed:—Thus, for instance, for an eight oz. mixture, let the ferri sulph. be dissolved in 1 oz. of water: one drachm of which would be the proportional quantity for 1 oz. of the mist. myrrh. potas. subcarb. and aq. rose. I am not aware that any change readily takes place in mixtures of myrrh, &c.; and, of the ferri sulph., dissolved in water, no change of moment will occur.*

Mr. H. Gillett Gridley, Hon Secretary to the Orthopedic Institution, Bloomsbury Square, has sent us communications to shew, very satisfactorily,

that some anonymous statements, made in the *Lancet*, to the injury of that establishment, are wholly erroneous. It appears that the lowest kind of falsehood characterizes the information published by our contemporary. We cannot insert the communications, on the ground that if we were to act as our "brother's keeper," our pages would be given less to teach truth than correct error.

M. F. (Lincoln's Inn).—The fainting scene before Lord Denman, Mr. Curwood, &c., is not suited to our pages.

Mr. Beloe's name is in the List, in Oct. 19th (No. 265).

An Excluded Graduate writes thus:—"Nineteen-twentieths of the profession must feel themselves much indebted to you for the manner in which you have commented upon the late gross outrage of the Council of the College of Surgeons. You have not allowed it, (as the ring-leaders no doubt hoped) to be cast into oblivion by the Medical Reform Bill, but have ever spoken of it as a rankling insult, and a grievous injustice."—Our correspondent proceeds to refer to the *Morning Chronicle's* biting condemnation of the Council—to comment on Sir Benjamin Brodie's loose phrase, (with a very explicit meaning,) that the College of Physicians is welcome to the General Practitioners, if it will take them, and to urge exertion on the part of the profession. We add our recommendation to his, but hope that the Council, coming to reason, much further exertion may not be required. Things, now, certainly promise better than they did a twelvemonth since: how much the Profession may be indebted to the *MEDICAL TIMES* for the circumstance, is a matter our modesty would prefer to leave to the "Excluded Subordinates."

We really think that Mr. Jackson's views have been put, in his numerous papers, with sufficient fullness before our readers, to render a further communication less necessary than he imagines. We consider Mr. Jackson a very lucid writer. For so small an organ as the *Spleen*, we and he have surely said enough.

Reports have been sent to us of Meetings held at Maidstone and Pimlico, which offer nothing requiring especial notice. The Resolutions of the latter will be found in our advertising page.

S.—A Skeleton, articulated, may be had of Harnett or Alexandre. Their advertisements appear in our pages. We do not know their prices.

An Old Subscriber.—Dr. Rigby always passes the *Speculum* whilst the patient lies on the left side: it is passed without any exposure, and merely the end of the instrument projects beyond the clothes.

A HANDSOME PORTFOLIO for holding the "*MEDICAL TIMES*,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

ALPHA.—The book is "Parry on Diet," not "Paris." We have heard of no recent edition of the work of Paris on the same subject.

Mr. LEADER cannot do better than enquire for himself. If he give others the trouble he would give us—if we allowed him—he is one to lose very little by bashfulness.

AN OLD APOTHECARY pays the penalty of keeping very foul-mouthed company. We cannot understand the good taste of gentlemen who, without "official" necessity, read our contemporary, much less essay to answer him. The wish for a whip in every "honest" hand is very "harmless." If granted, the recipient of the flogging would not be our correspondent. We join in our correspondent's prayer to be saved from such an advocate.

A COUNTRY COUSIN.—The accusation is beyond our jurisdiction. We must decline to introduce a matter requiring such long explanations to our readers.

Several books have notices in type, which we are reluctantly compelled to postpone to our next number.

Several correspondents have directed our attention to a very ungenerous and unjust notice of the recent work of Dr. Guy on Forensic Medicine. They will perhaps excuse the non-insertion of these letters, when we announce that next week we shall give a careful parallel review of the two works of Guy and Taylor.

QUERIST.—An M.D., of the University of Edinburgh, will register as a physician under the new Bill, supposing him to have joined a College of Physicians. The University degree will only serve for registration where it has been followed by connection with some College. The nature of that connection will decide the nature of the title to practice.

Mr. C. S. LONDON (Greenwich), writes in a bitter spirit, not to be wondered at, of the breach of faith to the old members committed by the new Charter. Admitting the cleverness of some of the Councillors, he extends the credit of that quality to the pickpockets, and implies, in very plain language, that both are to be equally guarded against.

MEDICAL TIMES ALMANACK,

The Almanack for 1845, will be ready in the course of the ensuing month. Gentlemen wishing to give advertisements the advantage of its large circulation, should remit their orders immediately.

THE MEDICAL TIMES.

SATURDAY, NOV. 30, 1844.

Dum tacet, clamat.

SIR BENJAMIN BRODIE seems almost as unhappy in the possession of his friends as of himself—about as fortunate in his confidences as in the subjects of them. To give his opinions bluntly to the world, would be his own political extinction: to communicate them confidentially to a friend is to be sure of their proclamation at Charing Cross. Thus, for example, talking to the Editor of a contemporary* the other day, the worthy Baronet expressed his grateful esteem for the body of General Practitioners, members of his College, by a loose phrase (spoken in confidence, of course) to the effect that, for aught he cared, "the College of Physicians was welcome to take them from the College of Surgeons;" and by a felicity quite worthy of the important sentiment, his kind friend, some three days after, was found authoritatively announcing it to us, in his *Journal*, as a fact in his own personal knowledge. Brodie is not, after all, the dangerous man we thought him. Providence seems to have given him a special organization for our protection. He disarms himself, and is at once our bane and antidote. As the boa-constrictor sounds his rattle, the wings of the vulture whirr, or the ghastly hyena yells, so does Brodie publicly apprise us of danger by a confidential communication. If he could only have restrained himself, throughout his Presidentship, to the profound concealment of his thoughts implied in him by the frankest of non-confidential conversations, we were lost. His Charter, instead of the most unsuccessful innovation ever hatched in a disordered fancy of very limited powers, would have turned out a grand move in his small statesmanship—the certain and triumphant prelude, to a series of silly misrules. That he has friends, and communicates confidentially with them, is, we repeat, matter for a corporate Te Deum!

But what means this silly prejudice of Sir Benjamin Brodie, and surgeons like him, against the General Practitioner? Who made him what he is, but the General Practitioner? He insinuated or worked himself into what, if now a waning, was once a large practice, by teaching: who paid him but the pupils who are now General Practitioners? Consultations spread his practice: who called him in but General Practitioners? He published books: who bought and read them but General Practitioners? He swelled his income some four hundreds per annum in Examination fees: who advanced them but General Practitioners? Finally, he has acquired high social consequence, as being the head of a great Surgical Corporation: who made that Corporation great, or affluent, or important, but General Practitioners? Whence, therefore, this insolent ingratitude? this disdainful maltreatment of benefactors?

If we may speak our mind freely, without the safeguard of a confidential seal that fastens nothing, the vice and weakness is the resource of a splendid mediocrity that can only hope to keep, by injustices, the height that has been won by

trickeries. "If there be no brand on the brow of the General Practitioner,"—so he reasons—"if there be no deceptive labels announcing him as subordinate and me as superior—my elevation is not permanently tenable. Talent and industry, if left free, find their level like water: I must fetter and compress—or I lose what I have." We say it, advisedly and with force, that this waste of a miserable ingenuity to trick out a few members with nominal distinctions, to hoodwink the public into a practical preference of them, is as insane as it is insulting. If the *Statesmen* (who resort to it) inwardly feel that they really can stand a fair and equitable appraisal in the market of public opinion:—and if, as we are told in their penitential manifesto, published in June last, "each individual in our Profession makes his own place in society, and intellect, knowledge, and integrity will ever be duly appreciated," what possible motive can they have for violating long-sanctioned and legally-acquired rights, and rousing up the fiercest hostility on the part of their brethren, that they may stand before the public decked with such adventitious distinctions as those they have tried to limit to the "purity" of their Surgery? If they are better Surgeons, and the public can, as they say, be relied on for its acknowledgment, why not consistently open the field fairly to every gentleman they have admitted to membership, and let the race be to the really swift, and victory to the really strong? Let us suppose them all they affirm, and how foolishly droll that they should rely on self-made rules of exception, exclusion, and promotion, for what their own deserts would secure them without a breath of suspicion or hate! Wicked servants! out of their own mouths do we condemn them. If they can rely on the public's discernment, they cannot rely on their own deserts!

The truth is, the New Charter has brought things to a crisis, and the body of General Practitioners have the ball at their own foot if they only know how to use it. Supporting the demand for "Justice—a clear Collegiate stage and no favour!" by the threat of a New College, they must either get what they ask, or place a complete extinguisher on the establishment in Lincoln's Inn Fields. The eyes of the Council are opening to their danger, and we can have little doubt that, for the future, the order of the day will be "*concession and conciliation!*" We confess that all our sympathies side with this sort of termination. We believe that the British Medical Profession will never stand in an unequivocal position of respectability till it be wholly connected with one or both of the two Colleges of Medicine and Surgery. The pure Surgeon and pure Physician must exist despite law: the universal belief that he who gives his undivided attention to one division of maladies, will know more about them, *ceteris paribus*, than he whose practice is extended over the whole range of diseases, must ever give especial honour and a higher kind of business to the pure Surgeon, or the pure Physician. Let the preference so founded be his remuneration and distinction. He wants nothing further. If society will not support his peculiar practice without insulting College distinctions, let the peculiar practice perish. It is founded for Society's good, and both should exist or end together. While thus individually the physician or pure surgeon would suffer nothing by an equal brotherhood with the practitioner of surgery and medicine, his College would gain much, and our body would, indeed, be a Profession. The General Practi-

* The MEDICAL GAZETTE.

tioner, at once a Physician and Surgeon, with no mark of degradation on him, would command respect—and no longer confounded with the body of Druggists, would, by the comparative moderation of his terms, be consulted by many, who, if they cannot see a pure Surgeon or Physician, now resort to a charlatan. We beseech the General Practitioner not to overlook this point. It is of the utmost social consequence to his order. Whatever he may owe to the Society of Apothecaries, continued connection with it is but continued loss of professional standing. To be ostentatiously obtruded on the public as connected with a company of Pharmacy, is to be *ipso facto* excluded from respectable practice. The taint of trade on us is ruinous; and with all deference to those who, in a somewhat narrow-minded spirit, talk of keeping the Apothecaries at our head that we may be under our own order and not have our standing lowered, they have mistaken utterly the circumstances under which we are placed. The Physicians, it is assumed, will lower the General Practitioners' examinations below the present standard, to give more credit to their own. Will they be insane enough to risk so audacious a proceeding? If they be, will twenty thousand General Practitioners let them succeed? If they try, will the Council of Health and the Government venture to support them? Under present circumstances, Colleges may fix their own standards of qualifications, and no General Practitioner in the empire can have a word of objection which he can influentially offer. With the changes that NOW MUST SPEEDILY take place IN THE COLLEGES OF SURGEONS AND PHYSICIANS, in which the General Practitioner will certainly be soon represented, and with the erection of a great responsible Central body, which will have the direct power of fixing a uniform and universal standard of competency, the General Practitioners will have, must have, a potent share in Medical Government, and an influence in Medical things, which makes connection with the Trading Company of the City a very shabby affair indeed.

Ye who amid this feverish world would wear
A body free of pain, of cares a mind;
Fly the rank city, shun its turbid air.

EXCELLENT advice, Dr. Armstrong, for those who are able to follow it; and thrice blessed are they who can follow it to the utmost. Would that we were of that happy number!

The influence of external circumstances upon human health and comfort, is a subject of the utmost importance, and demands the most serious consideration. Connected, as it is, with the welfare of our fellow-men, in their personal, social, political, and moral relations, it is a text upon which we may treat for ever, and still for ever find it unexhausted. As an organ, not only of the medical section, but of the larger circle of society, we feel that a most responsible part of our duty is to discourse upon topics which concern, not the few, but "the many of mankind." To such things, the events of every day invite our attention; and experience and education tell us how necessary is their study to our own and to others' happiness. The philosopher views them in their relation to science, and to the general course of Nature:—the philanthropist regards them in their relation to society. By the former they are valued simply as facts, which serve to illustrate or to amplify theories, generalizations, and laws:—by the latter, they are cherished and cultured as homely truths, which bear upon, and better, the social tastes of mankind. Let these purposes be

blended, and Science and Civilization, companioning each other, will reach their maximum.

We make these observations to invite, as best we can, the philosopher from his sterner purposes, and to induce him to believe, not only that

"The proper study of mankind is man,"

but that the proper temporal application of human science and wisdom, is the benefit and blessing of all who are related to us in the great family of creation. There is a certain class of society to whom the motto and the motive of this paper especially apply. We mean those sons and daughters of toil and of misfortune, who are condemned to a life of incessant drudgery or confinement in places, where pure air and healthy exercise are for the most part denied them. And this class is numerous enough to comprise the larger—aye, and the better—portion of society. There is no insult in the insinuation that the humble, as well as the exalted, are compelled to live under certain artificial circumstances which enervate and injure them. The mining drudge, who works in perpetual darkness or torch-light, and sees the clear sky and the bright sun but as a leisure and a luxury—the busy mechanic, who passes the greater part of his existence in an atmosphere, ill-ventilated and noisome—the shopman, the clerk, the poor dressmaker, and another female, poorer and more piteous still, whose only air and exercise are in the cold and damp of evening—the scholar and the statesman, who seek no respite from their studies, their tomes, and scrolls, and the pestilence of their closets: all, not one excepted, suffer or sink for want of

"That kindly sky, whose fostering power regales
Man, beast, and all the vegetable train."

But we may extend the observation, and apply the inference with almost equal seriousness to the great masses of mankind whose habitations are ill-ventilated and filthy. We allude chiefly to those domiciles of the poor which are found in the crowded courts and alleys of our towns. What must be the condition of humanity in such spots? What but "plague, pestilence, and famine" could revel there? They are the nursing places of disease and death. Fit trophies of the tomb! Scrofula, emaciation, stunted growths, shrivelled and deformed limbs, idiocy, and imbecility, meet you on every side. If an epidemic seizes upon such spots, it makes its home there, and thousands are its prey. Diseases, which are mild in healthier regions, become malignant there. A mere cold runs into influenza or putrid fever, and either hurries its victim rapidly to the grave, or leaves him to be dragged thither, wearily, in a consumptive train. Prescribe for dyspepsia, in those places, and treat it with what skill you may, you cannot cure it. The furred tongue, the fevered brow, the lost appetite, the lassitude and melancholy, will linger with the patient until you remove him to a fitter residence. Let it not be said that these things are the issue of poverty and starvation. See the half-fed child of the wilderness and bleak moor, and mark well his contrast. That child will make his meal of a raw turnip or a few blackberries, and laugh and work as they digest, and become good blood. No food is lost to him; it is all appropriated—and well, too—to the purposes of his constitution. His lungs, playing in a pure air, maintain the health and energy of his circulation, balance all his functions, strengthen every limb, and build him up, a hale, hearty, and vigorous man. Ruddy and rollicking, and free as the breezes that feed him—a stranger alike to a passion or a pang—he journeys through existence to that good old age which pronounces

the termination of man's natural life. He suffers but sparingly "the ills that flesh is heir to;" and if disease do attack him, his mighty stamina soon enable him to throw off the burden. The children born of such a parent, and nurtured under like circumstances, inherit the strength and soundness of their sire,—and hence the origin of that "bold peasantry," which the poet has properly denominated, "its country's pride."

This is not a captious comparison of the different states and conditions of man. It applies with equal truth to the inferior animals, and is perfectly accordant with the best established facts in physiology. There is no reason, beyond that which refers the circumstance to free air and exercise, why the wild duck should be stronger on the wing, firmer and redder in the flesh, and more vigorous and enduring, than its tame species. The wild rabbit is fleet, its muscles are ruddy and firm, and its bones dense and compact, because it respire a pure air and is unfettered and free; the tame rabbit, on the contrary, is weak, emaciated, and scrofulous, through being confined in an impure atmosphere, and having no opportunity of exercise. Keep wild rabbits as tame ones are usually kept, and they will speedily degenerate. We have traced the watery eye and the tumid belly, the listless gambol and the enfeebled limb, day by day, as these little creatures have suffered from confinement and artificial living. And thus it is with our own species: take the country child, blushing with rude health, and subject him to the atmosphere of a manufactory, and his cheek will soon lose its native hue and its laughing dimple; his eye will grow wan, and his energies will waste. Keep him long enough in toil and confinement, and, if he does not perish prematurely, he will degenerate, become scrofulous, and, perhaps, beget a progeny of cripples and consumptives. The statistics of our large towns tell us fearful truths concerning the influence of occupation upon health. We learn from them that people working in ill-ventilated rooms are not only weakly, dyspeptic, and early decrepid, but that they are peculiarly liable to fever, and to casual diseases, which, amongst such subjects, are unusually fatal. Their confinement not only predisposes to, but actually engenders, disease. Dr. Guy found that, of 104 men having less than 500 cubic feet of air to breathe, 12.50 suffered (in percentage proportion) from spitting of blood, 12.50 from catarrh, and 17.31 from other diseases; of 115 men having from 500 to 600 cubic feet of air to breathe, 4.35 had spitting of blood, 3.48 catarrh, and 20.00 other diseases; whilst of 101 men having more than 600 cubic feet of air to breathe, 3.96 had spitting of blood, 1.98 catarrh, and 17.82, other diseases: making respective totals of 42.31, 27.12, and 23.76. In another estimate it was learned that, of forty men, occupying small rooms, and breathing a hot and foul air, five had spitting of blood, six were subject to severe catarrh, six complained of indigestion, two of great debility, and one of rheumatism. Of other forty men who occupied larger rooms, and had a purer and cooler air to breathe, one only was subject to catarrh, two to indigestion, one to pain in the chest, one to nervous symptoms, one to headache, and one had varicose veins. Not one of them had spitting of blood. We can fully confirm these statements in one particular, viz., the liability of artisans to hæmoptysis, for, in making a survey, for pathological purposes, of a large manufacturing town (Birmingham), we found that, irrespective of the relative ease and labour of occu-

pations, the work-people, who were confined in atmospheres hot and ill ventilated, were, in the ratio of 7 to 1, more liable to the spitting of blood than those who worked under more salutary circumstances; and, nearly in the same ratio, was the tendency to tubercular consumption greater in the one case than in the other. And it has been conjectured, and perhaps wisely, that the more frequent deaths of phthisis in males than in females (five to four being the proportion), is owing to the former being, more frequently than the latter, exposed in numbers to the noxious atmosphere of work-shops, warehouses, and the like. It is estimated that, of subjects who die of consumption under thirty years of age, 37½ per cent. are those who live by in-door occupation, whilst, of out-door labourers, only 25 per cent. perish from the same cause; and, it is likely, that this latter class would be more rarely the victims of phthisis, if they would guard better against atmospheric variation and inclemency, and abstain from the immoderate use of stimulants. Indeed, the most fruitful source of disease amongst them seems to be their habits of intemperance, to which they are led, and often insensibly, by the nature of their employment and the facility with which they procure ale and spirits. A London drayman will consume a couple of gallons of ale or stout in a day, by a process of perpetual imbibition in moderate quantities. It is a common habit with carriers and waggoners, who journey from country villages to towns, to stop at most of the public houses on the road, both going and returning, and partake of *refreshment*, in the shape of ale and spirits. Add, to the quantity thus obtained, that which they drink at their different houses of call in the town, and the aggregate becomes enormous. In this way they will often swallow two and three gallons, daily, of ale, as variable in its age and strength, as in its amount of adulteration. But, still greater quantities of beverage are frequently consumed by harvest labourers. In Herefordshire, and Devonshire, it is not considered an excess for a man, when mowing or making hay, to drink from *twelve to sixteen quarts of rough cider in the day!* Such abuses could not possibly be endured by men engaged with in-door occupations, and yet, as we have said, the latter, abstemious though they be, are less healthy than such as are employed out-doors, notwithstanding the intemperate habits of the latter. The disparity, remarkable as it is, admits of but one explanation. The in-door labourers, as a rule, obtain higher wages, and consequently can better command the services of good food and clothing, than can the opposite class;—food and raiment, therefore, are not the only essentials to good health. It has been distinctly proved, that sedentary occupations are not to any great extent injurious, except in so far as they may be connected with an impurity of atmosphere. We may be debarred exercise, then, under certain circumstances, and be little hurt by the deprivation. What, then, is the chief cause of the injury which is suffered by confinement in ill-ventilated houses and workshops? That chief cause is *polluted air*,—in other words, a supply of oxygen gas which is insufficient for the purposes of RESPIRATION and NUTRITION.

This, and other subjects connected with the sanitary condition of towns, we shall treat more at length in future numbers of this Journal.

THE COLLEGE OF SURGEONS OF ENGLAND.

Various rumours are afloat as to coming alterations in the government of this important Corporation. It is said that the recent Charter is now acknowledged, on all hands, to have proved worse than a failure—an experiment, placing the connexion of the College with its members in jeopardy; and that Sir Benjamin Brodie avows at length that he had burnt his fingers in meddling with it. From what we have heard from various quarters, we believe we may say that the Council are inclined to recommend the inclusion of every

member of a few years standing as a Fellow, on a system by which, in a very short time, every member will receive the privilege of electing members of the Council. We are unable to say whether the Council will yet support the infusion of several new men in their body—chosen by the new system—or sanction the principle, that the Council shall be open to every member in actual practice, who shall be voted to it by the new elective body, but are inclined to hope that they will offer no strong objections to these improvements. The Marylebone Medical Association, which (by deputation) is to have an interview with the Council this day (Friday), will probably be able to give us, for next week, more authoritative information on these matters.

MR. IKIN'S REPLY TO THE CHARGE OF PLAGIARISM

To the Editor of the "Medical Times."

SIR,—In your last notice to correspondents, you state my answer to an article in your journal of the 2d Nov., containing a charge of wholesale plagiarism against me, has been *lost*: that reply, (as near as I can remember, for it was hastily written), I again forward for insertion, considering that, as you thought proper, to open your columns to an *anonymous* correspondent, signing himself "Scalpel," who took the trouble to dissect the short abstract of an Introductory Lecture, delivered by me in October, and who thought proper to term it nothing more than a "transcript," you are bound, in all *fairness*, to insert my reply, I shall then trouble you no further. I never did claim "originality" for the whole of the contents of my lecture, and this is implied by my introductory remarks, in which I state that it was "a difficult task to select such topics as should serve as a theme of attraction to the more advanced student!" Nor was I aware, that Dr. Hunter's lecture, delivered at the Westminster School, and published in the volume of the *Lancet* for 1841, had been previously published by McPhunn, of Glasgow, and delivered in 1835, till stated by Scalpel. In drawing up my Introductory Lecture, I quoted, and made use of, the *Lancet* for 1841; and this I acknowledge *twice*, and the only culpability on my part was, in not distinctly naming Dr. Hunter, in the same way as I did Dr. Hawkins; in not doing so, I at once candidly confess I am wrong, though not so wrong—nor did I make such use of his lecture—as to warrant Scalpel's "wholesale" charge, that my lecture was a mere "transcript" of Dr. Hunter's; which statement is a bare-faced, malicious perversion of the truth; and this I proceed shortly to prove. In Scalpel's quotations, he selects particular sentences, shewing, that I had quoted, and made use of, Dr. H.'s lecture; but he only gives a *portion* of a paragraph, not the *whole*, e. g.: those on Chemistry and Materia Medica. The definition of Chemistry, and other sciences or studies, taken from Dr. H., is given; but the remainder of the paragraph, the larger proportion of the remarks on Chemistry, are *entirely* omitted. Materia Medica the same. He *never* alludes to any observations on recent microscopic researches, or on the use of this instrument, or to those on the recent discoveries in Anatomy, viz.: those of Schneider, Müller, Marshall Hall, Kiernan, Todd, Bowman, &c.; or to those on the study of Comparative Anatomy (the relation of which to Human Anatomy occupied *one-half* of the lecture), or to those of a general nature, applicable to the occasion; and yet he, GOOD NATUREDLY and unhesitatingly, states, that the *whole* of my lecture was a "transcript." Now, Sir, I appeal to your readers, is such a statement, designedly and coolly made, either fair, warrantable, honourable, or true? I as broadly and distinctly beg to tell him, that he knew he was perverting the truth when he made it; what his motive was in doing so, he is the best judge! Again, your *honourable* anonymous correspondent, very cursorily, and as if quite unworthy of notice, alludes to my observation on the Medical Reform Bill, and is pleased to term them "declamatory;" whether so or not, they were true, and I conceived called for, on account of the general interest and

agitation existing in the Profession on this particular question; and as I had never stated my opinion in public on this question; this was the principal reason why the short abstract of my Introductory Lecture was published in the *Prov. Med. Journ.*, having, some years ago, taken great pains to expose the injurious effects of illegal practice by Quacks and Druggists, &c., and having published a very glaring case, which was exposed by me before a coroner's inquest.

Scalpel having stepped out of his case to cut my throat, or rather, having tried his best courageously and humanely to *dissect* me alive, I hope when he makes another such an attempt, it will not be in the dark, where the *wicked alone*, we are told, on the highest authority, love to dwell, but, that he will do it boldly, and openly, and not be ashamed of his, doubtless, distinguished name, nor longer conceal his cutting and sanguinary propensities. Then, your readers may become acquainted with *his* qualifications as an original writer, or lecturer, or *his* merits as a student and cultivator of medical science; for if he had quoted me fairly, he would also have stated, that I professed to be *nothing more* than a student in the vast field of physiological and anatomical research; for, in my concluding remarks, I distinctly state (*vide* Lecture in Provincial Medical Journal), "at all times, however, it should be held in mind, that in the comprehensive subjects they had to teach, the best and most accomplished teachers are *still students*—still, like themselves, learners; the only difference being, that the former were no longer beginners, but had made some progress in their course; so that imperfections and deficiencies were, to a certain extent, unavoidable." An "*original*" lecture, or rather a lecture containing original facts on anatomy and physiology from Scalpel would, no doubt, be most edifying to a class of young students, just about commencing their studies; but I, on the contrary, being under the necessity of making such a humiliating assertion, as that just quoted from my lecture, am content to deal with established facts, and glad to benefit by the writings and publications of others, and to make the best use of them in order to aid and instruct others; and the main point I had in view in my introductory lecture (a very small portion of which was published, as the reading of the abstract shows) was to convey to the mind of the young student a good general idea of the nature, importance, and interest of the various studies, he was about to engage in, as well as to cause him to appreciate the advantages every well regulated medical school possesses; if I did not succeed in so doing, I deeply regret it, as much as I do if I have been guilty of any injustice towards Dr. Hunter. But as Dr. H. is engaged in the same avocation as myself, I daresay he would not feel aggrieved by any ideas or observations of his being turned to a useful and instructive purpose.

I cannot conclude these observations, which, in justice to myself, I am obliged to trouble you with, without stating my belief, that the object of Scalpel's article could be nothing more, nor less, than a malicious one, and an ungenerous anxiety to diminish my utility as a teacher. My motives, be Scalpel's what they may, are well intentioned; I have been at endless trouble and research to prepare my course of lectures on General Anatomy, above thirty in number, and no new facts or theories, worthy of notice, are left unnoticed in them. And, at times, I have been vain enough to suppose I was not altogether an incompetent teacher of this particular department, though on this head, I am willing to abide by the decision of those who attend the lectures themselves, rather than on that of a cowardly critic, who stabs in the dark, and, fiend-like, chuckles at his dastardly success. Having parried his blow, as far as my case is concerned, and proved that he has not confined himself to the *truth*, and has done me gross injustice, and that his motives are not above suspicion, I take my leave of him. Thanking you for giving publicity to this reply,

I am, Sir,

Yours obediently,

J. INGHAM IKIN.

Leeds, Nov. 25, 1844

THE PROPOSAL TO BUY OFF QUACKERY.

(To the Editor of the "Medical Times.")

SIR, In your last, and preceding numbers are letters from Dr. Roden and Mr. Hacker, on the all-engrossing subject of Medical Reform; they both agree in opinion that the revenue derived from quackery is too great to be given up by the Government without an equivalent, which they propose to supply by an annual registration fee; for, although it must be generally allowed the tax ought to fall upon the public, who would benefit most by the change, yet I think the profession would not be averse to a payment of the kind to divest that part of the Bill of its main difficulty, because the advantage of the alteration in a pecuniary sense would more than compensate for the sum paid, and, more than all, the moral good that would be effected through its instrumentality by annihilating a system fraught with incalculable evils to mankind, and oftentimes entailing disease and wretchedness upon generations) would afford us through life a pleasing retrospect, and a feeling of conscientious pride, that the opportunity (and probably the only one we shall have,) was not lost for securing an inestimable benefit to our fellow-creatures.

In regard to the registering of practitioners, I incline to Dr. Roden's opinion, that "all Medical men in practice should pay the same registration fee," be it what it may; but I cannot coincide with that gentleman's views, when he says that "Really useful discoveries in medicine, &c., &c., might nevertheless, be registered for the inventor, in the same way that other inventions, designs, &c., are registered, and subject to similar payments." It is a system which would be viewed with suspicion by the public, and very naturally so, after abolishing quackery to raise a species of demi-quackery in its stead for the benefit of members of the profession, for in all probability it would rarely happen that a non-professional person would make a discovery of much value as a medicine. The proposed surveillance of the Council of Health would doubtless elevate the scale of nostrum venders and their nostrums, but it is a query if the public would entertain towards them a jot more respect for their exalted condition, than for their excluded predecessors, as it would be found a matter of no trifling difficulty with the community at large to disassociate nostrums and quackery, for what else would the registered inventions be but nostrums, and in what estimation would a nostrum-seller be held, other than as a quack, however gilded and perfumed his ware? Without being fastidious enough to repudiate at once the emolument to be derived from the registration of an important discovery in medicine, (and this is evidently the chief object of such a proposition, and one perhaps not altogether unworthy of some consideration,) would it not be preferable that the Council of Health should have the power of rewarding the discoverer, and publishing the secret, than to form an odious and unnatural alliance with quackery, and thereby inflict "a heavy blow and great discouragement" on the honour and respectability of the profession?

I am Sir,

Your obedient Servant,

EDWARD JACKSON, M. D.

Chadlesley Corbett, near Kidderminster,
November 9th, 1844.

FACTS ABOUT THE BILL.

(To the Editor of the "Medical Times.")

SIR,—The members of the profession are evidently gradually coming to their senses, and more and more disposed to act, as Sir James Graham requested, when in so frank and open a manner, he gave them the opportunity of considering THE BILL before it was discussed in Parliament. Although the Secretary of State has had to endure more wholesale badgering, more spiteful and personal attacks, than any other minister, especially from THE THUNDERER, from purely private enmity, and, therefore, we may suppose he would be ease-hardened to the squibs and petty stings of the *small fry* yet we could scarcely expect him to

undertake the improvement of the Medical Profession with such good heart, if he saw that his good intentions were met in an unfair spirit. The *Times* blames Sir James Graham for being ignorant of the profession. What member of Parliament is otherwise, literally speaking? some might say, not even excepting Mr. Wakley. But from the failures of Messrs. Warburton, Hawes, and Wakley, it became clear that no bill would have a chance of consideration, unless introduced by the Government. Sir James Graham was then induced to undertake the matter, and knowing his ignorance, his course was to consult a certain number of those men, who were generally considered amongst the most eminent in the profession. It may have happened, that in some respects these were not the best men to have consulted; they were too much aloof from their brethren, and too much inclined to believe, that the plans and the institutions under which they had flourished, were necessarily the best. Sir James Graham, however, as is well known, consulted others. Deputations waited upon him, and communicated with him by letter, from all the universities and medical corporations of the three kingdoms. He had interviews also with committees of provincial medical associations—and self-constituted representatives of the Practitioners of the Empire. It is reported that he found no two parties agree upon what they wanted, and that the conflicting interests of rival corporations were so jealously anxious to cater only for themselves, that the Home Secretary was very nearly resigning the whole undertaking in despair and disgust. The minister had also to consider not only what was desirable, but what was practicable. It is reported, that his own original scheme was remarkable for its simplicity, and perhaps, if left untouched, would have given very general satisfaction. It is said to have been as follows.—That no one would be allowed to practice in any branch of the Profession whatever, who had not begun as a general practitioner, and undergone an examination for that purpose, conducted by a Board consisting of Physicians, Surgeons, Accoucheurs, and Apothecaries. That afterwards, at a more advanced age, if the individual chose, he might proceed to any higher branch, by going through another examination before the appropriate College,—viz; if as a Physician, before the College of Physicians,—if a consulting Surgeon, before the College of Surgeons. So that all would begin alike, and the higher walks would be open to all equally, the second more extended examination being accompanied by an equal necessity for a more extended course of study. But Sir James Graham found that the powerful bodies whose interests would be affected by this scheme, were so violently opposed to it, that he was, *because of his ignorance*, obliged to yield. The English universities and those Alumni who were Physicians in extensive practice, were the strong opponents of this measure; and Sir James Graham felt sure that the great majority of each House of Parliament, being more or less connected with Oxford or Cambridge, would be influenced against him, from their readiness to protect the privileges of their Alma Mater. This led him to adopt modifications, but it is reported, that Sir James Graham would rejoice to have his original plan forced upon him, by the general voice of the profession influencing the votes of the House. It is quite right that the practising body of this country should transmit their free opinions on the matter at issue to the Government, but it is clear that the minister will be much more likely to attend to what he would see was a bonâ fide and dispassionate objections, rather than to the clamour of a factious cabal, or the disgusting outeries of a paltry knot of unknown and disappointed vagabonds, wishing to obtain notoriety by flattering the *Lancet*, and lyingly pretending to represent the respectability of the profession.

I do not wish to occupy your space by any remarks upon the various propositions of the Bill, for they ought only to be considered as propositions. But I cannot help alluding to an advertisement from the Worshipful Company published in all the journals several weeks ago—dated August 29th. In that document, the Company strongly protest against any attempt to remove the control

over the education and examination of the *general practitioner* from his own class. Now, Sir, I maintain that the Medical Bill does no such thing. The Apothecary's Company are not identical with the general practitioner, as he is and as he ought to be. The general practitioner is not in the *same class* with the apothecary. The general practitioner is, or ought to be, one well taught in every branch of the profession, competent to practice medicine, surgery, midwifery &c. How many, if any, of the Court of Assistants of the Apothecary's Company, can be considered literally general practitioners? Do not the leading ones, profess not to practice midwifery? Were they not obliged for many years, when midwifery began to be a part of their examination, to obtain the services of a distinguished physician accoucheur as an examiner in that branch? Which of them can be said to be sufficiently eminent as an Anatomist or a Surgeon, to make an examination in Anatomy and Surgery, by that body a test of competency? If it were a sufficient test, why do such a large proportion of the students pass the College of Surgeons as well, which is not required by Act of Parliament and therefore a purely voluntary addition of time, expense, and study? I think, Sir, that the Worshipful Company and the profession in general have lost sight of these facts.

I remain, Mr. Editor,
Your obedient Servant,
C. L. H. S.

November, 2, 1844.

MALFORMATION OF THE GENITALS.—Mr. Terry examined a child, aged two months, at the Northampton General Infirmary, on account of a malformation in the organs of generation. The mother, and grandmother, who came with the child, said that the external opening was closed, and the water came the wrong way, and that she was born so. At first, it appeared to be a common ease of imperforate vagina. There was, however, a little fulness, and a slight degree of prominence at the lower part of the supposed closed orifice, and, on proceeding to separate the adhesion, which required no cutting, and very little force, there was found something which looked like a penis. The parts were separated more extensively, and the parts which had been concealed more minutely examined; a glans penis and prepuce were then discernible, and the penis was complete, though confined and bound down to the neighbouring parts. The vagina was sought for, but in vain. The scrotum, with one testicle down, and the other descending, was gradually developed, and the little patient was presented as an entirely male child. There was a slight indentation at the orifice of the urethra, but the canal was impervious, and the urine passed through a little opening behind the corona glandis, just at the insertion of the frœnum preputii. There was a large quantity of loose cellular substance, covered by integument in the neighbourhood of the parts, so that even after the separation of all the adhesions, the slightest lateral pressure with the fingers gave again the appearance of a closed vagina, covering and entirely hiding the penis and scrotum as before. The case is detailed in the *Provincial Medical Journal*.

GOSSIP AND NEWS OF THE WEEK.

APOTHECARIES' HALL.—Gentlemen admitted Licentiates 21st Nov. 1844: John Rider, Charles Joseph Tomkins, Abraham Hoskins, Frederick Gaunt, Henry Smith Palmer, Thomas Watts, Leopold Beharrill Fox.

Mr. John Hilton, Lecturer on Anatomy and Physiology at Guy's Hospital, has been appointed assistant-surgeon to that Institution.

WESTMINSTER MEDICAL SOCIETY.

(Reply.)

"The *Times* of Medicine" affects to know,
That our Society's o'erlaid with "Snow."
As if of warmth he were the cause,
And only where HE shines, it thaws.
But what can he know of a spot
In which he does not place his F O O T.

Metropolitan Mortality for the Week ending Saturday, November 23rd.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	*914	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases.....	209	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	93	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	122	152	157
Diseases of the Lungs, and of the other Organs of Respiration	288	312	286
Diseases of the Heart, and Blood-vessels	33	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	61	66	69
Diseases of the Kidneys, &c....	3	6	5
Childbirth, Diseases of the Uterus, &c.	16	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	6	6
Diseases of the Skin, Cellular Tissues, &c.....	...	1	1
Old Age	50	74	71
Violence, Privation, Cold, and Intemperance!	*32	26	26

Analysis of Violent Deaths:—Fracture, 7 cases; 1 being suicide, 2 by the fall of hard bodies, 1 by machinery, 2 by horses and carriages, and 1a case of manslaughter. Rupture of the Liver, 1 case: cause not known. Wound, 1 case: suicide. Drowning, 5 cases: but whether accidental or from design not known. Hanging, 2 cases: suicides. Suffocation, 1 case: accidental. Burns, 5 cases: of which 4 were by clothes taking fire. Scald, 1 case: by drinking hot water. Poison, 3 cases: of which 2 were suicides. Overdose of Medicine, 1 case.

WE, the undersigned, hereby convene a PUBLIC MEETING OF GENERAL PRACTITIONERS in MEDICINE, SURGERY, and MIDWIFERY, practising in the City of Westminster and the Borough of Marylebone, to be held at the HANOVER SQUARE ROOMS, on SATURDAY, the 7th of DECEMBER, at Seven o'Clock precisely, for the purpose of taking into consideration the propriety of establishing an Association to protect the interests of the General Practitioner; and also to consider the expediency of co-operating with the Society of Apothecaries in the adoption of such measures as may be deemed necessary under the existing circumstances of the Medical Profession.

Robert R. Pennington.
 Ancell, Henry
 Baker, Emanuel
 Beaman, George
 Bennett, James M.
 Bird, James
 Bloxam, William
 Brown, Isaac B.
 Bryant, Walter J.
 Cathrow, William
 Chisholme, A. B.
 Chowne, C. E.
 Clayton, James
 Crooks, H.
 Dodd, John
 Drew, Walter
 Du Pasquier, C. F.
 Edwards, D.
 Fincham, George
 Freeman, Joseph
 Fuller, H. P.
 Gilder, W. T.
 Goodge, William
 Goodfellow, J. S.
 Grant, Nathaniel
 Guiseppi, Matthew
 Hawkins, J. V.
 Hobson, Nicholas George
 Hodding, William H.
 Hood, P.
 Hutchinson, John
 Jackson, Paul
 Jervis, Thomas
 Jones, Henry D.
 Keal, John
 Kell, L. P.
 Lambert, John W.
 Lavis, John
 Lucas, William Owen
 Macdonald, William
 Maclure, William
 Marson, W.
 Michell, J. G.
 Norton, Robert
 Nussey, John
 O'Connor, William
 Peregrine, Thomas
 Perry, John
 Probert, John
 Savage, Henry
 Squibb, George Jamse
 Stocker, Richard
 Tanner, Robert
 Tegart, Edward
 Tupper, Martin
 Vickers, W. R.
 Webster, George
 Witt, Charles
 York and Humby

SIR JAMES GRAHAM'S MEDICAL BILL.

MEETING OF MEDICAL PRACTITIONERS.

AT a numerous MEETING of the MEMBERS of the MEDICAL PROFESSION resident in St. Peter's Parish, Pimlico, held November 19th, at the Pimlico Dispensary, Lower Belgrave Place, to take into consideration Sir James Graham's Medical Bill, Mr. Perry in the chair, the following Resolutions were unanimously adopted.

1st.—Proposed by Mr. Leggett, and seconded by Mr. Morgan: That it is a matter of gratification to this Meeting, that Sir James Graham has introduced into Parliament a Bill, having for its object the Better Regulation of Medical Practice throughout the United Kingdom; and whilst it is ready to admit, that the said Bill contains much that is calculated to improve the condition of the profession, it cannot refrain from deprecating certain of its enactments.

2nd.—Proposed by Mr. Griffith, and seconded by Mr. Brunskill: That this Meeting views with disapprobation the proposed constitution of the Council of Health and Medical Education, inasmuch as the interests of the general medical practitioner will not be duly represented, unless a fair proportion of the Council consists of members chosen from among that numerous class.

3rd.—Proposed by Mr. Jonson, and seconded by Mr. Jorden: That this Meeting is of opinion, that the registration clause of the said Bill deserves the support of the profession, but in order to be efficient, the registering should not be voluntary, but be made requisite and essential for everyone who is permitted to practise as a medical man, whilst the list of the duly registered should be annually published.

4th.—Proposed by Mr. Thorn, and seconded by Mr. Bloxsome: That this Meeting is of opinion, that the proposed Bill of Sir James Graham, repealing, as it does, the Apothecaries' Act of 1815, and substituting no adequate protection to the great body of medical practitioners, would, if carried in its present form, be highly prejudicial to the interests of the profession, and to the public welfare.

5th.—Proposed by Mr. Ince, and seconded by Dr. Hawkey: That this Meeting deprecates in the strongest manner possible, that principle of the Bill which, by removing the stigma of illegality from empiricism, throws open the practice of medicine to every uneducated and incompetent person, as a measure most injurious to the community, and ruinous to the best interests of the profession.

6th.—Proposed by Mr. Sharp, and seconded by Mr. E. Davis: That this Meeting is of opinion, that no bill which does not assert the principles of protection to the public health, by strict examination of all who aspire to practise the healing art, in whatever department, ought to receive the sanction of the legislature.

7th.—Proposed by Mr. Meates, and seconded by Mr. Green: That this Meeting is of opinion, that an incorporation of the general medical practitioners, forming a College of Medicine and Surgery, would obtain for this almost entire mass of the profession, the rights and advantages they demand from the legislature, and it cordially concurs with the suggestions of the Marylebone Association in reference to this important principle, should the just and reasonable claims of the general practitioners be disregarded.

8th.—Proposed by Mr. John Hunter, and seconded by Mr. D. Wilson: That a memorial, prepared in conformity with the preceding resolutions, be transmitted to the borough members, with a request that they will support the objects of this meeting, and that every qualified general practitioner, resident in the parish, be requested to sign such memorial.

9th.—Proposed by Dr. Simpson, and seconded by Mr. Blanchard: That the best thanks of this Meeting are due to the Editor of the "Times," and to the Medical Press, for their powerful and able advocacy of the rights of the profession.

CHARLES RAY, Hon. Sec.

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Nose	J. Paget, Esq.	Organic Analysis	Dr. Miller.
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Osseous System (Comparative Anatomy)	T. R. Jones, Esq.	Ovum	Dr. Allen Thompson.
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December 4th, 1844.

LECTURE VIII.

On the Operation for the Extraction of a Cataract.

THE patient having been duly placed, the eye fixed, and the apprehensions naturally excited by the approaching operation having been soothed and somewhat allayed, the eye which was, in all probability, drawn into the orbit, will gradually advance, and become more prominent. The patient should be cautioned not to offer resistance, nor to strain, but to leave the eye quite loose, and entirely at the disposal of the surgeon. It has been proposed to occupy the patient's attention, by making him count 50 aloud whilst the operation is going on, or to say: *ba, ba, ba*, like a sheep, or *bo, bo, bo*, like a hypnologist; either of which sounds answer very well, provided the person thinks fit to repeat them. Every thing being thus prepared, the knife should be laid flat on the cornea with a very gentle pressure, yet sufficient to enable the patient to feel it, when it will be immediately seen, whether the eye is, or is not steady; whilst the distance across the cornea, which the knife has to traverse, is estimated. If the patient moves the eye much, this gentle application of the flat of the knife, should be repeated two or three times, until the apprehension excited by it passes off, when, if the knife be steadily passed through, it will scarcely be felt, or distinguished from its previous application to the surface. It is at this moment that the steadiness of the surgeon's hand is of the utmost importance; if it trembles in the least, he ought not to operate by extraction.

The knife should be held between the thumb and fore-finger, resting slightly on the second for further support, the thumb being straight and inclined outwards, the two fingers outwards and a little backwards, so as to allow the knife to be moved forwards, by the straightening of the fingers, and by a change in the inclination of the thumb from backwards, or outwards, to forwards and inwards; in other words, the knife is to be passed through the cornea by the motion of the thumb and two fingers, and not by any motion of the whole hand, the little finger of which should rest by its side on the face as a rest or support, although an experienced operator, having a steady hand, cares little for this assistance.

The next step, and really the first of the operation, is the most important; it is the place at which, and the manner in which, the point of the knife is to enter the cornea. It is, in my opinion, the great secret to be acquired. Some writers say it should be done one quarter of a line, others half a line, and a few a line, distant from the apparent junction of the cornea with the sclerotic. It is not however a matter of indifference. In elderly persons a semi-circular, and, sometimes, even a circular white line, can be readily seen a little way

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from the edge of the cornea; it is called the arcus senilis; and when this is situated at the upper half of the cornea, and is a semicircle, it exactly describes the incision which ought to be made in the cornea. The direction of making it is, therefore, precise as to size and situation. The great error, incommencing this operation, is made by entering the point of the knife nearer the sclerotic; and the consequence of this, is the undue escape of the aqueous humor, and the falling forwards of the iris, the great evils to be dreaded, and which will almost inevitably occur, unless the operation is begun in the right place. If, on the other hand, it is entered too far forwards, or at a greater distance from the edge of the cornea, than the usual situation of the arcus senilis, the incision will not be sufficiently large to admit of the exit of the lens without pressure and difficulty, which always tend to cause internal inflammation.

The manner of entering the point of the knife is disputed. The cornea being composed of several layers, constituting a substance of a certain thickness, there is some danger of passing the knife between the layers, and not across the anterior chamber of the eye in front of the iris, if care be not taken that the cornea is fairly penetrated in the very first entering of the knife; which accident may happen, if the anterior chamber is small, and the iris is close to the cornea. In order to avoid this error, modern authors (I believe, without an exception) recommend that the knife should be entered perpendicularly to the iris, as if the point were to be carried directly against it, but that as soon as the cornea is penetrated, and the point is in the anterior chamber, the handle of the knife is to undergo a sort of almost imperceptible inclination towards the temple; by means of which, the blade is to be placed with its flat surface parallel to the iris, across the anterior chamber; and, it is said, that the more quickly this is done, the less chance there is of the escape of the aqueous humor. To all this, I object in the most decided manner: the gentlemen, who think they do as they say, are I believe mistaken; and when they do, they do nothing but mischief. The turning, or attempting to turn the knife, generally leads to the escape of the aqueous humor, the very thing they want to prevent, and to all the evils it is most desirable to avoid. The knife should, in my opinion, be held flat, and the point ought to be introduced steadily in the same direction at the proper place; and if the operator can neither see nor feel when it has penetrated the cornea and is in the anterior chamber, the sooner he abandons operating the better. If a man has eyes, he can see when the point of the knife has entered the anterior chamber; and, if he has fingers, he will feel when the resistance offered by the cornea, is overcome. The young surgeon, instead of practising these manoeuvres, which are worse than useless, should practise on sheep's eyes, until he has acquired that tact, which will enable him to know when his knife is in the right place.

If this first step of the operation is well done, the operator may reasonably hope to be able to carry the knife fairly across the anterior cham-

ber; but he will not always succeed, however well-shaped the eye may be. At the very moment that he has penetrated the cornea, and is about to carry the knife on, and the motion should be a continuous one, the patient will often move the eye inwards: it is an involuntary motion, which the person cannot help; and as it is of common occurrence, the surgeon must be prepared, and do his best to prevent it. This can only be done by waiting, in the first instance, before he begins the operation, until the spasmodic action of the muscles of the eye has ceased; and then just before he enters the knife, by fixing the eye as much as possible with the two fore-fingers, if operating on the right eye. The upper one presses gently on the upper part of the globe; the lower one, whilst it depresses the lower lid, also applies itself to the inner and under part of the eye, by which an effort is made to counteract the turn inwards, if such an occurrence should take place.

If the turn takes place just after the point of the knife begins to advance across the anterior chamber, none but a calm, deliberate, and experienced operator will be able to finish the operation successfully. If he hesitates, the aqueous humor will escape, the point of the knife must be entangled in the iris, which immediately falls forward against the cornea, and the surgeon has nothing to do but to withdraw his knife, let the wound heal, and try again, three or four weeks afterwards. If, on the contrary, the turn inwards of the eye only takes place as the point approaches the opposite side of the cornea, the case is different, and a steady operator will readily complete this part of the operation, by carrying the knife onwards, even if the point should be out of sight; and if he can carry the point through the cornea, which is called completing the punctuation, he is safe. If the accident should not occur, and the eye remains steady, the knife will, in all probability, go safely across the anterior chamber; but if the hand of the surgeon wavers for an instant, or the patient endeavours, however unwillingly, to retract the eye, on feeling that it is wounded, the pressure caused by this effort of the muscles forces out the aqueous humor, and the point of the knife, in either case, may be even enveloped by the iris. If all these evils should be avoided, and the knife has swiftly, as well as steadily, crossed the anterior chamber, it may not be able to penetrate the cornea on the opposite side. This entirely depends on the perfection of the point of the knife, and, therefore, on it, the success of the operation rests. The inner layer of the cornea, or membrane of the aqueous humor, as it is improperly called, is much more dense and firm than the outer one, and the knife which will easily enter, will not always be able to come out on the opposite side. I have, in some cases, been obliged to use such a degree of force, (and have even then not succeeded) that I have almost felt assured that the knife, when it did penetrate the part, would inevitably go on, and stick into the nose. This greater degree of denseness of the cornea must always be reckoned upon, and in every case a proportionate degree of power must

be applied, as the point of the knife touches the inside of the cornea, that it may go through without any delay, at which moment the aqueous humour frequently escapes in part or in totality. In order to prevent this, and the evil consequences which may ensue, there must be no hesitation in this part of the operation. From the moment the knife enters on the one side, it should be carried swiftly, but not hastily, on, with a steady, undeviating progressive motion of the thumb and fore-finger, or two fore-fingers, until it passes through the opposite side, and the centre of the blade is in the middle of the anterior chamber, exactly opposite the pupil. This is the acme of perfection in operating, and must succeed; there is scarcely anything can prevent such a case from turning out well. I am aware that it cannot always be done, and that it suffices to have the knife fairly through on the opposite side; but then the after steps are not so certain. If the width of the knife be compared with the width of the upper half of the cornea, it will be seen that they are nearly equal; and, as the flat sides of the knife lie one against the cornea, the other against the iris, the latter part is kept back, and can scarcely get before the edge of the broad part of the knife; indeed, it cannot do so, and the knife is either carried on with the same motion, so as to cut its way out, or if the angle of the eyelids, or the nose, or any accidental motion of the eye upwards, prevent it, the knife must be made to cut its way out, not by one forcible effort, but by gently acting with the blade first towards the point, and then towards the heel; so that the inner portion of the upper part is divided by the blade near the point, the outer by the angle; for the cornea is often tough, and requires this sort of zig-zag, or sawing motion to be made, before it will yield; or the edge of the nail of the fore-finger may be applied to the outside of the cornea, against which it is readily divided. In all these cases, there has been a defect in the knife, either at the point, or half-way along the edge, the part which is more usually neglected, and to which great attention should be paid. The section of the cornea, thus completed, should be one perfect half, and a little more, rather than any thing less, and the incision should be at an equal distance from the sclerotica, or from the edge of the cornea, all round: but this is not often accomplished, and is of little consequence, as the cicatrix is out of sight.

The difficulty in doing this part of the operation arises from the escape of the aqueous humour; for, as this fluid lies before and behind the iris, the two portions communicating through the pupil, the sudden escape of even one-half of it causes the thin membranous iris to fall forward flat against the cornea, and, of course, against the knife, the slightest withdrawal of which allows the escape of the remainder, when the whole of the contents of the eye are pressed forward by the action of the recti muscles against the cornea. It is at once obvious, that no sharp-pointed instrument can now cross this space. If the escape of the aqueous humour does not take place until after the knife has crossed the anterior chamber, but has not penetrated the cornea, the operator must not hesitate, the knife must go on, and complete its object; for the iris will not be cut by that continued progressive motion of the knife, which will enable it to perforate the cornea.

When the perforation, or penetration, is completed, and well done, the patient and surgeon are in a very different relative situation to each other than before. The eye is almost entirely under the control of the surgeon; it moves with, and, of course, follows the motions of the knife, and if it has turned inwards, even into the very internal angle, the knife can bring it gently back to its due central position, but scarcely without the loss of the aqueous humour; and the iris is now seen upon the edge of the knife, sometimes even overlapping it: an event, however, which will very rarely take place, if the knife has been well made, and has been entered at the right spot, and the punctuation has been well completed. It is at this point that a young operator is confounded; he sees that the iris must be cut, if it cannot be moved out of the way; he thinks he has failed, becomes confused, hesitates, and does mis-

chief, or withdraws the knife and abandons his operation. If he is a clearer-headed person, he bethinks him of the directions he has read upon this subject, and proceeds accordingly; but he does not succeed one whit the better, and, in despair, accuses himself of awkwardness. He is not, however, the person in error; it is those who wrote the directions. I do not mean to say, that these gentlemen have willingly deceived the public, but I do say, it is my opinion, that they have told only half the truth. It may be that they did not know the other half, and I have no objection to its being so considered, except that I shall be set down for a discoverer of it, whether I will or not, which I am very desirous to avoid. The directions, given in such a case, by the Baron de Wenzel, and which the late Mr. Ware said, were the most important in his whole book, are: that the cornea must be gently rubbed with the point of the fore-finger, which causes a contraction of the pupil, and consequent drawing back of the iris, when the surgeon must complete the operation; but if the iris again fall forward, before this is accomplished, he must keep the finger on the cornea until it is effected, by which, all danger of the iris suddenly protruding will be avoided. It is also recommended, that the surgeon should wait a little, and allow the spasm to subside; and he may wait and rub, and wait again, and then rub again if he pleases; but he will rarely succeed, unless he does something more, and that is,—to raise the eye, or, in other words, to draw it as it were a little out from the orbit, whilst, at the same time, he presses the cornea flat against the blade of the knife. This is the other, and the best half of the secret, and without he does which, he will not succeed in disentangling the iris. A little consideration will, I think, show why it can only be done in this manner. When the aqueous humour has escaped, the cornea becomes flaccid and the remaining humours of the eye advance, or are brought forward by the action of the recti muscles, so as to press the iris against it. If the knife is between the iris and the cornea, it keeps these parts asunder, as far as its width extends, but not farther, and as it raises the cornea in every part, it would make a vacuum below its edge, between the iris and the cornea, if the iris did not rise up to fill the space, or if the air did not rush in to do it. This effect of the air is, however, counteracted by the muscles acting on the eye with greater power; and the consequence is, that the iris is forced upwards into the vacant space, and the air, if any has entered, is expelled. The iris can, however, be only elevated, or protruded to a certain extent, in consequence of its circular attachment, and of its disposition to contract towards its pupillary edge, or centre. When the cornea is well raised, so as, in some degree, to raise the eye along with it, whilst, at the same time, the cornea is pressed against the blade, the iris slides from between them, and the operation may be completed, so as to give rise to a highly-successful operation. There is now another secret to be disclosed, of yet greater importance to the young operator; it is, that the effect of an injury to the iris is very greatly overrated, and that if the operation cannot be completed without injuring it, the injury must be committed. The real truth is, that *no good operators* in this great city of London do otherwise. When the iris bulges much over the edge of the knife, it is often not possible to get it quite clear, by any effort, exertion or dexterity on the part of the operator. If any man says otherwise, I do not hesitate to say that he is in error, and that his own operations, if he has ever done any, will show it. This being the case, the operator has only a choice of evils, to proceed under any circumstances, or to abandon the operation. This last I have done, and the consequence was, that as much inflammation followed as if the operation had been duly performed; and the eye was not upon the whole in a very favourable state for a future operation, the iris being usually a little injured, and the consequent inflammation rendering the pupil less regular and dilatable than it ought to be. If the operation is on the contrary completed, the iris is slightly shaved as the knife advances, or a piece may even be cut out, but the patient will, never-

theless, have a very good eye. The cut in the iris will often not be discernible, unless the upper lid is raised to look for it, and the patient will so remarkably well, after a very speedy recovery. In fine, I may say the operation is always done in this manner by all those who know what they are about, and the eyes of persons of all ranks who have been operated upon, either in London or on the Continent, prove it. It is possible that the operators may not know what they have done, or how they did it; they may have supposed they were doing one thing, whilst they were actually doing another. I do not dispute this, or anything else, in the least, but I wish to give such information to young surgeons as will enable them to operate successfully, and to know why and wherefore it is that they are successful.

The woman they say who hesitates is lost; this I have no knowledge, but that the surgeon who hesitates in the first steps of this operation is very likely to lose his patient's eye, I am certain. There should not be one, not even the slightest stop, from the moment of entering the knife, until the cornea is wholly divided, or at least until the incision is nearly completed; for very nervous or agitated persons, I always leave the smallest possible portion of the upper part of the cornea uncut, and withdraw the knife, which prevents the sudden expulsion of the contents of the eye, and the slight division of this part afterwards is of no consequence. It may be done with a narrow, curved, blunt pointed knife, or with a double guarded cataract knife. The most difficult thing to acquire in surgery, is this happy touch, which enables a surgeon to begin and complete his operation without hesitation, and nothing but experience can give it; but the necessity for this experience becomes less onerous to all parties when it is confined to one point alone.

The cornea in some cases is large and full, which renders the operation apparently more easy, whilst in others it is flatter, and nearer the iris, the anterior chamber of the aqueous humour being smaller, and the space less across which the knife is to pass. It is in these cases particularly that a good commencement of the operation is important. There are two points to be especially attended to, the application of belladonna, and the size and situation of the incision. I formerly applied the belladonna, and in all cases so as to have the pupil fully dilated before I began the operation. I thought it aided the surgeon in making the first incision when the cornea was flatter than usual, and I think still that it does, in some degree, and I would advise its being done in such cases, but I do not resort to it in those in which the cornea and anterior chamber may be considered of a normal size. I suspect I did not know so well how to operate, and was more willing to avail myself of anything that might by chance prove advantageous. It has been supposed, when the pupil was fully dilated, and the inner edge of the iris was drawn down under the outer or the circumference of its attachment, that it would fall forward on the edge of the knife; this is an error, for the moment the aqueous humour escapes from under the knife, for that which escapes from above is of little consequence, the iris instantly returns to its ordinary situation, the effect of the belladonna being removed by the evacuation of the aqueous humor.

The second point is that the size and situation of the incision is of the greatest importance. It should include nine-sixteenths of the whole cornea, and this does not make a large flap, when it is considered, that the point where the knife enters, and where it comes out on the opposite side, are at a greater distance from the apparent junction of the cornea and sclerotica, than is usually described to be proper. If somewhat less than eight-sixteenths of the cornea are cut, the ninth sixteenth part acts upon the surface of the lens like a band drawn across it, and keeps it steadily fixed in its place, that it will sustain considerable degree of pressure made on the under part of the eye, before it begins to move from its place. The pupil cannot dilate so readily, and the lens is rather forced through, than otherwise, bruising its edge, and bringing with it a portion of the pigmentum nigrum from

inner surface. This pressure should always, possible, be avoided, inasmuch as it is often more injurious by causing a sudden instead of gradual expulsion of the lens, and with it, in probability, a discharge of the vitreous humour. Inflammation of the internal parts follows the removal of a lens, when it has been accomplished in this manner. It is, therefore, for many reasons, a matter of great consequence that this incision should be made sufficiently large in the first instance.

After each step of the operation, or the introduction and withdrawal of any instrument, the eyelid should be allowed to fall, and the patient to rest for a minute or more, if necessary, the operation being one requiring coolness on all sides. The division of the cornea having been completed to its due extent, the next thing to be done is to divide the capsule of the lens, unless the action of the muscles has forced the lens out, in which case it will sometimes do, with a portion of the vitreous humour. The division of the capsule is effected by introducing the hook under the capsule made in the cornea, and between it and the iris, until it reaches the pupil. The end of the hook, forming a right angle with the shaft, is introduced on its side, the point being backwards, so that it cannot catch or tear anything, but it has arrived opposite the centre of the pupil; when the point is to be turned towards it, several slight scratches are to be made in the capsule in a circular, or in different directions; the hook is then to be turned on its flat side, with the point reversed or downwards, in which state it can be easily withdrawn without entangling the capsule. During this part of the operation, a bright light should not be allowed to fall on the eye, as the pupil will contract, and offer some little impediment to its performance. The lid need not be allowed to fall after the removal of the hook, as the patient shows symptoms of restlessness, it should be done; if he is quite quiet, the lid may be allowed to fall, but not increased pressure of the muscles cause the opaque lens or cataract to advance, and will ultimately expel it without any assistance, provided the capsule has been sufficiently divided, so as not to offer any resistance, and the incision in the cornea is large enough to allow a free passage through it. The other end of the hook, to which the hook is affixed, called the eye, may be used to assist the lens, if it appears wedged in the incision, or otherwise impeded from progress outward, or the hook itself may be pushed into it; or if any portion of it or of the capsule should be soft, and is separated from it, any blood should be effused from a wound in the iris, it may be brought away by it, and this should be done with great care and gentleness, the action of the lid being regulated by circumstances.

When the lens will not advance under ordinary circumstances after the capsule has been duly divided, there are two points to be attended to, as to the impediments to its progress. One is a deficiency in the extent of the incision in the cornea, the other an insufficient rupture of the capsule. If the lens should be large, it cannot pass through a small opening, and it will not even be forced from its situation to come through one which is not large enough to allow it to pass, if drawn through the hook.

When the lens does not begin to move from its situation, after the capsule has been torn, the surgeon must satisfy himself that the incision in the cornea is sufficiently large; or if it is not, he must enlarge it. He should be equally certain that the capsule is sufficiently torn through, by repeating the operation; when, if there be nothing to impede the advance of the lens, it will be seen to rise from its situation, its upper edge gradually passing through the pupil and sliding over the iris, unless the internal incision is not sufficiently large, when it could be assisted by the hook, or curette, in its expulsion, the lid should be allowed to fall.

If the flap made in the cornea should by any means be turned downwards, it must be replaced in its situation by the end of the flat probe, when the lid is again raised.

The lens should tilt forwards a little, and gradually ascend, although it cannot come through

the incision, this is easily enlarged and without any difficulty with the point of the cornea knife, the lens being a sort of protection to the iris unless this should be brought outwards with it, in which case the incision is much too small. These are very delicate operations and must be done with great gentleness and dexterity to succeed, and the eyelid should be allowed to fall after each and any attempt which may be made, in order to prevent a spasmodic action of the muscles from uneasiness.

If the incision in the cornea is much too small, of which the operator can readily judge, the lens will not ascend on a reasonable degree of pressure being made with the point of the fore finger through the under eyelid against the lower part of the eye, such pressure not being directed backwards into the orbit but diagonally upwards. The incision must now be enlarged at one or perhaps both ends, and I do this generally by a little touch at a time with the point of the knife used for dividing the cornea; or if the incision is much too small, the guarded knife is to be preferred, to the exclusion, I am of opinion, of all others, and even of scissors, of which I have had many kinds made, although none have answered to my satisfaction.

The lens does not however always come out so easily and regularly. It sometimes happens that instead of rising up by its upper edge, the vitreous humour, which appears black because it is transparent, and allows the black pigment beneath to be seen through, is perceived pushing forwards between it and the iris. Nothing can prevent a portion of this vitreous humour being protruded and expelled, and no attention need be paid in order to obviate it, for it cannot be done. But attention must be paid to the fact, that its expulsion under pressure will not in general be accompanied by that of the lens, which, having lost its support, will sink down towards the bottom of the eye, and must infallibly cause its destruction by inflammation, if not removed. The surgeon aware of this circumstance, and knowing that pressure of any kind, that even the mere action of the muscles, will cause the expulsion of the vitreous humour without the lens, passes either the large or the small hook through the vitreous humour, which begins to escape when its enclosing membrane is pierced by the hook, the point of which is to be fairly stuck into the under part of the lens, which is to be drawn out with it. A portion of vitreous humour must of course escape, it cannot be prevented; it was inevitable from the first; but the great object, the extraction of the lens, has been attained. If the surgeon hesitates, and does not calmly and steadily introduce his instrument, and hook the lens at once, the vitreous humour begins to escape, the lens sinks, and the eye will be lost, if he does not instantly pass the hook through the pupil, and hook the lens, as he would catch a fish with a landing hook. There is no alternative, it must be done, or the eye will be destroyed.

It sometimes happens that the lens is suddenly expelled, on the incision being completed, by a spasmodic action of the muscles of the eye, and with it a great portion of the vitreous humour. I once saw the lens violently forced out, and the vitreous humour with it, and it appeared to me, as well as to the operator, that the whole of it was discharged, nevertheless the patient recovered a fair degree of sight. This case taught me how much might be lost, without the eye being destroyed, and I soon learned that a great part might be lost, without any inconvenience ensuing. I apprehend that it is better to lose a fourth or a fifth part, than an eighth, although it is still better to lose none.

The loss of a portion of the vitreous humour has been a surgical bugbear in doing this operation.

It is always better that it should not take place, but it is not of such material consequence if it does; the principal inconvenience accruing from it being an irregularity of the pupil, which does not in many instances impair vision. It is however an evil, but it is also one which happens very frequently in the hands of the best operators, and cannot be avoided. It sometimes occurs from a change of structure, which has taken place in it, and in the attachment of the capsule of the lens to the membrane which surrounds it; a change which

may be in some cases ascertained, but which in others cannot be known.

The vitreous humour, being a more consistent substance than the aqueous humour, forces the pupil upwards, in the direction of its passage out of the eye; whence it is not easily induced to return to its proper situation; whilst a portion of the vitreous humour is apt to remain between the edges of the cut part of the cornea, and prevent their early and complete union. If a very small portion of vitreous humour only be lost, it is usually followed by a severe inflammation; if a larger quantity be lost, there is usually less. The derangement which is caused in the mechanism of the part, and which must be followed by inflammation, being compensated by the loss of matter, allowing the vessels of the enveloping membranes to enlarge with greater facility; whilst the secretion which takes place to fill up the eye, and which is accomplished in a few hours, in all probability tends to diminish the inflammation.

The irregularity of the pupil, which occurs from the sudden expulsion of the vitreous humour, and from its resting on or adhering to the iris, is neither easily nor generally overcome; the pupil is drawn in the direction in which the expulsion or evacuation has taken place, and usually remains more or less in that situation. The best method of causing its return to its natural place, is to allow the lid to fall, and then to rub it very gently with a soft and wet sponge for two or three minutes, which often brings the pupil very nearly back to its central position. I have seen cases in which little or scarcely any deviation from the proper situation of the pupil has taken place after an evacuation of the vitreous humour; but it is more usual for it to remain drawn upwards or downwards, as the incision may have been made, constituting principally a defect in the appearance of the eye, which persons on recovering sight do not usually much regard, or lament. A greater inconvenience arising from the evacuation of the vitreous humour, is, that a portion interposes between the cut edges of the cornea when they are supposed to be placed in apposition; and, whilst it prevents a rapid union between these parts, also tends, by allowing the newly secreted aqueous humour to escape, to draw the iris into the line of the incision. If this takes place, the iris adheres to the cut surface, the pupil is permanently and more completely drawn in that direction, and the anterior chamber of the aqueous humour is less perfect, both in shape and appearance, in consequence of the cornea and the iris being brought nearer to each other. This inconvenience, arising from the interposition of the vitreous humour between the edges of the incision in the cornea, is to be avoided, as far as it can be done, by carefully removing with the curette or flat probe any part of it which can be seen, and by gently rubbing the eye in the way I have directed, in order to cause the pupil to return to its proper place.

The last point of importance in the operation, is to place the cut edges of the cornea in apposition, and this should be done most carefully. In many cases it is best effected by a gentle friction on the lid; in others, the cornea will require to be replaced *in situ* by the end of the flat probe, but in all, it must be done so that there is no appearance of separation between them; and the operator should satisfy himself of the fact, before he desires the patient to look upwards, and close the eye for the last time.

I have now drawn your attention to difficulties which you had not, perhaps, anticipated in so apparently trifling an operation. It is satisfactory to know that they are almost always avoided by a successful first incision.

J. F.

UNIVERSITY OF LONDON—DOCTOR OF MEDICINE, 1844.
—First Division: Edward Ballard, University College; Joseph Hullett Browne, Guy's Hospital; John Jones Davies, London Hospital; Thomas Inman, King's College; Wm. Jenner, University College; Geo. Johnson, King's College; Fredericke Robt. Manson, ditto; Edw. Meryon, University College; William Augustus Raper, ditto; George Augustus Rees, St. Bartholomew's Hospital; John Snow, Westminster Hospital; Stephen Henry Ward, London Hospital; Edwin Wing, School of Physic in Ireland.—Second Division: Patrick Martyn, School of Physic in Ireland.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

Every thing, therefore, leads us to believe, that the convolutions in the special organs of the sensations and memory—the brain—must obey the stimulus they supply to it; it must form determinations, and execute, or cause them to be executed; in a word, it must will, and the will must act. Now, one of the facts the best established, both by experimental physiology and by clinical observation, is this, that the will is one of the chief properties of the cerebral hemispheres.

Following up our analysis, we may affirm that the brain is the organ of the sensations, of the memory, and the will. But the will, or the volitions, as M. Flourens, calls them, are acts much less simple than they seem to be, and it becomes a question, what is the will proper to the hemispheres of the brain, and where is its seat?

It has been shewn recently that, in man, the white substance, which forms the centre of each hemisphere, exercises a decided action on the movements; nay, it has been regarded as one of the principal organs of motility. In fact, in sound physiology, the will, and cerebral motility, are inseparable; and although cases of hemiplegia may be quoted, in which patients still retain the power of willing movements without that of executing them (which at first sight would seem to establish a distinction between the motility and the will), it is easy to demonstrate that the will, thus acting, proceeds from the hemisphere remaining healthy, and not from the one in which motility has been destroyed; and as the sound side has no action on the paralysed side, it follows, that those patients possess the will without power of execution. This, in our opinion, is the true explanation of a fact, which establishes still more strongly the close union in the brain between the motility and the will, and hence also, we consider that their seat is the central white substance of both hemispheres.

The structure and arrangement of this substance in each hemisphere explain the action of the will over all the movements directly dependant on the encephalon. This central white mass being formed by the expansion of the fasciculi of the spinal marrow, which throughout their course are intimately connected with the nerves of the limbs, with those of the senses, and with almost all the cerebral pairs, it follows that the will exerts on the one hand a direct action on the muscular organs, the senses, all modes of expression, gestures and speech, while, on the other, it commands the functions of the surface of the brain by the fasciculi which it sends off in every direction and to all the convolutions.

In the view of a physiologist, attention is simply the will dwelling on a sensation, and, in anatomical language, the central white substance acting for a time on one or more of the leaves or lamellæ of the convolutions. Thus the will commands the memory, as it does the movements and the dispositions, and this generality of action is in conformity with the generality of the relations of the white substance.

With this arrangement in view, it becomes less difficult to explain the variety of effects resulting from alterations of the brain according to their seat; and which, up to the present time, has given rise to so many conflicting opinions, and contradictory suppositions. Clinical facts have been appealed to, for localizing the action of a given portion of the brain on speech, the motions of the limbs, &c.; other facts were adduced to disprove any such action; and all this was inevitable; because the function of each of the hemispheres is a question of entirety and not of detail: their structure representing that of the whole cerebro-spinal axis; and their diseases, therefore, must

represent those of the entire cerebro-spinal axis, with all their symptoms, according as they affect the fasciculi sent to the hemispheres, and to their communications with the different nervous centres.

I had under my care, at Bicêtre, a man with all the symptoms of chronic myelitis, with fixed lancinating pain in the lumbar region, paralysis of the right leg, insensibility of one-half of the abdominal walls of the opposite side, and paralysis of the rectum and bladder. Everything seemed to support the diagnosis of a chronic disease of one-half of the lumbar spinal marrow, and the treatment was directed accordingly. At the autopsy, the spinal marrow was found to be perfectly healthy, and, in fact, the only part of the brain that presented lesion was the upper portion of the right hemisphere, where a single convolution was changed into a dark, lardaceous substance, resembling schirrus, and from which a pedicle descended for an inch and a half into the white substance. The system of positive localizations must be erroneous. In each of the hemispheres, lesions produce disturbance of function in direct relation to the distribution of the fasciculi that are diseased.

Thus we have, in the hemispheres, perception of sensations, memory at the periphery, and will in the centres, and this will presides over the motility as well as over the other operations of the brain; and voluntary motility, therefore, is an act or function of the brain. But what does general pathology of the brain show in reference to the sensations, memory, and will? Observe the progress, frequently so rapid, of paralytic demency; it begins by confusion of ideas, momentary loss of memory, which indicate commencing alteration in the lamellæ of the convolutions. The disease advancing, the will is enfeebled and voluntary motility is impaired generally; the lesions of movement are shewn in tremor, inertness, the relaxation and semi-paralysis of the muscular system, and of the tongue especially. We find the motory and sensitive powers deeply affected; the senses are dull, and the cutaneous sensibility is abolished, wholly or partially. Here again pathological analysis gives us results similar to those obtained from experiments: the sensations, memory, and will are affected in the same way in the diseases of the hemispheres.

Speech is affected in the same way. We have already stated that there was good reason to believe that the faculty of articulating sounds was a function peculiar to the corpora olivaria. These organs are wanting in animals, but are large in man, and are reinforced at their centre by a grey substance, which gives origin to the nerves of the larynx, the tongue, the pharynx, and face. But the olivaria, like all the other nervous centres, are subject to the direct action of the cerebral will, and, whenever this will, or voluntary motility, is altered by a morbid state of the hemispheres, its effects are felt in the olivaria, as well as in the nerves and muscles they supply, and in all the other nervous or muscular organs. Nay, these effects proceed still farther, as shown in the atony, or paralysis of the organs of deglutition, the œsophagus, intestinal canal, the bladder, and the sphincters; the cerebral, or intellectual acts are also impaired, for these patients are incapable of attention; their will can no longer be fixed on any sensation, or remembrance; and from this inertness of the will, they are no longer capable of reflection, or of forming ideas; and we thus see at a glance to what a small number of words and faculties physiology reduces all the distinctions and all the confusion of metaphysical language; speech, in reality, is but a mode of expression of the sensations, just as much as gestures, handwriting, or the play of the physiognomy. Speech is expressed by the nerves of the corpora olivaria, as gestures are by the cervical nerves, and as the play of the features is by the trifacial nerve; and no one has yet dreamt of looking for a special lobe of the brain for any of these faculties.

In man, therefore, the functions of the hemispheres are to perceive sensations, to retain the image or recollection of them, to express them through the will, which has the power of reproducing, combining or fixing them, for a shorter or longer time, on these hemispheres. Thus, the

distinctive character of cerebral action is the eminently voluntary: the motility which depends on the other nervous centres, as we have seen by reference to the spinal marrow, and the cerebrum is only demi-voluntary; and that of the matter of nutritive life, the heart and uterus, is entirely beyond the influence of the cerebral will. Local or general alterations of the brain produce local or general lesions of the intellect, memory, and sensibility; and these lesions are so varied, only because of the great diversity and number of the ramifications of the fasciculi from which the hemispheres are formed.

We thus see that the will performs its part in all the actions of the brain, which is continually excited and active, and which, consequently, for its reparation, requires intermission and repose. Sleep is but a profound and regular interruption of the functions of the senses and the brain, and of the will and voluntary motility especially. Fatigued by the labours of the day, the encephalon falls at night into a state of extension; on the contrary, the entire visceral system then resumes a greater activity; the pulse becomes more frequent, the face flushed, the conjunctivæ injected, the blood is congested in the brain, and the nervous centres are compressed. Opium, by producing congestion of the hemispheres, is added with the same effects. At a more advanced period of the night, the phenomena are no longer the same; the pulse is slow, the face pale, the visceral system, in its turn, becomes depressed, the brain is freed from congestion, and again refreshes itself; it awakes again at the slightest excitement.

If, in the course of the day, the brain has received any vivid impression, if the sleep is disturbed by a bad digestion, or by visceral excitement, the nervous centres are insufficient to break slumber, such as hunger, the genital orgasm, or other internal excitation, dreams are produced, and these, notwithstanding what is said to the contrary, bear a relation more or less direct to the cause in which they have originated. It is then that impressions perceived by the lamellæ of the convolutions upon the scene, but without order or connection, because they are no longer under the government of the will. And thus it is why our dreams to us as realities, and become more connected and less fantastic towards morning, when the brain will be on the point of resuming empire—dreams give place to reveries.

But there are also cases, although rare, in which voluntary motility is aroused while the patient continues, and external acts and motions are performed. This is the state of natural somnambulism. I have seen some of these at the Salpêtrière; on one occasion, I met a patient half-dressed, walking slowly along the building, her eyes closed. I followed her till she re-entered the dormitory. She felt her way by the wall, and it was only with difficulty that she turned any obstacle. At such times, during this state, one of the senses becomes aroused, while the others continue to slumber; then hears what is said, and gives answers; when he awakes completely, he is not conscious of what he may have said.

Dreams, like the morbid states of the brain, help us in the analysis of its functions, and only in this point that they can interest us. In partial sleep, they tend to shew, in stronger terms, that isolation of the cerebral functions from sensations, memory and will, the whole of which forms the intellect; they demonstrate the identity that exists between the recollection of the sensorial acts; the vivacity of the impressions on the brain: reactions which are sometimes so strong, that some women, labouring under mental alienation, are fully convinced that they have had connexion with man, and that this sensation becomes the cause of a fresh attack of delirium; they serve to prove the sincerity of persons labouring under hallucinations, the existence of visionaries, and to shew, in the minds of the pious and rational, that conflict between education and natural desires which ceases during sleep; thus abandons them in idea to erotic attacks, in which they grieve when they awake: the will abdicates its functions. Sleep, too, may degenerate into disease; I have now under my care a young person, who drops into sleep for

every hour. These attacks of somnolence, as often as 25 or 30 times during the day, are characterized by the most perfect calm; for a few minutes, her consciousness returns, and she resumes the conversation where she left off. The explanation of the phenomenon does not seem to be the soporific state is the effect of communication of the hemispheres, are we to assume that the functions, so frequent and of such duration, do take place?

The functions of the brain have their regular periods of repose, they may also, on the other hand, be excited to high activity and superexcitation, depending on what are named the passions. We should, however, not dwell on this point at present; it may be useful to indicate here a more physical division of them, than any that has been hitherto.

Instead of establishing a distinction on mere grounds of repose, we say that we ought to admit, intellectual passions, passions of affection, and passions of aptitudes. Every passion is but the vivid exaggeration of one of these three classes of feeling. The passions of the intellect are divided into those that relate: first, to the passions of emotion, surprise, astonishment, joy, grief, and, secondly, to the memory: regrets, recollections; and thirdly, to the will: obstinacy, perseverance, indecision, abnegation.

Passions of affection, are: love, self-love, jealousy, envy, gratitude, and all modifications of sentiment which impels us to love, or to live. Passions of the aptitudes are marked by all singularities designated as character; that is, by a mode of being, thinking and acting, less in contrast with that of ordinary life. These passions have one effect in common, and that is to exalt or depress the whole action of the system, and, as a consequence, that of the heart and viscera; singularities, and depravations of character, are more calm, although in no respect rational.

The same may be said of the aptitudes, or individual dispositions, which may be the result of the conformation, born with the individual, or modified by education and by habit. Gall had no success in proving them to be often hereditary, but certain qualities and talents seem transmitted from generation to generation; perfectly distinguished these original aptitudes from what were called, before his time, the ideas. But he was wrong* in assigning a separate organ to each aptitude, most of which are general as will or memory. The aptitudes must not be considered as the product of the organs, but as modifications in the functions common to the intellectual operations. They are especially upon our social conduct, and upon our relations with our fellow-creatures, the objects amidst which we live; they therefore, our mode of feeling, and may generate into passions. The study of the passions, in their relation to the conformation and arrangement of the encephalic organs, is yet in infancy, and its true rudiments are to be sought for, in the first instance, in the lower

we wish to make a physiological distinction between the aptitudes and instincts, which are always confounded with each other, the aptitudes should be reserved for those that are acquired by education, and instincts for those that are hereditary, original; we should then

all, in laying the foundation of a system, finally disposed of the jargon of the old physicians, could have had no idea that he had completed this mighty work. I have, I heard him say, repeatedly, that much was to be learned by future observers; and our author happily verifies Gall's opinion. The venous and internal convulsions were deeply studied by him, and he it was who led the way to others now are following so beneficially. The importance of the nervous centres, from the experiments of modern physiologists, and the views of M. Pinel especially, can no longer be denied. The new ideas, however, present no objection to the ideas of Gall; they are, indeed, the development of these ideas.—Translator.

define the instincts as organic dispositions, giving rise to regular acts, but frequently involuntary, and differing from each other according as they arise from the viscera, or from the encephalon; and hence two species of instincts.

The visceral instincts are the result of visceral wants; as hunger and thirst relate to digestion, the want of breathing, and the movement it excites, the instinctive cry of pain, or danger, belong also to that profound and ever watchful harmony of the organization, which confounds the internal and external organs in the same want to live.

The encephalic instincts are, doubtless, hereditary, and the uniformity of instinctive labours performed by all the individuals of the same species proves it sufficiently. In animals, moreover, these instincts are susceptible of acquiring such a degree of perfection as to place them on a level with the most profound acts of the intellect. And thus, the species, most remarkable for an admirable industry, live under a common protection; birds of passage, that fly in flocks, know how to arrange themselves in a straight line or circle, to break the force of the wind, and when they alight to place sentinels for their protection. In acts so wisely combined, the instinct is nothing else than intelligence, or encephalic action of the highest order. When, also, we see the wood-piercing louse; how each of them, springing from a larva, and without having ever seen its mother work, finds the material for its construction, hollows out a habitation for a fresh family, there to deposit with every egg the nourishment required for the complete development of the larva; we cannot help referring such a concatenation of foresight, care, and attention to a purely animal instinct; but, in its very humbleness, this instinct is so great, so stupendous, that an attentive observer cannot refuse to assign to it the highest rank amongst the most complicated intellectual phenomena, or to regard it as a cerebral operation, the more profound, as it is primordial, spontaneous, and unassisted by education. And this, we must acknowledge, is one of the solemn lessons, which the comparative study of the nervous functions holds out, to humble the presumption of the human understanding.

In the state of civilization, the instincts, born with us, are subject to all the influences of the times, the men, and the conditions in the midst of which we live. These instincts give way before more powerful phenomena,—the propensities. Amongst these propensities, those of vanity and pride, and those of destruction, are the most important to be studied, from the fact that they are liable to degenerate into ridiculous or atrocious monomanias, and these, too, the more dangerous, as they sometimes shew themselves without any very apparent intellectual disorder. We shall speak of this subject, when we come to consider these perversions in their connection with certain developments of the brain, and their influence in the production of insanity.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 154.)

Of the next case, I shall merely give an abstract, on account of its complicated character, and the length of time over which it extends.

E. F., æt. 28, pale; countenance expressive of much depression: married nine years; never pregnant.

August 21st, 1841.—Suffers intense pain in the catamenial periods, especially in the left iliac region, extending from the kidney to the groin, with occasional darting pain in the uterus. Catamenia very sparing, and, generally, not until she has passed three days of intense suffering; much gastric and hysterical derangement; severe pain of limbs.

Exam. per. Vaginam.—Os uteri distinctly pervious; cervix rather painful to the touch.

Always menstruated naturally and regularly

before her marriage. Two years ago had a severe fall on her left side, followed by inflammation of the left kidney, for which she was blistered (11) producing severe strangury; some sort of dilator after this appears to have been used to the os uteri.

I put her upon a general course of tonic and alterative treatment; leeches were applied to the anus to relieve uterine congestion, and to assist the action of medicine on the torpid chylipoietic viscera.

May, 1842.—The os uteri had become engorged, swollen, and soft, with superficial bleeding granulations, which were touched by lunar caustic with great relief.

In July, the os uteri was again leeches, with relief; she was put on the use of sarsaparilla. Still, although the general health (digestion, bowels, &c.) had on the whole improved, the severity of the dysmenorrhœal attacks, and the lacerating pains kept her weak, and in much suffering.

In the beginning of November, on account of pain in the left kidney, I was induced to examine the urine, and found it with considerable excess of urea, which continued to the end of the month, although the sp. gravity was as low as 10.20.

In the beginning of December, on account of the general derangement of health and pain of limbs, I ordered her:—

R Potass. iodidi gr. v., liq. potassæ m x. ex decoct. sarzæ co. t. d.

R Pulv. ipecac. co. gr. x. o. n.

The pills confined the bowels somewhat. In a fortnight, the excess of urica was scarcely perceptible, and a slight show of catamenia (the first during the last four months) took place. At this time she caught a severe influenza or cold, which assumed much of the rheumatic character, especially in the pains about the pelvis; her general health still continued to mend.

Towards the end of January, 1843, the mixture of iodide of potassium and sarza was discontinued; there was still a good deal of gastric derangement, and she was ordered nitro-muriatic acid with infus. gentianæ co.

February 9th.—The os uteri was examined with the speculum, and some fresh granulations touched with caustic. A scanty appearance of the catamenia, but of a much better colour, took place on the 11th, after an absence of seven weeks; the discharge relieved her greatly, and the general health improved.

Towards the end of February the urine was still of a very low specific gravity (10.13); it was opal, and showed a suspicious appearance of serosity. Copious traces of muriates of soda and ammonia were also observed. These symptoms of renal irritation indicated by the urine were confirmed in the next report.

March 4th.—Much pain in the region of left kidney, extending downwards and forwards into the left thigh and leg; frequent desire to pass water. These pains, she says, remind her of what she suffered three years ago, when she had nephritis. Omitt. mixt. gentianæ co. c. acid. nitro-muriatico.

R Extr. gentianæ, extr. hyosc. aa. gr. v. o. n., lin. saponis c. opio lumbis.

This treatment relieved her greatly; the general health continued better; the characters of the urine instantly improved; its sp. gr. rose to 10.23; it was strongly acid, with a small quantity of lithate of ammonia, and the proportion of the mixed phosphates was again natural; although the opalescent appearance, and copious epithelial matter, still indicated the presence of renal irritation.

18th.—Slight molimina menstruationis, with a scanty discharge of brownish fluid, accompanied with severe darting pain, and followed by much headache. The motions became very unhealthy, being either dark or clay coloured; and she took two doses (gr. v.) of calomel on alternate nights. The urine had relapsed considerably in its unhealthy characters, being again at 10.13, its opalescent appearance increased, and a dubious trace of albumen on boiling. The phosphates, also, were very sparing.

April 1st.—Although the general health ha

much improved, the symptoms of subacute inflammation of the left kidney were still more marked, and she suffered greatly from rheumatic pains of her limbs. Eight leeches were applied to the part, and I ordered her 3j doses of extr. of taraxacum with milk and lime water. The leeches seemed to reduce her very much without relieving the pain to any great extent, but the urine rose to 10·26½, clear, dark orange, acid, much epithelial matter, with a thick sediment of lithate of ammonia, and copious phosphates. The nitrate of silver was again applied to the os uteri, and the following day a slight show of catamenia took place, of a natural colour, and with less pain than usual.

22nd.—The kidney again showing symptoms of derangement; urine at 10·11, opalescent, orange, much epithelial matter and sparing phosphates. Leeches were renewed to the region of the left kidney, apparently without relief to the pain, but the urine again rose in its specific gravity to 10·25, orange, strongly acid, with copious phosphates, especially of lime. She continued the taraxacum, and returned to the gentian and nitro-muriatic mixture.

May 20th.—Her symptoms now were chiefly those of gastric derangement. Very little pain in the region of left kidney, and with the exception of a large quantity of epithelial matter, the urine was natural.

June 24th.—The granulations of the os uteri were again touched with nitrate of silver, on the 20th, and a slight show of natural coloured catamenia has appeared this morning. General health improved; urine sp. gr. 10·16; quite natural.

From this time her health continued better; the only troublesome symptoms were occasional, sharp, rheumatic pain in the right shoulder, with much pain and pricking of urethra after passing water. The catamenia amounted only to a show, and were attended with much pain. The urine (with one exception, when it was opalescent, 10·11, and with scarcely any phosphates) was, on the whole, nearly natural.

In the beginning of September, her only complaint was of the rheumatic pain, for which I added some tinct. iodin. to an effervescent draught of potass. tart., which she took three times a day, and returned to the use of the taraxacum, which had been discontinued for a time. This was at a halfway period; the urine passed at night was rather high coloured, 10·20, acid; copious epithelial matter; a slight trace of urea; the triple phosphates natural in quantity, but the phosphate of lime very sparing.

September 16th.—Catamenia appeared yesterday with less irritability than usual; it is sparing, and at present dark; much improved in health. Omitt. haust. sodæ tart. c. tinct. iodin. Rep. taraxacum et liniment.

R. Pulv. guaiaci, magnes. carb. aa. gr. x. om. mane ex. aquâ.

The next catamenial period was attended with much pain, both in the pelvis and left lumbar region, and also in the limbs; the discharge was very sparing. The urine, passed at night, showed much epithelial matter; its sp. gr. was 10·26; there was a slight excess of urea, and the phosphates very sparing; eight leeches were applied to the left lumbar region; the guaiacum and magnes. powder was discontinued; she continued the taraxacum, the haust. sodæ tart., and the liniment.

The period at the beginning of December was very unfavourable, with much derangement of the general health. Numerous granulations on the os uteri were again removed by caustic, the application of which brought on a return of the catamenia a week before the expected time. Although the discharge was very sparing, it was much improved in colour, as was observed after the previous applications of the caustic. The urine now was in a highly deranged state, being neutral or alkaline, opal, loaded with epithelial matter, sp. gr. 10·21, and doubtfully serous.

In February, 1844, on account of increased pain and other symptoms of congestion in the left kidney, leeches were again applied with relief. There was great gastric derangement; the menses continued unhealthy and sparing; I

tried the iodide of potassium in sarsaparilla without any seeming benefit, and returned to the use of the taraxacum night and morning, and the gentian and nitric acid mixture during the day, with improvement to the condition of the urine. A small dose of calomel was given at the beginning of March, on account of the unhealthy evacuations, with much relief, and she continued the above medicines with evident benefit, the condition of the urine still improving. This amelioration lasted through March and April until the beginning of June, with the exception that the phosphates of lime were throughout very sparing; it increased to merely a trace of lime on the first of June, and now copious crystals of muriate of ammonia showed the presence of inflammatory action still existing in the kidneys. She commenced taking 3ss. doses of the liq. calcii chloridi in infus. gentianæ co. three times a day, which was afterwards combined with an equal quantity of infus. sennæ eo.; the linimentum camphoræ co., with tinct. opii to the loins was continued, and at the end of June the urine had become nearly natural. At this time the system seemed to make a more than ordinary menstrual effort, but without success; the succeeding half-way period was equally well marked, and as there was much debility she bore the use of tonics for a few weeks with apparent benefit. Towards the beginning of September, her old rheumatic symptoms returned, although, in other respects, the general health was much improved. During this month, she applied leeches twice to the region of the left kidney, on account of increasing pain in this direction; the sp. gr. of the urine was very low (10·08), and it was loaded with epithelial matter. Much relief was experienced from the leeches, and she returned to the use of a mild tonic, viz.: nitro-muriatic acid with gentian. The system began to renew its menstrual efforts more powerfully, but in a less regular manner, as seen by the following report in October.

October 4th.—Severe pain of back came on, a week ago, attended with violent retching, and severe darting pain in the uterus. This attack was followed by intense pain of occiput and neck, which distinctly alternated with the pain in the back, coming on in proportion as the pain of back diminished. It is full six months since any discharge has taken place at a menstrual period. During this attack of cerebral congestion, she applied cold lotion to the head, and put her feet into hot water, which relieved the headache somewhat, but brought the pain again into the back, with violent aching of the legs. She had difficulty of speaking whilst the headache lasted, any movement of the tongue or jaw causing pain. Bowels, during the attack, were very confined.

8th (*Vespere*).—Has had slight premonitory symptoms of a menstrual period; the occipital headache was relieved when they came on.

Exam. per Vaginam.—Os uteri very tender and sore to the touch; it feels swollen, soft, and pulpy; through the speculum, it looks much inflamed, and the surface is very granular. I pencilled it freely with argenti nitr.

Hirudines viij. labiis.—R. hydrarg. chloridi gr. vi., pil. aloes co. gr. viij. M. ft. pil. ij. h. s. s.

Semicup. calidum post hirudines; sinapism. utraque mammæ.

R. Pulv. aloes ʒj., mist. acaciæ ʒss., aquæ ʒiiss. M. injiciatur demid. pro enema., post balneum.

R. Secalis cornuti, sodæ biboratis, aa ʒj. mist. acaciæ ʒss., aq. einnamon ʒvss. M. sumat cochl. magn. ij., cras mane et rep. tertiâ quaque horâ.

17th.—The application of the caustic brought on a good deal of pain; she applied the leeches to the labia, and the sinapism to each breast, the same evening; used the hot semicupium, and aloetic enema, immediately afterwards, and took the pills as prescribed. The pain increased to a violent degree, and lasted severely until midnight, but became easier until morning. The leeches bled profusely. A show of florid blood appeared the next morning (Oct. 9th); it continued during the day; towards evening, the pain returned more severely, followed by a free and florid discharge,

coming in a gush, for a few minutes. About 10 o'clock the morning after (Oct. 10th), she awoke by another gush, which continued, at short intervals, during the night, and at longer during the day. It continued moderately, off and on, until the 15th. She has felt weak since, is generally better. The pain of hips and was entirely removed.

Rep. extract. taraxaci, et haust. magn. carb. c. guaiaco.

26th.—Much better; has caught cold.

Rep. med., rep. mist. gentianæ c. acid. nitr. dil. bis die.

28th.—Feels much better and stronger; sees any pain of back; bowels regular; appetite moderate; no pain of limbs; tongue clean; urine yellowish-green, bright, but became opal the next day; acid; has a slight mucous cloud on cooling. sp. gr. 10·11; phosphates all natural; copious muriate of ammonia; much epithelial matter.

Pergat. R. Liniment. camphoræ eo. ʒiiss. opii ʒss. M. ft. linimentum lumbis infricand.

Nov. 2.—Severe pain came on yesterday, at the pelvis and loins, warning her, that a menstrual period was approaching. Since the last period she has had more lancinating pains, than usual about the cervix uteri, scarcely any pain of kidneys, no leucorrhœa.

I passed the uterine sound quite into the cervix of the uterus, in order to ascertain if the os internum was pervious, and as it appeared contracted, I dilated it gently, and afterwards touched the granulations, upon the os uteri, with nitrate of silver.

Let her repeat the calomel and aloetic pills, leeches, hip-bath, enema, sinapism, and mist. opii, on the 8th of October.

9th.—Severe pain came on when she returned home, followed by a discharge of bloody menses during the night. She applied the leeches to the next morning, and the other remedies as directed. The discharge became profuse, and continued all day, but whether it was partly from the leeches, she cannot say. The next morning (Nov. 3rd), she took the mist. secalis cornuti c. sodæ biboratis, which brought on severe uterine pain, with increase of the discharge, which subsided in the evening, and again returned slightly. Much better, partly anæmic; tongue clean; appetite improved.

Pt. haust. guaiaci c. magnes. carb. om. m. gentianæ c. acid. nitr. dil. t. d. et taraxacum.

15th.—Lancinating pains continue as before (Nov. 2); little or no pain in the region of the left kidney; heart irritable; has not taken the guaiacum and magnesia regularly, as the bowels are open.

R. Liq. calcii chloridi ʒj., ter die ex infus. gentianæ eo.; contin. taraxacum.

In a case of this length and complication, it comes exceedingly difficult to ascertain what the original affection is to be looked upon as the original affection. In the present instance, previous history points to the renal affection, being this, although the prominent symptoms when she applied to me, were those of severe menorrhœa and uterine irritation, combined with considerable derangement of the assimilating functions. These symptoms were sufficiently relieved by leeches, and a course of alterative and tonic medicines, to render her but an occasional patient at St. Bartholomew's. It was not until the following year that, finding I did not relieve her sufferings, at the menstrual periods, by directing the state of uterine congestion, and improving the general health, I investigated the case more fully, in order to discover what, and what the cause was, which kept up this state of congestion, pain, and general derangement, and which had hitherto (beyond a mere temporary alleviation) seemed to be untouched by the treatment employed. The increasing pain in the region of the left kidney induced me to examine the urine more so as her history pointed to this spot as the seat of the mischief. The excess of urea, with concomitant pains of limbs, and general derangement of the digestive organs, seemed to indicate the use of the iodide of potassium, with liq. pot. and sarsaparilla; and as the bowels were in order, I ventured to give 10 grs. of Dover's powder, at night, to allay the irritability of the

this treatment, the urine improved considerably for a time, but the subsequent reports were, that the functions of the kidney were impaired; its light, specific gravity, opacities, defective proportion of saline ingredients, and a constant excess of epithelial cells, justified the fear, that structural disease was beginning to show itself in the organ.

Although the menstrual functions continued imperfect, and highly unsatisfactory condition, I was content to go on with the line of treatment which I had adopted, viz.: of keeping the renal symptoms, attending to the general health, and occasionally applying the nitrate of silver to the os uteri, whenever irritation was produced by the presence of granulations, the result, however, of uterine congestion. On three occasions this was attended with a striking improvement in the catamenia, not so much in the quantity, but in the appearance of the discharge. It was, however, difficult to steer between the general health and torpor of the system, on the one hand, and the rheumatic symptoms, the result of malnutrition, on the other, complicated, as they were, with so much renal and uterine derangement, and my treatment may, perhaps, seem peculiar, from its varying, first in one direction, and then in another, according as the different symptoms shewed themselves most prominent. However, it will be seen, that the main object of treating the tone of the system, was never lost sight of during the whole course of treatment, although necessarily modified, from time to time, by existing circumstances. Although slow progress, in this respect, was tolerably steady, in spite of her local sufferings, she always manifested, that the improvement of her general health was uniform, and very decided.

The treatment of the renal symptoms presents interesting points. It will be seen, that a direct connection existed between these and rheumatic symptoms, the one being seldom attended without the other. Although the pain in the back was not much relieved, at first, by the treatment (April 1st), their good effects were seen by the improvement in the urine which immediately followed, the specific gravity rising from 10.13 to 10.15, and again (April 22), from 10.11 to 10.25, with a remarkable increase in the proportion of saline ingredients, especially of the phosphate of lime, which had been so sparing. In stating this, it is only fair to add the manner in which I tested the variations in the phosphate of lime, having thrown down the mixed phosphates of lime and magnesia, and dissolved the precipitate in acetic acid, and have separated the lime by the addition of a solution of ammonium carbonate. I am aware, that Dr. Bright considers this scarcely a sufficient test, but to the very variable condition in which the phosphate exists in the urine, especially that of the phosphate of lime, which is not always entirely precipitated by ammonium carbonate. Still, however, the fact, that the quantity of phosphate of lime, precipitable by this means, was very small, when the urine, in other respects, manifested a very deranged state, and increased remarkably when the inflammatory state of the system was relieved by leeches, &c., is worth noting.

From this time, during the whole summer and autumn of 1843, the kidney affection disappeared at measure, and her symptoms were chiefly of gastric derangement with more or less catarrhic affection, especially of the uterus. There was much uterine irritability and suffering during the menstrual periods, and the catamenia were scanty and unhealthy. From time to time the symptoms of the os uteri were relieved by the application of caustic, with the invariable result of bringing on a healthier condition of the system. During all this period, the health improved slowly, but steadily, to improve, until winter, when the renal symptoms and gastric derangement again became more marked, in spite of my efforts to the contrary. As the summer of 1844 advanced, the general improvement in all the symptoms, except in the state of the catamenia, was very considerable; and, in the hope of effecting a more decided alteration in the state of the renal functions, I put her on a course of treatment of lime with evident benefit. Perhaps of

all the preparations in the pharmacopœia, this is capable of producing effects most analogous to those of the Carlsbad, Bath and similar mineral waters, which are celebrated for their alterative action upon the system. The tone of her health and general powers evidently rose under its action, and I thought it a good opportunity to try a short course of tonics. With the increased activity of the circulation, the kidney occasionally required fresh leeching, and now the uterus began to make more powerful efforts than ever to re-establish a more healthy state of menstrual function, but it showed a strong disposition to assume a vicarious form, and to produce cerebral symptoms of a very serious character.

As there was every reason to suppose that these would return at the next period, and, perhaps in a still more formidable form, and as the symptoms of inflammation of the cervix uteri, especially the lancinating pains, had nearly, if not quite, disappeared, although the mucous membrane of the os uteri was still much congested, and covered with granulations, I considered it a good opportunity for making a vigorous effort to rouse the activity of the uterus, and excite a copious secretion of the catamenial discharge. Guided by the good effects of the caustic on former occasions, I applied it freely to the os uteri as soon as fresh menstruation made their appearance; and putting in force the plan already described (Oct. 8, 1844), succeeded in rousing the uterus to a most copious and healthy menstruation. The effect has been very striking, as might be expected; she has experienced a greater relief than she has enjoyed for some years, although considerably weakened by the duration and profuseness of the discharge. The interval between this and the succeeding period was occupied in maintaining the general health, and when the time returned again, a similar plan of treatment was adopted. The case still continues under treatment. I propose to continue the same plan, as that above described, at each successive menstrual period, carefully watching any disposition to inflammatory action which may show itself in the kidneys, cervix uteri, or other parts, during the intervals.

ON AURA EPILEPTICA, AND OTHER DISORDERS OF SENSITIVE BRAIN-TRACTS.

By T. WILKINSON KING, F.R.C.S.E

Aura, and its Varieties; neither excitomotor nor sympathetic. Causes, brain lesions—Aura only seems to ascend, or at times to spread. Aura in apoplexy, &c.

What are called premonitions of epilepsy seem evidently in great part to be disorders of feeling, depending on disturbance in sensitive tracts, located in the head; such as morbid smell, hearing, taste, vision, numerous deranged sensibilities of the surfaces of the body or limbs, prickings, tinglings, coldness, heat, pain, itchings, &c. &c. Head pain, mental affections, and disorders of motion, have also each their several seats in like manner.

Cases of aura do occur alone. They also occur with epilepsy, under various circumstances, namely:

1st. With old injury to head, or with other signs of undefined brain disease.

2nd. With old injury to the head, opposite to the limb affected with aura.

3rd. With defined lesion in the head, opposite to the limb affected with aura, and even towards the anterior cerebral lobe, or the posterior, as the leg or the arm is particularly affected with aura, or palsy.

I propose to offer what illustrations I may have of these opinions, without attempting a formal demonstration of them.

Dr. Bright describes aura passing from the little finger upwards, with loss of voice for two or three minutes, twice in one day—in a young man who never seems to have experienced more of such disorders.—(p. 516.)

A man aged 24, was suddenly seized with giddiness and pain in the left thumb, rising to the head, and followed by insensibility, with traction of one

side of the mouth; a similar fit recurred every six weeks.—Babington, Guy's Hospital Reports, No. 12, p. 8.

A man, aged 22, had old head injuries and fits, a creeping up the right arm, insensibility, foaming and struggling, principally of the right side.—*Ibid*, No. 12, p. 8.

A boy, æt. 12, was eight weeks ailing, with nervous tremors of the left arm and leg, then epilepsy, he died of abdominal tubercle, &c. There was strumous tubercle of the right hemisphere with softening around.—Dr. H. Green, Med. Ch. Tr. vol 25, p. 194.

A boy æt. 2, became impatient, and wilful, and suddenly had jerking of the left hand, which returned every morning; and later, more of the arm was affected, and then the leg, consciousness remaining, and sleep following. The parts were variously palsied, stiff, and convulsed, he seemed to suffer, and to dread much. Both sides now were affected: screams: coma: about two square inches of the surface of the right hemisphere were tuberculous and softened.—Mr. Dunn, in Med. Ch. Trans. vol 25, p. 209.

A man æt. 35, three months after a fall, had some facial palsy, and the next day felt a sensation commencing in his fingers, and passing 'all over him,' which lasted for half a minute; he then became insensible, and fell, his mouth and head being drawn to the right side.—Babington, Guy's Hospital Reports, No. 12, p. 6.

A man æt. 30: a blow on the head, and insensibility, then epileptic two years; the fits always made the left side weak, and little sensible. The left leg was agitated, and had aura before fits, ascending to the head. He improved, but after eight months returned, with violent epilepsy; fits began with "twittering" in the leg, rising half way up the body. The skull was thickened. The dura mater thickened, ossified, and posteriorly adhered to the cerebrum, to the extent of three square inches.—Bright, p. 544 & 643.

A man æt. 37: ten years subject to head ache under various treatments, then epileptic 14 months, and occasionally hemiplegia with tremors of the affected leg. These and cramp pains now preceded fits, as aura; some fits arrested by a tourniquet, others not. After stopping some fits, the aura came in right wrist, and a ligature stopped the attack, but often not. Skull thickened, especially towards the vertex. A tumor, the size of a small almond, pressing into the "upper part of the posterior lobe of the left hemisphere."—Bright, p. 538.

I conclude then from the foregoing, and from physiological reasoning, that aura is a perverted sensation depending on lesion of sensitive tracts in the brain, just as the palsies, convulsions, rigidity or contraction of one limb depend, on lesions of motor cerebral tracts. The reader may suppose that some such opinion as the above is discoverable in the great work of Dr. Bright, (pp. 544. 549. 553. 643.) but I conclude that the Doctor's views are distinctly opposite. Farther illustrations of the case in hand I have not thought it necessary to seek out, although doubtless more and precise facts would still have especial advantage: my aim has been to indicate a principle, with the hope of enforcing other opinions.

Dr. Babington observes, after relating numerous interesting cases: "I could cite many other cases, in all of which aura is recorded as passing from a distant point, generally from one of the extremities, either directly to the head, or through the stomach to that part; insensibility always commencing on its arrival at the sensorium. Hence the idea presented itself of arresting the fit, by the application of pressure on some part through which the aura takes its course; and this measure has not unfrequently succeeded."

"What may be the cause of so curious a phenomenon as the epileptic aura remains, like that of epilepsy itself, unexplained. It is remarkable, however, that it is not necessarily connected with epilepsy at all; being sometimes felt by those who suffer from cardialgia, pyrosis, and other symptoms of dyspepsia. A near relative of my own furnishes an example. He is much subject to head-aches, dependent on a disordered state of the stomach; under which he ejects, by a kind of ruminating action hardly amounting to retching, large quanti-

ties of acid fluid. These attacks are often ushered in by a sensation of tingling in one arm, which mounts up from his finger's ends, and gradually advances towards the face on the same side, affecting one half of the tongue, palate, and lips."—See *Observations on Epilepsy*, by Dr. Babington, Guy's Hospital Reports, No. 12, p. 1.

The idea of aura ascending is, I think, sometimes groundless; at the best it seems a fallacy. Commotion in the brain-tract, corresponding to the finger, or to the ankle, almost necessarily proceeds to involve adjacent brain-fibres; and the derangement still referred to the extremity must of course seem to ascend. That ligatures, detaining blood in the limbs, should partially affect the course of convulsions, is at least not wonderful. In other cases, as we have seen, the aura is not ascending, but diffusing.

Apoplexies, ramollissemens, and palsies, have each at times some kind of aura, and especially in the limbs whose motion is altered; just so epilepsy, or convulsions; and these facts seem pretty strictly indicative of the local cause in operation. Epilepsy of one lateral half of the body indicates motory brain disease on the opposite side, and rather removed from the pons varolii.

I confess that aura might have appeared an apt illustration of the overdrawn doctrine of excitation; the above explanation, however, arose pretty directly in the course of my seeking out the sensitive analogues of convulsion and palsy, in connexion with brain lesions. To induce one sound truth against erroneous sympathies, is of course more satisfactory than to destroy a dozen of those fanciful explanations, which are too numerous to leave a hope of ever seeing the last of them. There seems almost cause to distrust the prospect of any true foundation to sympathies. Aura at least may have little to do with gastric irritation. Finally, I would add that the more we can make sure of central disorders of brain, without true head-ache, the more we press head-ache, as a symptom, exclusively to the surface of the head; and aura may thus at times become an additional clue towards precise cerebral diagnosis.

36, Bedford Square.

A CONJECTURE ON THE NATURE OF ELECTRICITY.

To the Editor of the "Medical Times."

SIR.—I trust that the following theory, which I now suggest, regarding a most important subject—the nature of Electricity—will be deemed worthy of the consideration of the public.

Some little merit belongs to those who, acting as pioneers, in a degree clear the way for the progress of the *principes artis*,—inasmuch as conjecture, born of the poet and philosopher, has frequently preceded, led the way, and given the hint to steady labourers in the vineyard of Science. On these grounds, I venture to offer the suggestions which follow.

I think the great mistake, on the part of many philosophers, has been, their starting with the gratuitous supposition that electricity is a simple element, or substance.

I believe, from what I have observed, that electricity is a compound body—a combination of hydrogen and oxygen—that the phenomenon of electricity consists of a sudden combination of the two, in some certain specific proportions, not yet ascertained;—or, in other words, that it is a rapid combustion of the hydrogen, occurring at particular points of the substance or surface producing it, and directed or guided through certain media, in certain directions and modes.

That, in a thunder-storm, a decomposition of the upper and more rarefied strata of the atmosphere, as well as of the water embodied in the clouds, occurs in a degree, whereby the lightning is generated: so, also, in a steam-boiler, favoured by the heat as an exciting cause, and the minute separation of the particles of water, in form of steam, as a pre-disposing cause, we have similar decompositions occurring,—and hence the amazing production of electricity in a steam-boiler, lately discovered. Upon viewing the demonstration of

this, I could not help saying to myself—surely this is a thunder-storm in miniature; and I then was immediately led to reflect, what were the elements of the materials employed for its production?—and that they were precisely the same as in the generation of the electricity of the thunder-storm.

I believe, that just as electricity may be formed by the combination of the elements of water and of the atmosphere, so the composition of water, by means of the electric spark, is only the resolution of the elements of electricity into water, in certain altered proportions of combination; i.e., in proportions differing from those proportional quantities of the same elements which constitute electricity. In short, that the same elements, hydrogen and oxygen, constitute both water and electricity, but in different proportional quantities; much may depend also (regarding the production of electricity) upon the mode in which the two combine.

Certain causes, I conceive, favour both the production and dispersion of electricity; such as heat, moisture, friction of the atoms of the two hydro-electric producing substances, combined with free exposure of them to oxygen—also the rarefied state of the water, in form of steam—or the physically-extended condition of all other hydro-electric substances. Lastly, I conceive, moisture, especially, acts as a strong dispersive agent.

According to my view, the reason why we do not succeed, in a humid atmosphere, in making electricity apparent by means of the electrical machine, is, not that electricity is not generated, but because humidity in the atmosphere conducts or draws the electricity away from the machine, as soon as it is generated, causing its general and immediate dispersion in insensible quantities: and, for the same reason, are we particular in wiping dry the glass legs of the isolated stool; viz.: to prevent the general and insensible dispersion of the electricity as it is generated, through the medium of any humidity upon the legs.

We, hence, see why lightning abounds most in hot, dry, inter-tropical climates; for there is not only more material for the generation of electricity (hydrogen, probably, being more abundant in such climates, in the upper strata of the atmosphere), but this electricity is also, owing to the dryness of the atmosphere, more concentrated, in the form of stronger, more vivid, and larger volumes of electric fluid. We also see why the nerves, being wet cords, are so favourably disposed for the conduction of electricity.

Nitrogen, by the decomposition of the atmosphere in a thunder-storm, I conceive to be set free, which, by combining with a portion of the hydrogen (liberated by the decomposition of water, but not consumed in the formation of lightning) forms the nitrate of ammonia, which we find abundantly produced in the atmosphere during a thunder-storm.

I believe, also, that the spontaneous generation of electricity, owing to chemical changes in the bowels of the earth, is the cause—or, at all events, a frequent one—of earthquakes.

In the next place, let us apply this theory of the generation of electricity to the animal frame, and we shall see how it harmonizes with Liebig's doctrine of the generation of animal heat: and with Dr. Keenan's idea that electricity is generated in the human body by the union of the oxygen of the air with the hydro-carburet bases taken into the system as food.

Dr. Keenan, I believe, is right in supposing that there is a constant generation of electricity in the frame, by the union of the inspired oxygen with the hydro-carburets; but he has not explained how it is produced, nor has he attempted to define the nature of electricity.

Now, I conceive that the animal electricity is expressly produced by the union of the oxygen with the hydrogen of the hydro-carburets. That whilst animal heat is evolved in the blood by the union of oxygen with carbon, we have electricity especially produced in the same, by the union of oxygen with hydrogen, together with some of the animal heat.

Thus, then, some of the inspired oxygen, entering the blood, unites with the carbon of the hydro-carburets, producing animal heat (the combustion of the carbon)—whilst another portion of the

oxygen unites with the hydrogen of the carburets, to form electricity the combustible hydrogen).

Dr. Keenan is, however, wrong, I think, in calling "the lungs a galvanic battery, viscous being merely the recipient for the reduction of the oxygen into the circulating blood, where the generation of electricity expresses its place, its development being, doubtlessly, by the animal heat; and its equitable and the dispersion effected through the whole of the guineous system, by the fluidity of the blood, and the freedom of its circulation.

The circulating blood is, in fact, in the position of animal electricity, the glass cylinder of the battery, the rubber, or the plate and rubber of the electrical machine, or the zinc plate of the galvanic battery; with this difference, the blood contains the full complement, both of hydrogen and oxygen, necessary for the genesis of electricity, while the electrical machine obtains its oxygen from the atmosphere which surrounds it. In other words, in the former instance, electricity obtains its oxygen through the lungs; in the latter case, as, in a thunder-storm, immediately from the atmosphere.

One reason why the nerves are so minutely distributed through all parts of the system, in form of minute peripheral extrinsic nerves—why many run so closely concomitant with the smaller arteries, and mingle in myriads with the capillaries—is, that they shall universally form the office to the circulation of the test of the prime conductors of the electrifying machine, taking up from the vascular system the electricity as it is developed in the blood, and which electricity is then conducted, through the nerves (the prime conductors), to the brain (the Leyden jar, where it accumulates, and whence it operates reflex action, through the nerves, upon the voluntary muscles, in volition.

That electricity performs some very important office in the frame, there is no doubt; but by no means warranted, on that account, to cause we cannot define the exact nature of its essence, to start to the conclusion that it is identical with the nervous fluid;—we never shall be able to account for the vital manifestations of the nervous system by the agency of electricity.

Either excess of electric repletion, or exhaustion, will, I conceive, be injurious; excess of development of animal electricity, over-expenditure, depressing—organic depression. Inasmuch as excess of action leads to expenditure, so it may lead to depression—cessation of organic action.

I believe (as I affirmed in print, fourteen years ago) that electricity is a salutary and necessary organic stimulus, but nothing more: this is only conclusion that facts and observation seem to justify.

Your obedient servant,

G. D. DERMODY.

Charlotte Street School of Medicine,
Dec. 2, 1844.

DIVISION OF TENDONS.—The experiment of Stromeyer, and the more recent experiment of Mr. Tamplin, shew, that the new substance unites the divided portion of a tendon, gradually contracts until it entirely disappears; and consequently, the diseased muscle or muscles were operated on, must become elongated.

DISLOCATION OF THE THUMB.—Mr. Stromeyer believes the obstacle to the reduction of the dislocated thumb, to be constituted by the tension of the long flexor muscle, when it has slipped over either side of the first bone of the thumb, the back part, where it is placed between the first and second bones. When thus displaced, it contracts with the extensor tendon in drawing the bone over the back of the first, and in fixing it in that position. The course to be pursued, therefore, to effect its reduction, is to employ great force in any mode or direction rather than to trust to the influence of gentle manipulation of the parts in effecting the removal of the obstacle to reduction.

COURSE OF CLINICAL LECTURES ON THE IMPORTANT POINTS OF SURGERY.

delivered at St. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

Edited by G. SAYLE, Esq., M.R.C.S., late Curator of the Museum of St. George's Hospital School.)

Lecture XVIII.

CAUSES OF THE SYSTEM RENDERING OPERATION DANGEROUS.

SYMPTOMS.—I began, in the last Lecture,* to draw your attention to certain states of the system which increase the danger of operations, and which should always be looked to before the operation is performed upon, excepting those cases where the operation for its performance is immediate, as in strangulated hernia, &c. I told you there were peculiar states of the constitution which the surgeon must detect, nor the organic changes producing these states, without the aid of the microscope, and I mentioned, first, that state in which there is a superabundance of acid in the system, namely lithic, but also other acids producing similar effects; as, for example, the lactic. I said, in this state exists, the patients must be looked upon as in an inflammatory condition, which state must be corrected previous to the performance of the operation. If this be not attended to, the patient will be liable to violent inflammatory symptoms from very slight causes; and it is necessary to attend to this in private, as well as in hospital, practice, especially among the lower classes of society. Then I spoke of persons whose urine is alkaline; they, also, are very unfit for operations, for it indicates a debilitated system, a great want of vital energy: so, also, persons giving albuminous urine, of which I mentioned several cases, or states, of constitution in which it is so. viz.: 1st, albuminous urine, arising from disease of the kidney; and 2nd, those in whom there is no alteration in its structure, and the urine presents no albuminous appearance till heat is applied. Persons who have been intemperate drunkards (especially those who are accustomed to drinking spirits) suffer much from violent accidents or operations; inflammation of the cellular membrane follows, running on to a gangrenous and sloughy state. It was my intention to say much respecting the treatment of these cases, but as I entered upon the subject in the last Lecture, I had better not leave it incomplete. I draw your attention principally to the states of the system, especially in reference to the red and white deposits; now, he who does not attend to these, not understand, these appearances, is totally unqualified to be entrusted with the management even of a simple case. When these deposits occur, the patient is mostly constipated; to remedy which, the most powerful purgatives should be employed, which act on the liver and increase the secretion of bile. Dr. Prout says is intended to neutralise the acids, which, when in excess, are found in the urine. These persons also require alkalies—at certain times and seasons; a fact which is much neglected by our branch of the profession. The object of this treatment is to neutralise the acid left in the stomach after digestion is completed, for which purpose 15 grains of bicarbonate of soda is sufficient; for, if you give in larger quantities, the stomach pours out acid to neutralise the excess of alkali present. You will meet with persons who give alkalies at dinner, which is evidently wrong, for it increases the acid required for carrying on digestion. Sir Gilbert Blaine's plan of partly neutralising the alkali with a vegetable acid, is very useful, and ought never to be forgotten. Colchicum is much more efficacious in clearing the system when the alkali is given alone. Colchicum in small doses is occasionally very useful in these cases. Care should also be taken with respect to the diet of the patient; and fruits, or wines, or indigestible food, be carefully avoided. I draw your attention to such particulars will, in most cases, be of great service in this state of the system, and it is of im-

portance to attend to it, not only in cases requiring operation, but also in the treatment of local diseases. There is still another state which makes a person unfit to bear the shock of an operation, and my attention was first drawn to it when I was house surgeon. A man was brought to the hospital who had cut his throat; it was a very slight wound—no great mischief was done; but presently he got into a state of great excitement, talked and rambled a great deal, and on the second night after his admission, he was found dead in his bed. The night-nurse had observed him to be breathing with difficulty, and came to fetch me to him, but before I could get there he was dead. On making a *post mortem* examination, nothing was discovered to account for his sudden death; but I learned from his friends, that he had showed symptoms of mania on former occasions, previous to committing the attempt upon his life. Nervous excitement greatly increases the danger of even slight operations. In the museum, you will find a preparation of a man's tibia, in which abscesses had occurred just above the ankle-joint; it was the first case of the kind I ever saw, and what I learned from that case, has enabled me to save the lives of several patients in my own private practice. The abscesses had existed several years, and the matter had been slowly deposited; the pain produced by it was excessive, occurring in paroxysms; and from his severe sufferings, the poor fellow was in a state of great nervous excitement. I amputated the limb, and he bore the operation very well; but, when put to bed, he talked wildly and rapidly, and in the evening secondary hæmorrhage came on, at which he was greatly frightened, although it was soon stopped. The next day the excitement continued, and the other symptoms increased; he became maniacal, fancying he saw a soldier in one place, another somewhere else; his tongue was moist; pupils much dilated, and a candle being brought near them, they did not contract; he died; in short, there was traumatic mania; he, however, had been maniacal before. A lady came to me with an ulcer in the back part of the rectum, which had troubled her for several years; I advised her to have the sphincter muscle divided. She was an hysterical person; and I learned afterwards, that one of her sisters had died in a mad-house, and subsequently I attended one of her brothers, who had attempted to destroy himself. The lady consented to the operation, and during its performance very little blood was lost, but she immediately fell into a state of hysterical syncope, which lasted several hours, and when she recovered, she became much excited. This state of things continued several days, during which time I saw her, with Dr. Southey and Mr. Jackson; but she died. On examination, we found the pleura and upper part of the abdominal viscera much inflamed, but not at all in the lower parts, approaching the seat of the operation. It appeared to me that these were all the result of great nervous excitement, corresponding to what occurs after injuries of the brain, where you get local inflammation in distant parts of the system. I could, if it were necessary, mention many similar cases in illustration of this point. I therefore advise you to be very careful how you operate on maniacal or hysterical persons, especially females. Of course, I do not mean common hysteria, but the disease in an aggravated form. But should the operation be absolutely necessary, then take care not to lower your patients much previous to its performance, and directly afterwards let them have some gentle stimulus; the same plan of treatment is best in cases of traumatic delirium. When operations turn out badly, it is generally the result of a bad constitution. But, again, when a person has local disease in any vital organ, it is not advisable to perform any operation. If a patient has diseased lungs, and you cut him for fistula, very frequently he will die; or if the fistula heals, the disease of the lungs is aggravated, and he dies sooner than he otherwise would have done: and the same applies to disease of the liver, or any other vital organ. You would think organic disease of the heart a great objection to the performance of any operation; but so far as my experience goes, these cases do better than some others, where the disease would appear to be of much less consequence; for, in the cases of this kind,

which have come under my notice, they have generally done well. A case of this kind occurred in the hospital some time ago, where I operated on a man for lithotomy, who also had disease of the heart, of which he afterwards died; but he bore the operation very well. I saw a patient (with the late Mr. Earle) who had disease of the heart, and was also suffering from a disease requiring operation, and we rather hesitated about performing it, being afraid of the disease of the heart; however, the patient suffered so much, that he said he would take his chance, and he recovered without having any bad symptoms. A lady, about whom I was consulted lately, had malignant tumour of the breast; she had also organic disease of the heart, with dilatation of its great vessels. The tumour of the breast was not exactly scirrhus, but it was increasing in size, and, excepting disease of the heart, was a good case for operation. The physician thought it would be unsafe to operate, but I had seen similar cases do well, and therefore advised her to undergo the operation, as it was not likely to affect, or be in any way affected by, the disease of the heart. It was performed, and I think since then she has been better than she was before. Mind, I do not say you are to let disease of the heart go for nothing; but there are cases where considerable organic disease of the heart exists, and which do not render the performance of an operation at all more dangerous. I mentioned inflammation as one of the principal causes of death after operations in dram-drinkers. I will mention to you a case of this kind. A stable-keeper, who was much addicted to drinking, received a blow on the back of the thorax, which fractured one of his ribs; the lung also appeared to have been bruised by the concussion, an accident which a healthy person would speedily recover from, but here it had run on to gangrene. But I think such a state may be produced by many other causes besides dram-drinking. A gentleman with diseased testicle put himself under the care of Sir A. Cooper and myself; we put him through a course of mercury, but without advantage; then of iodine, also without any benefit; we then operated upon him, but sloughing and gangrene followed, and he died; and I strongly suspect the iodine had much to do in the result of this case. He had been taking it in larger doses than I should venture to give it now. Two other great causes of mortality, after operations, are erysipelas and venous inflammation. You know what a scourge erysipelas is in the London hospitals; so it is also in private practice; but I do not think I have so many cases now as I used to have formerly, which, I think, is owing to my being more careful. I think erysipelas occurs chiefly in those who have been kept low, either before or after an operation; therefore, if you would avoid it, do not lower your patient too much, either by bleeding, purging, or low diet. An operation is a great shock to the system, and a debilitated constitution will not bear up against it so well as one in proper condition. I believe I have been more successful in my operations since I attended to this. It is right to clean out the patient's bowels, but it should be done gently, and the day before the operation. You should never give drastic purgatives at those times, as they produce large biliary and watery secretions, and lower the patient more than is either useful or safe. Keep him rather low the first day or two succeeding the operation, then gradually approach to his natural diet, making allowance for the want of exercise. If a patient has been accustomed to take spirits (not otherwise), I give him a small quantity, for if a person in health is suddenly deprived of his accustomed stimulus, he does not bear it well, and of course he would bear such deprivation much worse after the shock of an operation. Venous inflammation occurs frequently after operations in persons of a low condition, and the same means recommended for erysipelas are also to be attended to in these cases. Dr. Farr had a tumour on his face, and he would not have it operated upon in the spring, as he thought operations were more dangerous then than at other times. Certainly I think more mischief follows operations at particular seasons; the cause of this I cannot explain; whether it is that the perspiration and lactic acid are prevented escaping from the skin, or whether it depends upon peculiar

* See 'Medical Times,' vol. x. page 491.

electric conditions of the atmosphere. Easterly winds, I have observed, are generally more prevalent at this season of the year. When any of these unfavourable circumstances exist, I endeavour, as much as possible, to postpone any operation; so, if a patient comes to you with a little tumour on his head, tell him to wait a while, it will keep very well. Then, lastly, with regard to the use of stimulants: I do not mean that you are to keep the patients constantly excited, but allow them a reasonable quantity. You should never bleed patients largely after operations, nor allow much blood to be lost during an operation. I have heard persons say, when much blood has been lost during the operation for lithotomy, "Oh, it will do him good!" but observation does not confirm this opinion. Where there has been disease of the kidneys, and the patient has lost much blood, in all the cases I have seen, the patient has died. Then, remember, that, during an operation, great loss of blood is always dangerous.

PATHOLOGY OF EXPECTORATION.

By SAMUEL WRIGHT, M.D., Edin., F.S.A.
Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c.

In this series of papers, it is intended to treat of the chemical and physical characteristics of the various sputa which are discharged in affections of the respiratory organs,—of the pathognomonic relation which these sputa bear to the diseases in which they occur,—of the influence which remedial agents exert over the diseased action and the morbid products,—and of the pathological appearances which accompany these several forms of abnormal expectoration.

To these purposes, however, it is deemed a necessary preliminary to consider, in detail, the properties possessed in the natural state by the substances which will more immediately engage our attention, viz.: MUCUS, PUS, and TUBERCLE. This is thought to be the more advisable, as affording the only correct means of comparing and comprehending the peculiar relations which these animal matters respectively bear to each other, and the many morbid changes which they severally undergo.

MUCUS.

Mucus is a peculiar fluid, secreted (in the human subject) only by membranes which line passages and cavities having a communication with the external air. It is produced by follicles, which are little more than saccular depressions; by glands, which somewhat resemble the salivary; and sometimes, as in the frontal, sphenoidal, and maxillary sinus, and in the tympanum, by the whole surface of the membrane itself.

Mucus is one of the simplest of the animal fluids—as well in its composition and properties, as in the nature of the apparatus which produce it. In its healthy state, it seems to be possessed of no appreciable physiological activity, and renders its negative services by harmlessly shielding its membranes from the influence of external agency. The vital action requisite for its production is also very elementary; for it is formed in the oyster, in quality almost as pure as amongst the highest mammals. In the latter, however, it is susceptible of extensive changes, which intimately correspond with the state and action of its secretory organs, becoming more fluid, more dense, or more tenacious, as these are relaxed, congested, or inflamed. For similar reasons, it may also become acid or alkaline, may contain an excess of saline matter, or may be impregnated with calcareous particles, or with other foreign matter.

Healthy mucus varies somewhat in appearance, density, &c., with the organs which secrete it. The mucus of the conjunctiva, for example, is little more than a very dilute saline solution; its proportion of animal matter is sometimes wholly inappreciable. The mucus of the mouth is more dense; that of the Schneiderian membrane, and of the trachea and bronchia (except in their minuter ramifications) denser still; whilst the

heaviest specimens are met with in the stomach and in the large intestines. The purest form of mucus is found in the gall-bladder, after effectual and permanent closure of the cystic duct. This I shall describe as the standard by which all other varieties of mucus are to be judged.

Pure mucus is as transparent and colourless as crystal; by reflected light it exhibits the faintest blue tinge. In its composition and properties it bears some resemblance to vegetable mucus (*tragacanthine*), but differs from this in containing nitrogen, and in not being miscible with oils. To the naked eye it is a perfectly homogeneous fluid, but, when examined with a microscope, it occasionally presents stray particles of epithelium, and a few globules,* which resemble those of pus.† They consist of an envelope and a central nucleus;‡ by the action of acetic acid the former is dissolved, and the latter is separated into several nucleoli, which are insoluble in the acid.

The specific gravity of mucus has been variously estimated; but its extreme range of diversity, even in its healthy states, precludes the possibility of any specific standard of weight being established. However, as it will concern us hereafter to treat exclusively of the mucus derived from the trachea, bronchia, and lungs, I may state, that a vast number of comparative experiments induce me to express my belief that, if the fluid secretion of these parts exceed in density 1.0699, or be inferior to 1.0099, it may be considered to be unhealthy.§

Mucus possesses the properties of viscosity and fluidity in a remarkable degree; whilst it admits of being poured from one vessel to another, it is yet capable of being drawn out into strings as fine as melted glass.

Mucus is not soluble in water, but is much swollen by it, may be pretty uniformly diffused through it, and does not separate from it by rest; it is precipitated, however, by alcohol, but subsequent washing restores to it the entire of its natural properties.

Mucus is perfectly neutral to test paper,|| and usually contains, in minute proportions, the saline constituents of the serum of the blood.

It is soluble in alkaline lixivia, and may be precipitated from them by acids. It is coagulated by acetic, and many other acids, but long digestion renders it soluble in them. In dilute acetic acid, it is more easily of solution, and often without previous coagulation.¶

It is neither thickened by cold, nor coagulated by heat; when quickly dried, its appearance resembles that of horn. By distillation, it furnishes the common products of animal substances. It is said to be so averse to spontaneous decomposition, as in some instances to have preserved its sweetness for a whole year.** This, however, is true of it only in its dried state, when it may be kept indefinitely.

* In the secretion of the tonsils these globules are exceedingly abundant.

† Gornius says that they are precisely like oil globules.—*Dissert. de Pituita*.

‡ Mucous globules are sometimes found destitute of a central nucleus; and, again, the mucus of an inflamed surface, though not unhealthy in its chemical relations, is often very abundant in globules, which may be seen to be filled with granules.

§ In taking the specific gravity of mucus, care must be used to exclude every bubble of air from it. For want of attention to this particular, Senac stated the specific gravity of mucus to be less than that of water (*Tr. du Cour.*, tom. ii., p. 101); and Borseiri made this the test of pure pus, from a similar mistake.—*Institutiones Medicinæ Practicæ*. Ven. 1782—5.

|| Dr. Babington says, that bronchial mucus is always alkaline. (?)—*Guy's Hospital Reports*, vol. ii., p. 539.

¶ For an interesting allusion to this property, see *Annales du Museum*, vol. xii., p. 66.

** Senac *Tr. du Cour.*, t. ii., p. 101. Comment. Acad. Scient. Petropol., t. xiv., p. 209; and Weitbrecht says of the mucus of the larynx, "collecta ejus quantitas per annum etiam non computruit."—*Commentarii de Rebus in Scientia Naturale et Medicina Gestis*. Lipsiæ, 1753, vol. ii., p. 317.

It is destitute of taste, and possesses the faint animal odour.

It is not coagulated by galvanism; impure, so by absolute alcohol, and by ether; unaltered by corrosive sublimate, and by ammonia; dissolved by tannic acid, by triacetate of lead, by nitrate of silver, chloride of tin, and various salts.

According to Berzelius, the mucus of the trachea and trachea consists of—

Water	.....
Mucous substance	.....
Muriate of potash and of soda	.....
Lactate of soda and animal matter	.....
Soda	.....
Phosphate of soda and animal matter	.....

I have never myself met with uncoagulated mucus in a specimen of *pure mucus*; but I have occasionally found traces of it in those varieties of mucus which have contained *free albumen*.

A very clear and characteristic form of mucus obtained from the gall bladder of a patient in the Royal Infirmary of Edinburgh, furnished the following constituents:—*

Water	.....
Mucus	.....
Muriates	.....	} Potash } } Soda } } Lime }
Lactates	.....
Phosphates	.....
Sulphates (a trace)	.....
Loss	.....

The mucus of the nose, obtained during an active catarrh, when the natural secretion was little altered in appearance, gave the following results:—

Water	.....
Mucus	.....
Albumen† with soda	.....
Muriates	.....	} Potash } } Soda }
Lactates	.....
Phosphates	.....
Loss	.....

Tracheal and bronchial mucus, obtained from a patient who died during the existence of an active symptoms of influenza, consisted of the following ingredients:—

Water	.....
Mucus	.....
Albumen (coagulated)	.....
Muriates	.....	} Potash } } Soda }
Lactates	.....
Phosphates	.....
Free acid (a trace)	.....
Loss	.....

* The mode of analysis, which I pursued consisted, first, in heating the mucus to the boiling point—no coagulum was formed, and, consequently, no albumen was present; secondly, in very gradually evaporating the fluid to dryness, and determining the proportion of water; thirdly, separating from the residue the salts soluble in water; fourthly, in incinerating the residue, so calculating the proportion of mucus, and of soluble saline matter associated with it.

The following diagram will illustrate the process:—

Mucus—Heat	} Dry residue	Water	} Soluble
		Incineration		Mucus

* It will be understood that the solution is perfectly neutral.

† In order to separate these salts from the mucus, with any admixture of animal matter, it is necessary to heat the dried residue until it acquires a deep brown colour, before acting it with water.

‡ It is to be understood that the presence of albumen in mucus is always a proof of the mucus being impure; and of having been secreted under circumstances of local inflammation or irritation. "The mucous secretions in disease frequently

Mucus obtained from the stomach of a man, died of schirrus of the pylorus, consisted of—	
Water	961.2
Mucus	28.5
Albumen (coagulated)	3.7
Uricates. } Soda }	
Actates. } Lime }	4.2
Phosphates. }	
Free acid (inappreciable quantity)	
Loss	2.4
	1000.0

PUS.

Pus is a fluid, formed in the living body under pathological condition of inflammation or contusion. It probably never exists in the blood, except as a consequence of absorption, or of inflammation of the blood and of the lining membrane of the veins. It may be generated in all soft tissues—in simple cells, in fibrous structure, in plain membranes, and in glands.

Various have been the theories suggested, from time to time, to account for the origin of pus. Some have believed it to be formed from the crisis of the capillary extremities, broken and closed by inflammatory engorgement, and subsequently mixed with a humour discharged by the injured vessels. The mixture is rendered homogeneous (he says) by the augmented heat of the part, and by the action of the arteries.* Platner†, and others of his time, adopted the opinion of Cullen. Pringle,‡ and after him Gaber,§ maintained that pus is formed by an alteration in the constituents of stagnant serum, after its absorption during inflammatory action. Cullen sanctioned the latter theory, but believed further, that the process of conversion into pus is a fermentative one “which may affect the solid substance of the part, and perhaps every solid of animal bodies: so it most readily and particularly affects the cellular texture, eroding much of it, which thereby becomes a part of the pus.”|| Lashuis believed that pus is nothing more than a matter.¶

In 1722, Dr. Simson, of St. Andrews, first described pus to be a *genuine secretion*. To him is due the merit of having originated, in the form of conjecture, this now established and most important pathological truth. His opinion was shortly credited on the continent by De Haen, Schroeder, Brugmann, and Plenciz; by Morgan in Philadelphia; and, in our own country, by Hewson, Hunter, Home, and Cruikshank. Hewson, however, was the first who *proved distinctly* that pus may be formed, as in serous cavities, and in mucous membranes, without erosion or ulceration.**

Microscopical and chemical analyses have lately afforded us a complete knowledge of the minute structure and ultimate composition of pus, and have consequently led to some very probable conjectures of its origin. Its formation has been chiefly referred to an action, *per se*, of congested or extravasated blood. Though the merit of this proposition is claimed on the behalf of modern discovery, it is yet due to the science of an earlier age, to remind the classical reader, that Hippocrates first affirmed that blood effused into any cavity is converted into pus.

αἷμα ἐκχυρὴ ἐξ τῆς καὶ κοιλίας παραφύσις ἀναγὰν ἐκπηθῆναι.††

Some serous, and contain albumen, as if the fluid was merely drained from the liquor sanguinis, as in some kinds of catarrh, and diarrhoea.”—Mr. Lancel. *Lancet*, 1839-40. Vol. II., p. 69.

* Aphor. 387. † Instit. Chirurg. sect. 54.

‡ On Diseases of the Army. Appendix.

§ Acta Taurinensia. Vol. II.

|| Cullen's Works. Ed. of Thomson. 1827. Vol. II. p. 10.

¶ Briende. *Traité de la Phthisis Pulmonaire*. Paris 1803. Vol. I., p. 71.

** Experimental Inquiries. Part II., p. 117-18.

†† Aph. 20. Sect. 6. Joh. Zechius Cons. 46. Duret. in Coac. L. 4. Sent. 16.

This opinion was scrupulously adopted by Celsus,* by Galen, and by many later writers. Van Helmont, in particular, says—“Flava atque cinerea tabidorum sputa igitur, vegetatilis in pulmone errores sunt, et *cruror degeneratus*, quem ideo totius, macies subsequitur.”†

Bennet thought that blood, which has stagnated, may deserve the name of pus.‡ De Haen at one time entertained a similar belief, for he asserted that the *formation of pus in the blood* might be seen by arresting the circulation.§ His theory is combatted by Haller, in the second volume of his Physiology. Ludurg also says that pus is formed from blood, stagnant in its vessels, and that the action is hastened by moderate heat.||

Quesnay states that pus is merely the inflammatory crust of the blood, in a modified state, and that it is produced in the interior of the blood vessels.¶

Later observers have more minutely investigated the structure and mode of formation of pus, and many of them have maintained that its globules are nothing more than altered blood corpuscles.

Mandl asserts that the colourless corpuscles of the blood, the globules of pus, of mucus, and of all other secretions, are identical.**

Gendrin, who has examined this subject with some care and ingenuity, informs us that, if blood be retained by ligatures in its proper vessels, it coagulates and becomes organized; but that, if a stimulating injection be previously thrown in, a high degree of inflammation results, and pus is formed. He thinks that the conversion of the fibrine of the blood into pus occurs independently of any inflammatory action of the contiguous tissue, by some process, not understood, inherent to the blood itself.††

Laënnec, from Gendrin's experiments, believed pus to be only softened coagulable lymph.

Donné, after a series of interesting and extensive experiments, arrived at the conclusion that globules of pus are nothing more than transformed blood corpuscles. He says, that the change will take place in blood recently drawn from a vein. If one part of pus be mixed with eight or nine parts of blood, the coagulum will be dissolved in the space of from eight to twenty hours. If more pus be added, the solution will be quicker. On the following day nothing but pus is found. Donné further says, that this process goes on by a force which is inherent in the blood, for it does not happen but to recent blood.‡‡

The experiments of Donné have been carefully repeated, variously and extensively, by Wood, who has totally failed to obtain the remarkable results above described. He confined blood in the carotid arteries by ligatures, and introduced into it warm water, fluid mercury, solution of nitrate of silver, and a globule of metallic lead—but no pus globules were formed. He concludes: “Ex his experimentis concludendum est materiam fibrosam, quæ et in sanguinis coagulo adest, et per inflammationem in arteria exudari potest, facultatem non habere, se in pus mutandi.”§§

(To be continued.)

* “Si in ventrem sanguis confluit, ibi in pus convertitur.” Celsus. De Med. 1831. Ed. p. 49.

† Ortus Medicinæ. Amster. 1652. f. 39. p. 354.

‡ Theatrum Tabidorum. 1654-56.

§ Sec Commentariorum de Rebus in Scientia Naturali et Medicina Gestis. Lipsiæ. Vol. IX., p. 92.

|| Idem. Vol. XIII., p. 142.

¶ *Traité de la Phthisis Pulmonaire, par Briende*. Paris, 1803. Tome I., p. 71-2.

** *Anatomie Microscopique*. Livr. 1 and 2.

†† *Cyclopædia of Practical Medicine*. Art. Inflammation. Vol. 2, p. 716.

‡‡ *Archiv. Gen. de Med. de Paris*, 1836.

§§ *De Puris Natura atque Formatione*. Berol. 1837. pp. 3-5.

Wood further advances the following queries against the notion that blood corpuscles are convertible into pus globules:—

I. Quomodo fit pus per inflammationem in animalibus quæ Batrachia vocantur?

II. Quomodo accidit in contusionibus et fracturis, ut sepiissime extravasationes permagnæ non

ON THE PROXIMATE CAUSE OF TUBERCLE, AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSSWILL, Surgeon, Leicester.

(Continued from page 158.)

Whatever have been the ideas entertained respecting the pathology of tubercle, and the causes of its deposition, we find that all have attributed its occurrence to the existence of an unknown morbid cause, producing certain morbid results. Andral distinctly asserts, that the proximate cause of tubercle is unknown; he views it as the result of a change of secretion, appearing originally in a liquid state, and then, as if by a process of crystallisation, becoming solid, according as its more fluid particles have become absorbed. Cruveilhier conceives, that before tubercle has been deposited as a hard body, it exists in a fluid puriform condition. Sir Charles Scudamore considers it dependent upon the presence of a specific virus in the blood, existing in all states of intensity, and which virus he calls the tubercular, which expends itself in the formation of tubercles in various parts of the body. Dr. Campbell regards the production of tubercle as the result of a mechanical obstruction in the capillaries of the lung; he believes, that a want of due proportion between the size of the morbid particles contained in the blood and the diameter of the capillaries, is the cause of the arrest of the former in the course of the circulation; and Andral, in another part of his work on pathology, is evidently of the same opinion; for he says, “I have, in reference to the generally received opinion, described tubercle in the lymphatic ganglions as the product of secretion, though I am disposed to think the day is not far distant when it will be proved to derive its origin from a different source; perhaps it may yet be considered as simply the result of an alteration of the lymph itself, either spontaneously, or caused by a morbid condition of the lymphatic vessels, or, perhaps, resulting simply from its stagnation, caused by some mechanical obstacle to its circulation through the lymphatic plexus.”

In speaking of the insoluble salts of lime, as constituting the cause of tubercular deposit, I must be understood as regarding them as the proximate cause leading to its formation, and not as the predisposing cause tending to its manifestation. These *predisposing* causes are many, and will be discussed hereafter; but it is to their operation that the production of tubercle has been usually ascribed, whereas, had there been no insoluble deposit of lime in the diseased organs, their effects would have been manifested under different forms. In physical appearance, tubercles are represented as being, at first, hard, friable bodies; subsequently softening and appearing as white curdly masses,

in suppurationem transeant, quum tamen in his conditionibus magna sit hæsitatio et coagulatio?

III. Si pus ex sanguine proxime fit, ejusque globuli ex globulis sanguinis, quomodo fit, ut si puris globuli ex vasis divisis et extremis (quæ vero non existunt, ut Ill. Müller noster refert) exsudent, sanguinis globuli etiam non exsudent, qui multo minores sunt?

IV. Ex experimentis et argumentis, concludo pus in partibus nullis (nisi in inflammatione vasorum ipsorum) factum esse priusquam materies ex qua fit extra vasa effusa sit, atque casus illos, in quibus Gendrin sanguinem in pus converti vidisse sibi videtur, non probabiles esse.—*Op. Cit.* p. 3-4.

The possibility of the conversion of blood into pus was questioned, a thousand years ago, by Paulus of Ægina, who especially doubted whether arterial blood could be so transformed. (*Friend's Hist. Med. Fol. Lond.* 1733. p. 450. Gendrin inferred, from his experiments, that arterial blood is more disposed to organization than to conversion into pus. (*Cyclop. Pract. Med.* vol. 2. p. 716.) Morgagni also denied the convertibility of blood into pus. “Verum cum sanguinem effusum perstare, non pus fieri, alia alias a nobis productæ, producendæque, historiam comprobent.” (*De Sed. et Causis Morb. Ep.* 5 3. *Ebrod. Ed.* 1779

suspended in a sero-purulent fluid; finally, when softened, the tubercles have a tendency to quit their situation; not being endowed with vitality, they cannot grow by intus-susception; they can only increase by accretion of fresh particles of tuberculous matter, and, whenever this deposit has commenced, the process continues so long as there remains any of the original cause of its production in the system: during the period of softening, each particle of tuberculous matter, acting like a foreign body on the tissues with which it is in contact, produces a secretion of pus, which mechanically effects the division of the tubercle into clots. In the first place, there is formed a process of irritation; then a secretion of pus; eventually, in most cases, a solution of continuity, by which a way is opened for its escape; sometimes, instead of softening, the animal matter is absorbed, leaving a cretaceous concretion, consisting of carbonate and phosphate of lime. The physical appearances of those who are liable to phthisis, have been admirably described; these appearances, I have in a previous part of these papers stated, are ascribable to organic functions; and where such condition of body, resulting from such organic functions, is found, observation has also proved that there exists a predisposition to tuberculous diseases; and, in the category of tuberculous affections, I include many of those usually recognised as scrofulous, such as glandular affections and scrofulous diseases of the joints. Andral observes, that tubercle "is especially frequent in persons whose skin is very fair, and, as it were, blanched, and without any trace of colouring matter in its capillaries; and in whom the prominences of the cheek exhibit a red tint, which forms a remarkable contrast with the dead white of the rest of the cheek. The colouring matter, thus deficient in their skin, is likewise so in their eyes, which retain the blue tint of infancy; and in their hair, which is light coloured, and also small in quantity; their muscles are soft and slender, and show little contractile power; their blood is serous and deficient in fibrine and colouring matter; and among their secretions, the mucous predominate. In these individuals, moreover, sanguineous congestions are formed with remarkable facility, in different parts of the skin and mucous membranes; and, when once formed, never terminate, but continue in the chronic state, and are frequently succeeded by ulceration and various disorganisations, which do not heal without the greatest difficulty, and that often by the employment of measures the reverse of those termed antiphlogistic. Such a constitution as this may have been formed without any external cause appearing to contribute to it; in other cases it appears to be acquired. The living in an impure or insufficiently ventilated atmosphere, the crowding together of a great number of persons, want of due exposure to the sun, habitual humidity of the atmosphere, various excesses, which exhaust the forces and waste the nervous influence, to the detriment of the nutritive powers—such are the causes which, while they produce in the blood an impoverishment, indicated externally by the state of the skin and muscles, and impress upon every hyperæmia a chronic or languid character, tend also to produce in every organ the secretion of tubercle." "I do not mean to assert that tubercles are formed only in individuals like those just described; on the contrary, they occur in others of a totally different constitution; still I am borne out by the facts in the two following positions: first, that the tubercular diathesis is in direct proportion to the development of the constitution above described; and, secondly, that, in proportion as this constitution becomes less strongly marked, the tubercles also become less frequent, and especially occur in fewer organs at once."

In chemical constitution, tubercles will be found to be composed of organic matter, mixed with inorganic bases, consisting of those insoluble salts, on which I apprehend the proximate deposition of tubercle to depend. It is worthy of remembrance, that, out of the body, albumen or white of egg exerts a strong affinity for lime, which, by exposure to the air, becomes a hardened mass, consisting of albumen and carbonate of lime; in the same manner does it appear to form a com-

pound in those parts of the body where this earth is present. No good analysis of tubercle has yet been made. Thénard's is the only one which I have ever met with, attempting to give the relative proportions of its components. Sir Charles Scudamore, who has paid much attention to this subject, has contented himself with stating, in general terms, the parts entering into the formation of this morbid product, and has not attempted, as far as I am aware, offering a tabular analysis of tubercular products; indeed, from the observations which he makes, it is evident that he concludes almost every tuberculous mass to differ in the proportionate quantity of its component constitution. In this view, he is borne out by my own investigations, founded on the analysis of many examples: the justness of such an opinion will be recognised, when it is admitted that tubercular formations are not definite chemical combinations, but are an agglomeration of elements, varying in proportion, and frequently even in constitution, in almost every example, but which, nevertheless, always contain an insoluble principle, which principle is a salt of lime. This element, being constant, must, I apprehend, be essential to the composition of a true tubercle, and, being the only insoluble element presented, must, I conclude, form its radicle, upon the presence of which, the deposition primarily originated. Thénard, in his table, states tubercular matter in the unsoftened state to consist of:—

Animal matter . . .	98.15
Muriate of soda	} 1.85
Phosphate of lime	
Carbonate of lime	
	100.
Composition of cretaceous tubercles,	
Animal matter . . .	3
Saline matter . . .	96
Loss	1
	100

That this analysis is faulty, is evident from a comparison of the proportion of solid matter relative to the animal constituents in the two tables; for, to make the matter clear in round numbers, if, in the unsoftened tubercle, the saline matter stands in the ratio of two to a hundred—in the cretaceous tubercle, where the animal matter has disappeared, the amount absorbed would have been as 5,000 to 50: a quantity totally disproportionate to the cavity these solid cretaceous tubercles occupy.

Sir Charles Scudamore observes, that tubercles are invariably composed of albumen, occasionally presenting a slight evidence of fibrine, and always containing lime in abundant proportion, and in varying degrees of combination with carbonic and phosphoric acids, more rarely with muriate. In some instances, he has detected the presence of magnesia. The harder the tubercle, the larger the proportion of phosphate of lime which it contains; and when of a less degree of firmness, the carbonate preponderates, and the albumen is more dense. He has not observed any gelatine in tubercle. In proportion as it may possess transparency, the albumen which it contains is thinner, and its specific gravity is less; on the contrary, when opaque, it is denser and has more of the albuminous principle, and less water. Hence it is evident, that the external character of tubercle depends upon its chemical composition. Mr. Gulliver, in his microscopic observations upon the minute composition of tubercle, remarks, that they contain: first, granular matter composed of infinitely minute particles, which is always the most prevalent ingredient, almost always mixed with other ingredients, and frequently forming the entire mass of easeous tubercle; secondly, of corpuscles, more or less globular or oval; thirdly, of cells, which may be recognised in greyish miliary tubercle (composed probably of septa of compressed albumen).

Such is the chemical constitution and microscopic appearance of tubercle; deficient as is the analysis in determinate proportions, yet this is not of such great importance, since it must be remembered, that no two tubercles resemble each other in this respect. Tubercles are not a chemical and

defined compound; they consist of an undefined and undeterminate mixture and accretion of principles. In all, lime is present; and as the animal matter is occasionally absorbed, leaving the calcareous components only, in the place of deposit, we must conclude that it is the lime, which in all cases prevents their re-absorption, and which, being insoluble, originates the deposit; and that, where this lime disappears, it must arise either from a cessation of the cause originating it, and its absorption into the system in a soluble condition, or in its being thrown off by the expectoration. This postulate, granted, obviously indicates in part, the method of treatment, which we shall consider in its proper place. The cause which originates the formation of tubercle may give rise to its deposition in many parts of the body simultaneously. Where is the proof that tuberculous matter exists in the circulation, as pus is found to exist? and yet the appearance of tubercular deposit, in numerous organs at the same time, has been ascribed by some to the deportation of this principle from the locality primarily influenced to the organs subsequently affected, or rather infected, by this circulating poison; whereas, by presuming that the proximate cause is attributable to an insoluble salt of lime, existing and present in the blood, which, by its deposit, gives rise to that train of action originating tubercle, we can readily account for their appearance simultaneously in numerous parts of the body, and especially in those organs engaged in the filtration of the animal fluids.

By inductive reasoning alone, tuberculous deposits might have been supposed to have had their origin from calcareous deposition.

M. Larcher has proved, that in phthisis the bones contain a less proportion of phosphate of lime. In numerous cases of disease of the bones, when the earthy matter has been absorbed, tuberculous matter has been presented in the lymphatic glands and pulmonary organs. Andral relates the case of a boy who had disease of the bones of the iliac fossæ, in whom the lymphatic ganglia around the bronchi, the mesentery, and pelvis, contained a number of chalky concretions, the lungs also being similarly circumstanced. If, then, these concretions can be traced in cases like these to the presence of bone-earth in the blood, why not infer that the calcareous deposits existing in the lungs, subsequent to the absorption of the animal part, owes its origin to the same cause; for they are but the result of complete absorption of the organic matter? The lymphatic system (as may be supposed from this view entertained respecting the origin of tubercle) is repeatedly found affected, and containing a white curdy substance similar to tubercle, only of a more fluid composition; frequently a gland is found infiltrated with tuberculous matter, sometimes occurring in isolated spots, sometimes occupying its entire substance. Sæmmering mentions instances where calcareous deposits of phosphate of lime have been found in the lymphatic vessels; and M. Lauth relates a case of caries of the iliac bones, where the lymphatics of the pelvis were found filled with osseous matter.

To draw up a resumé of my opinions on the nature and proximate cause of tubercle, I would therefore conclude this part of the subject by offering the following observations:—

1. That mechanical obstruction causes the deposition of an insoluble body.
2. That tubercle results from this deposition, the basis of which deposition is a salt of lime of an insoluble character.
3. That albumen is effused around the obstructing agent as around a foreign body.
4. That this foreign body, causing obstruction, operates as an irritant to the neighbouring parts, causing effusion of albumen.
5. That the obstruction acts as a nucleus, and the cause continuing, further deposition occurs.
6. That the more considerable the obstruction becomes, the more widely diffused is the irritation.
7. That the result of capillary irritation is, first, a diminished condition of the calibre of the capillary vessels, with accelerated circulation, thus originating a cause for further deposition and increased obstruction.
8. The irritating cause, continuing, leads to an exaltation of the vital powers of the part, and

augmentation of its organic action, and, consequently, active hyperæmia.

9. A secretion of pus takes place, originating from the presence of the irritating body, which, infiltrating its substance, mechanically divides it.

10. The irritating cause is expectorated.

11. If the calibre of the capillary vessels be sufficiently large to permit of the insoluble matter, present in the blood, to pass freely through them, no tubercular deposit will take place, and it may subsequently be reduced to a soluble condition, and thrown off by the excretory process; but if it happen, that the calibre of the capillary vessels be of insufficient diameter to allow it to circulate freely through, then the primary deposit will occur.

12. Certain constitutions, known as those of the scrofulous diathesis, possess this delicacy of organic structure, and are, consequently, more liable to tuberculous affections.

13. Any cause exciting this condition, namely: a diminished calibre of the capillary vessels, and its sequelæ, the result of irritation (provided lime exist in an insoluble condition in the blood), will be an exciting cause for the production of tubercle; in such way do external agents act.

14. The exciting and *proximate* cause of tubercle is therefore an insoluble salt of lime, which, combining with organic matter (albumen), locally, or in the course of circulation, forms that combination from which tubercle has its origin;—the *predisposing* cause is a condition of the capillary vessels unequal to allow of its free passage, the result of congenital or organic formation, or the effect of physical irritants.

How, then, is lime rendered insoluble in the circulation? We know that, as bone-earth, it exists as a solid component of those organs in the condition of subphosphate; that it appears in the blood as a soluble superphosphate, and that it is presented in the urine as such; how, then, does it become insoluble in the blood? for, as subphosphate or carbonate, it is deposited. This inquiry may, I think, be answered by presuming, first, that, as in the cases narrated of disease of the bone, the lime may have been taken up by the absorbents in such abundance as to prevent the formation of a supersalt; secondly, that, when primarily entering the circulation in solution, it may subsequently meet with bases which render it insoluble; this I apprehend is frequently accomplished by the soluble salts of lime, which are contained in the water taken as drink.

This condition may, therefore, originate either from a deficiency, positive or relative, of phosphoric acid in the body, or from a superabundance, positive or relative, of lime.

The chief cause of the positive deficiency of phosphoric acid, in the blood, results from an insufficient quantity of animal food, with an insufficient amount of exercise.

The chief cause of the positive superabundance of lime, in the circulation, is the prevalence of that earth as a soluble *sulphate* in the water; and it is a recognised fact, that marshy districts, where the water is uncontaminated by salts of lime, are comparatively exempt from phthisis.

MAGIC, MESMERISM, HYPNOTISM, ETC., ETC., HISTORICALLY AND PHYSIOLOGICALLY CONSIDERED.

By J. BRAID, of Manchester, M.R.C.S.E.

Last May, a gentleman, residing in Edinburgh, personally unknown to me, who had long resided in India, favoured me with a letter expressing his approbation of the views which I had published on the nature and cause of hypnotic and mesmeric phenomena. In corroboration of my views, he referred to what he had personally witnessed in oriental regions, and recommended me to look into the "Dabistan," a book lately published, for additional proof to the same effect. On such recommendation I immediately sent for a copy of the "Dabistan," in which I found many statements corroborative of the fact, that the eastern saints are all self-hypnotisers, adopting

means essentially the same as those which I had recommended for similar purposes.

It is a curious and interesting fact, clearly demonstrated by this investigation, that the induction of a habit of intense abstraction or concentration of attention, through a strain on the eyes, by a steady, fixed gaze at an object, and suppressed state of the respiration (which observation and experience had led me to adopt and recommend as the most effectual mode of inducing the nervous sleep, and its consequent phenomena), has been practised for similar purposes by the *magi* of Persia for ages before the Christian era; most probably from the earliest times; was well known to Zoroaster, who followed in their steps, 550 years B.C.; and from this found its way into India in those days, where it has been employed by the Hindoo saints and religious mendicants, Jogees, Fakirs, and others. I had hinted (page 21 of my Treatise on Hypnotism) at this as the *probable* mode by which they performed the extraordinary feats there referred to. This predication is now proved to be the fact.

Whilst there is this remarkable coincidence, however, between my own views and theirs, as to the modes of inducing the *sleep*, and some of the *phenomena*, in the sequel it will be found that our theoretical views as to the nature and cause of the *subsequent* and *ulterior phenomena*, are "wide as the poles asunder."

The following seems to have been the cause of the introduction of this practice into India, as related at page 270, vol. I. of the "Dabistan:"—An Indian sage, having heard of King Gushtasp having adopted Zoroaster's creed, wrote a letter to the king, dissuading him from such a course. On this, King Gushtasp invited the sage to come and hold a discussion with Zoroaster in his presence. The Indian sage obeyed; but, instead of overthrowing Zoroaster's influence, was himself converted to the faith of the latter. I shall quote from the "Dabistan" the following interesting narrative of his conversion. Zoroaster addressed the Indian sage thus: "Listen to one Nosk of this Asta, which I have received from God, and attend to its interpretation." One of Zoroaster's disciples, at the illustrious prophet's command, then read a Nosk in which God said thus to Zardhust (Zoroaster):—"On the promulgation of the Iran faith there shall come from Hindostan a wise man, named Jangranghachah (now this was the real name of this Indian sage), who will ask three questions, after such and such guise, the answers to which are after this manner, thus answering all his questions:—

'By this same Nosk his condition was improved:

And the answer to each question was correctly given."

"When he heard the solution of his question, he fell from his chair, and on recovering his senses adopted the pure faith."—Page 277.

Now it appears to me highly probable, that this extraordinary Nosk, which was so astounding to the Indian sage, from *announcing him by name*, and the very questions which he meant to propose, and their appropriate answers, was, after all, no such mighty miracle as at first sight it appears to be. Let it be remembered, that this same sage, on hearing that King Gushtasp had embraced this faith, "wrote an epistle to the great king, dissuading him from the profession of the pure faith." Now this letter was sent *prior* to the *sage's visit*, for the purpose of holding this disputation with Zoroaster; and the latter would, no doubt, see the letter, or hear its contents, and might thus, very easily, from the train of argument used to the king, judge what questions would be put by the Indian sage, as well as what might be the most suitable answers to them.

Moreover, the contemplation of the subject might excite a dream, during which, all was passed in review before his fervid imagination, with all the impressiveness of reality, and thus, without intending any deception, he might be induced to record it as a special revelation, before the arrival of his opponent.

There seems good reason to believe that the Greeks acquired their knowledge of hypnotism from Persia, about 500 years B.C. "Dabistan,"

page 227, vol. I, it is recorded: "St. Clement, of Alexandria, places Pythagoras about the sixty-second Olympiad, or about 528 years B.C., and says, that he was a zealous follower of Zoroaster, and had consulted the Magi. Iamblicus, in his life of Pythagoras (cap. 4), states, that this philosopher was taken prisoner by Cambyses, and carried to Babylon, where, in his intercourse with the Magi, he was instructed in their modes of worship, perhaps by Zoroaster himself;" and again, at page 281, "At the age of sixty-five years, Zoroaster delivered in Babylon lessons in philosophy, and counted Pythagoras amongst his disciples." At page 278 of the same volume, it is said of Alexander the Great, that "when he came to Iran, he found that the Gushtaspians of Iran were the better and wiser, and he found that they had such power that, when they pleased, they left the body, which they treated as a garment." And, besides these, he saw another class of men in Iran, who, by means of reason and meditation, discovered the real nature of things as they actually exist."

It is thus evident, that self-hypnotism existed in Persia before Alexander's expedition into that empire; but how long before Zoroaster's time, I can discover no mode of determining with any certainty. It was no doubt practised by them from the earliest ages.

From what is related at page 129, vol. ii., of the "Dabistan," it appears that "Goraknath was the fosterfather of the prophet (Mahommed) who, having received the august mission, took the mode of Yog from the sublime road of true faith." This certainly offers a good explanation of the visions of Mahommed, whilst in the extatic trance induced by self-hypnotism. There cannot remain a doubt, that Ardir Viraf's vision of heaven and hell (recorded at page 285, vol. i., "Dabistan") occurred to him during a fit of self-induced hypnotic extatic trance, which lasted for a week, his couch being all the while surrounded by six sages. His vision is well worth perusal, and seems to have prefigured that of Mahommed. Ardir Viraf lived about A. D. 200, and it is highly probable that the knowledge of his vision was the type and exciting cause of Mahommed's. A. Viraf, in his splendid and sensual heaven, finishes up with the following remarks:—"What can I say concerning the black-eyed nymphs, the palaces, offspring, and attendants, the drinks and viands? anything like which I know not in this elemental world."

On the 6th of last July, an interesting paper appeared in your own columns, entitled "Practice of Hindoo Mesmerism," which referred to Ward's History of the Hindoos for proof, that what we were doing at the present day, under *new names*, had been quite familiar to the Hindoo philosophers from time immemorial. After furnishing an interesting extract, descriptive of some extraordinary effects which they alleged they could thus produce, and which, like the Mesmerists of the present day, the Hindoos represent as real (but which I attribute entirely to an inordinately excited state of the imagination, which invests every idea arising in the mind with all the attributes of present reality), your correspondent adds: "I would only observe that the Hindoo saints are all self-mesmerisers, following the method adopted by Mr. Braid, of Manchester, in regard to his patients, restraining the breath, and fixing the eyes and thoughts on one object."

The perusal of this paper made me desirous to examine all which was recorded on the subject in the work referred to, but I was unable to procure the volume before the month of September. The result of this investigation, however, I consider so important, that I feel desirous of submitting a few remarks, which are likely to interest the readers of your liberal and independent journal.

It is gratifying for me to discover, that the views which I was led to entertain as to the *nature* and *cause* of the sleep and some phenomena (and which I arrived at from independent experiments and observations, without any knowledge of their views and practice) should be confirmed by the practice and experience of all these eastern devotees. Their success in hypnotising themselves by their own personal acts, independently

of any aid from another person, and which they had practised for ages and ages before animal magnetism or mesmerism was heard of in Europe, strongly confirms my views that there is no *magnetic fluid* or *special influence requisite to produce the sleep*, and many of the attendant phenomena. Moreover, what is of far more consequence, is the weight which this ought to have with sceptics in the hypnotic and mesmeric phenomena. Those who wish to deny the facts and phenomena of hypnotism and mesmerism, if they would be consistent, must also deny all which has been recorded as having been exhibited by these devotees for ages past, and also all which has been observed in our own time, and borne testimony to by most competent, respectable, and living witnesses. The feats of some of these Mobids and Yogees, as they are respectively called, of suppressing their breath and reducing the circulation, until both have been so long and completely suspended that the patient is *apparently* dead, and yet recovers, may to some appear startling and incredible. It is, however, attested by too strong evidence to be doubted by any reasonable and honest man—and, as regards sceptics, I would beg to remind them that we had an instance in point in our own country, in the case of the late Capt. Townsend. This case was carefully investigated by the late Dr. Cheyne, and two other gentlemen. Few were so competent, as a medical evidence, as Dr. Cheyne, and a more honourable and veracious witness could not have been found. Various tests were applied to determine the state of the circulation and respiration, but both were *so completely* and *so long suspended*, that they suspected the colonel had carried his experiment too far, and were retiring from the room, *supposing him to be irrecoverably dead*. However, they now observed him begin to move (I presume this was the effect of the current of air when they opened the door), and by degrees he became completely restored.

The following is the relation of this case by Dr. Cheyne:—"He could die," says Dr. Cheyne, "or expire when he pleased, and yet, by an effort, or somehow, he could come to life again. He insisted so much upon us seeing the trial made, that we were at last forced to comply. We all three felt his pulse first; it was distinct, though small and thready, and his heart had its usual beating. He composed himself on his back, and lay in a still posture for some time; while I held his right hand, Dr. Baynard laid his hand on his heart, and Mr. Skrine held a clean looking glass to his mouth. I found his pulse sink gradually, till at last I could not feel any, by the most exact and nice touch. Dr. Baynard could not feel the least motion in his heart, nor Mr. Skrine perceive the least soil of breath on the bright mirror he held to his mouth. Then each of us, by turns, examined his arm, heart, and breath, but could not, by the nicest scrutiny, discover the least symptom of life in him. We reasoned a long time about this odd appearance, as well as we could, and finding he still continued in that condition, we began to conclude that he had indeed carried the experiment too far; and, at last, we were satisfied that he was actually dead, and were just ready to leave him. This continued about half an hour. By nine in the morning, in autumn, as we were going away, we observed some motion about the body, and, upon examination, found his pulse and the motion of his heart gradually returning; he began to breathe heavily, and speak softly. We were all astonished to the last degree at this unexpected change, and, after some further conversation with him and among ourselves, went away fully satisfied as to all the particulars of this fact, but confounded and puzzled, and not able to form any rational scheme that might account for it."

The Colonel's extraordinary power was just what so many of the Eastern saints have attained to and practised. Thus, at page 93, vol. i., of the Dabistan—Kalian expressed himself thus, "The connexion of my spirit with this body, formed of the elements, resembles the relation of the body to a loose robe; whenever I wish, I can separate myself from it, and resume it at my desire."

The Mobid "Hoshyar had attained to the power of suppressing the breath for one watch

(three hours)."—Vol. i., page 111, Dabistan; and page 116:—"He used to lay on the breast of a person, plunged in sleep, something of such a nature as to make him return an answer to every question proposed to him." This was merely the effect of contact arousing and rivetting attention. During the hypnotic state, J. B. Khoda Joi, "could suppress his breath during four watches" (twelve hours.)—p. 118. "Kalian was a religious man, and kept his breath for two watches, or six hours." p. 146 of vol. ii. Dabistan.

"Serud Nath was of a noble origin. He could restrain his breath for *two days*."—page 138, vol. ii. Dabistan. In the year 1638, A.D., he was seen in Lahore by the author of the Dabistan. Vol. ii, page 137—"Balik Natha, they say, a penitent, was of royal extraction, and attained great perfection in the Yogee; *he restrained his breath during ONE WEEK*; and after having passed one hundred and twenty years of his life, he had not lost his strength." He was alive in the year 1618, A.D.

In the journal of the Asiatic Society of Calcutta, there is a case recorded of a Fakir, who allowed himself to be *buried for a fortnight, and was taken out alive*, as vouched for by an English officer, who witnessed the experiment. One of the Rajahs, (I think of Lahore) having heard of these feats, had determined to test it in a manner which could admit of no doubt or collusion.

With this view he had a grave dug, and, under a guard of soldiers, after the devotee had reduced himself to a certain condition indicated, he was put into the grave and covered with the earth. His grave was strictly and constantly watched by the soldiers until the expiration of the period named, when he was dug up, and *was actually found alive, and recovered on being thus restored from his solitary abode*.

After all, this is no such miracle, but we can find an analogy for it in the *hybernation of animals*. In man it is acquired by habits of rare occurrence, and is therefore astonishing; in animals it occurs naturally and periodically, and therefore we view it as a matter of course. But, when duly considered, it is perhaps less surprising for the Yogee who, by habit, was in some measure prepared for such a feat, to have survived his sepulture under the stern command of the Rajah, than for the fat pig, recorded by Martell, and quoted by Dr. Lion Playfair, in his lately published paper on sleep, which, *without any such preparation*, was buried by the falling in of an embankment, and yet was taken out *ALIVE, at the end of 160 days*. Dr. P. observes, "Instances have occurred in which pigs, being placed in a favourable condition, have actually proved their capability of being in a state of hybernation. Thus, Martell describes the case of a fat pig overwhelmed with a slip of earth, which lived 160 days, without food, and was found to have diminished in weight, in that time, 120lbs.—an instance quite analogous to the state of hybernation."

From a very early period of my attention to the subject, I observed the greater difficulty of hypnotizing patients who *breathed quickly*, and therefore desired them to suppress their respiration. At page 78 of my work on Hypnotism, the following remarks occur:—"In reference to my original theory, Dr. Binns (in his work on sleep, published in 1812), at page 372, calls in question the justness of my allegation, that, during hypnotism, natural or artificial, there should be any *imperfect arterialisation of the blood*, notwithstanding the suppressed or modified respiration and circulation. He has adduced no arguments, however (sufficient), to convince me to the contrary; and I again repeat my conviction, that such condition of the blood *does* exist, and is a cause of *ordinary sleep*; and that the still more intense state of torpor, in a certain stage of neuro-hypnotism, results from a *still less perfectly purified blood*; and, on the other hand, that the dreamy and excited states arise from different degrees of stimulating properties of the blood, from being *more highly arterialised* at various stages, together with the *velocity of the circulation*, and *pressure or tension on the brain*, during the cataleptiform state."

(To be continued.)

ON THE INFLUENCE OF THE SUDDEN TRAUMATIC OR TOXICAL LESION OF THE SPINAL MARROW ON THE KIDNEYS AND BLADDER.

By E. H. DESPORTES, M.D., M.A.M., &c.

(Communicated by the Author.)

Before commencing the object of the following memoir, which may be considered as an abstract of my own observations and experiments, it may not be uninteresting to make a preliminary remark upon a point of the science which is still enveloped in doubt.

It has been concluded, because an aqueous urine was found in the bladder, when water was injected into the stomach of an animal whose spinal marrow had been previously destroyed, that this lesion has no effect on the secretion. I raised my voice publicly against this opinion, stating that the fluid in the bladder may have been carried there by some prompt passage, as yet undiscovered, of which numerous examples are extant; but in which it takes place so rapidly, that it is impossible to admit that the liquid is conducted thither by the ordinary circuit through the kidneys; and I added, that, as the blood contains certain principles of the urine, the aqueous liquid may, in the canals it follows ere it reaches the bladder, dissolve some minute particles of these constituent parts, without it being necessary to seek an explanation their presence by the intervention of the kidneys.

This objection was replied to by the quotation of an experiment, of which I could not be supposed to be ignorant, viz.: that when both kidneys were removed, no urine was found in the bladder. But, in my opinion, those who asserted this, ought to have foreseen and combated a reflection which renders the fact null: that the removal of the kidneys occasions, either directly or indirectly, a peculiar disturbance, so serious, that many organic acts are interrupted, or put a stop to, a sufficient length of time for death to take place before their re-appearance, or before the establishment of their supplementary acts. This opinion has never as yet been victoriously replied to, but a singular argument has been brought forward against it, namely: that there was no disturbance in the economy after the removal of the kidneys. What, no disturbance! To what lesion, then, can the denomination of disturbance be reserved, if it be not given to one which causes death in the space of four, five, seven, or at most nine, days? Neither can I admit the opinion, that the destruction, the division, or the sudden crushing, of the spinal marrow, is without influence on the kidneys or their functions. I will, to combat it, content myself with quoting the following words of Sir B. Brodie: "Injuries of the spinal marrow, including those resulting from, or accompanying, fracture, are well known to produce *certain changes in the urine and urinary organs*."

When an instrument or a poison—and the effect produced by the latter is very analogous to, if not the same as, that of the former—is made to act violently on the spinal marrow, the kidneys are affected by the traumatic, or toxic, lesion, in two ways:—First, like all the organs of the economy; and, secondly, on account of the affinity which exists between the spinal marrow and the kidneys. —When the spinal marrow has been divided, torn, or destroyed mechanically, or acted upon by a poison, in the whole system, and, consequently, in the kidneys, a phenomenon takes place, similar to what is observed when a deep and dangerous wound has been received; for instance, a gun-shot wound. In these cases, a violent clonic spasm pervades the whole economy, and manifests itself in each part, according to its organisation, the functions it performs, and the modification caused in its mode of existence and peculiar vitality.

The nerves of the kidneys are numerous, and proceed from the renal plexus of the sympathetic nerve, consequently, in an indirect manner, from the spinal marrow; since, between the two, ganglions are found, which may be considered as secondary nervous centres. On account of this disposition, they are affected by the violent general spasm, produced by the sudden traumatic or toxic

cal lesion of the medulla. At the same time as this clonic spasm manifests itself in the eyes, ears, and larynx, by disturbances in the sight, hearing, and speech; in the muscles of the face, by their contraction, so as to give rise to trismus; in the respiratory organs and heart, by the irregularity, the intermittence, and the inequality in the breathing, and the pulse, &c.; the same spasm certainly affects the kidneys, and shows itself by an irregularity, a suspension in their functions, and a lesion of their substance. Were it possible to lay bare, as in experiments on animals, one of the kidneys, probably it would present to the touch a degree of firmness greater than in other pathological conditions, and, sometimes, on its surface, certain movements, or small, short, unwonted tremors. These phenomena are difficult to be distinguished from those dependant on the opening made in the abdomen, but these last are the effect of a clonic spasm, and produced by a large wound, and thus are identical in their nature and in their cause. Moreover, they cannot be produced without causing a disturbance in the renal circulation, which is carried on by a voluminous artery, the irregularity of whose pulsations, in an experiment, is easily perceived and felt.

But the kidneys do not experience the only morbid phenomena observed, when the spinal marrow is affected by a traumatic lesion or a poison. They perform a function—the secretion of the urine—and therefore they act like those organs which can never be completely deprived of the property they possess, since they are independent of the will; and Sir B. Brodie remarked long since, that the effect produced on the kidneys was the same, no matter what part of the spinal marrow was the seat of the lesion. When the disorder of the medulla is considerable, and takes place suddenly, the secretion of the kidneys ceases partly or entirely, and it is only after a certain time, which is very variable, that it recommences; thus, there is a notable diminution in the urine secreted during the twenty-four hours, so much so, that the quantity, which reaches the bladder, has been supposed, in man, to be two or three ounces the first, and three or four the two following days. This circumstance did not escape the notice of Sir B. Brodie; and, on persons affected with serious lesions of the vertebral column, as paralysis from some internal cause, or whose medulla has been suddenly acted on by a poison; as also on animals on whom different experiments had been performed, I have myself had opportunities of observing facts which confirm the opinion just announced, as to the quantity of urine secreted. The cause of this diminution was, on a recent occasion, mistaken by several distinguished authors; because they forgot that, when called near the injured person, at least twenty-four hours after the accident, they drew off, on the first introduction of the catheter, the urine in the bladder at the moment of the accident, as well as the small quantity secreted after it had happened. Now, when twenty-four or thirty-six hours have elapsed, the secretion of the urine may have become, so far as quantity is concerned, as abundant as possible with the existing disease.

It may, however, be objected, that, by experiments performed by eminent individuals, it has been proved that, after the destruction or division of the spinal marrow, the urinary secretion continued, not being notably interrupted; and that 3iiss. of the liquid flowed through the catheter, in the space of an hour, from the bladder of a middling sized dog, and 3j. in fifty minutes from that of a terrier. Such a result is at variance with what I have observed in man; and, as I am not in any way biassed by any anterior publication on this subject, I do not see why I should modify the opinion I have been led to form from experience. As a conscientious observer, I seek but the truth, and I can therefore have no reason to desire that the question should be solved in one way rather than in another: it matters little to me individually, whether the urine is or is not secreted in any given case; but it is necessary, in a scientific point of view, that this should be known; consequently, it will not be unimportant to examine what would be the result of a short and impartial commentary on the experiments that have been performed on animals.

The following remark first presents itself. If, on the one hand, observers have concluded, from clinical observations, or experiments on animals, that the urinary secretion persisted without undergoing any notable diminution; on the other hand, there are likewise observers who, from similar facts and experiments, have come to an opposite conclusion (Sir B. Brodie, Messrs. Brachet, Gamage, Krimer, G. Lund, Ollivier, Segalas). The question, therefore, still appears to be surrounded with difficulties, and wavering between two contrary assertions. Again, do not the conclusions drawn from experiments, and which are contrary to that just mentioned and adopted by me, viz:—that, in man, the sudden and serious affection of the spinal marrow acts on the kidneys, suspending, in general, but for a short time, their secretion, and causing it to decrease also for a certain length of time,—lose much of their value by the following reflections?—Can the quantity of the urine, which escapes through the catheter during vivisections, performed on different dogs, and which is remarkable, be estimated, without knowing approximately the quantity secreted by the different species of animals, usually employed for these experiments;—that the physiology and pathology of these animals are surrounded with as much difficulty as in the human species;—that, in small animals, all the acts, the secretions and especially the excretions, take place, and are repeated far more frequently than in those of a larger kind, &c. Does it not, therefore, appear difficult, if not impossible, to affirm, though the animals, on which the experiments were performed, evacuated three ounces of urine in an hour, or an ounce only in half an hour, that the kidneys really secreted as much urine as when the spinal marrow is in its normal condition? Besides, may not the quantity of urine transmitted to the bladder be momentarily increased by the injection of a certain quantity of water into the stomach, and its passage from thence into the bladder, without following its usual circuit through the kidneys; and may not the quantity of urine, which escapes through the catheter, be greater than what would have taken place in an animal whose spinal marrow had not been wounded or destroyed? Finally, is not the *consensus* of the different parts of the body incontestably much less in animals than in man? Without a doubt. In man there is between all the organs composing the economy, so close a bond, and such an affinity, that they form an almost indivisible whole, each performing its part, and which, while possessing a peculiar existence, cannot be changed, interrupted, or suppressed, without giving rise, from the absence of its needed or normal action, to a certain degree of disturbance in the acts which constitute life. Now, if anything similar takes place in animals, it is never to the same degree, and, perhaps, not in the same way.

From the foregoing remarks, to which many more pertinent ones may be added, it is evident, that, in the actual state of medical knowledge, viewed under the two-fold consideration of experimentation and casual observation, it would not be prudent to neglect, on account of the contrary results obtained by experiments on animals, the ordinary ones observed on man, when suffering from a sudden and traumatic lesion of the spinal marrow, or one produced by an internal cause. It is not necessary to add, that these remarks are not only applicable to what follows, but, likewise, may perhaps lead to the study of the accidental lesions on the spinal marrow in man.

Another phenomenon appears at the same moment, and is produced, in general, by the influence exercised by the sudden, deep, traumatic, or toxic lesion of the spinal marrow on the kidneys. It consists in an immediate diminution of one of the principles of the normal urine. This liquid has not its customary acidity; it contains little or no mucus, and is of a slightly disagreeable odour, *sui generis*. In order to ascertain the diminution of the acidity, inject a certain quantity of distilled water into the bladder, previously emptied with the catheter; leave it for a given time, and then withdraw it: this done, establish:—1°—The quantity of urine added to the water injected; and 2°—The acidity possessed

by the mixture, by comparing it with another portion composed of an equal quantity of distilled water and of normal urine, obtained by micturition from a healthy individual. In acting thus, it is easy to discover whether the acidity of the urine, drawn from an individual suffering for a day or two only from an injury of the spinal marrow, caused by an accident, or by a poison, is diminished. In the latter instance, when the substance administered is an alcaloid, there may be some doubts; in the former, there can be none.

Sometime ago it was asserted by Krimer, and again in a recent and learned memoir, that, in general, the urine, in the lesions of the spinal marrow caused by vivisections, remained acid. But, in these experiments, it is related that, in several dogs, it was normal, and in others more or less acid than in the natural state; and here, the number of animals in each case matters little; what is important to be noticed is, that it varies. Now, in serious injuries of the spinal marrow in man, something very analogous has been observed, as will presently be mentioned; let it, however, be remembered that the accidental, or traumatic, suppression of the function of the spinal marrow on the kidneys, causes a modification, and, in general, a diminution, in the acidity of the urine secreted from the instant that the lesion is produced.

This established, I will now give the proof of the opinion just announced. There are some cases, in which the urine, drawn from the bladder of an individual affected with an injury of the spinal marrow, or under the influence of a substance which specially acts on this organ, is very acid, of an opaque yellow colour, and deposits an amorphous, yellow, sediment. If any observer, by some extraordinary concatenation of events, met with such cases only, the error would be excusable; but if he record only the acidity of the urine, and neglect to state whether it presented also a yellow colour, was opaque, and deposited an amorphous, yellow sediment, his description must be inexact and incomplete. These concomitant phenomena, the acid, opaque, yellow urine, with an amorphous, yellow sediment, were observed and rightly recorded by Sir B. Brodie, and other practitioners; and I will add, because I consider myself sanctioned by experience in so doing, that these phenomena in the urine indicate a peculiar morbid condition, either of the kidneys or some other parts of the system, at the moment of the production of the sudden traumatic or toxic lesion of the spinal marrow. Under these conditions, the acidity of the urine, even when highly developed, does not invalidate the conclusion, that its modification, or domination, is one of the symptoms by which the kidneys reveal to us the mode in which they are affected by the traumatic lesion of the medulla. Is it not, that, to a certain extent, as the instant in which the injury was produced becomes more and more distant, the kidneys, and the urinary organs, assume by degrees a peculiar state of morbid debility, and have thus, as recorded, alternately offered, for one or several days, either a limpid acid urine, *i. e.*, normal; or an altered liquid, whose characters I will presently describe.

The acidity of the urine, in its different degrees, as well as the other principles of the fluid, seem, as to their variation, to be, in a measure, under the dependency of the different or successive conditions, in which the person or animal is found. How many days does the primary and immediate diminution of the acidity last? Three or four, at least; so it appears from the first observation, quoted by Dr. Segalas. This case shows, also, that, with care and attention, the urine may for a considerable length of time present its normal, or nearly normal condition (vide *The Medical Times*, vol. x., No. 462.)

The traumatic, or toxic, lesion of the spinal marrow, especially when carried to an extent sufficient to produce paraplegia, causes a new and notable alteration in the quantity and quality of the urine contained in the bladder. This liquid, in these cases, 1st, becomes more abundant than it was during the four or five days following the accident, and contains, in suspension, a quantity of mucus greater than in the normal state; 2nd,

it has manifest alkaline properties immediately that it is drawn from the bladder.

1°. As to the augmentation in the quantity of the urine, subsequent to the three or four days succeeding a serious injury of the medulla, it is because the clonic spasm which affected the kidneys, as well as the other parts of the body, at the moment the lesion of the medulla was produced, decreases by degrees, and even ceases completely. If an aqueous drink be given, now, to the patient, and the kidneys secrete freely, though abnormally, the quantity of urine in the bladder is necessarily increased, and the liquid which flows from that reservoir, in these cases, on the third, fourth, or fifth day after the lesion, brings away a certain quantity of mucus. Therefore, this last is supposed to be the result of the secretion of the vesical mucous membrane; such may be the case in reference to that, which is not very intimately united with the urine, and which separates itself readily from it by cooling. But is it so with that, which forms, as it were, a part of the urine, and which is so united that it is impossible to suppose that the feeble oscillations which the liquid experiences in the bladder, could be sufficient to produce so complete a union, and such a perfect division of the mucus between the molecules of the liquid, that its separation does not take place on rest alone? This mucus, of which it is impossible to determine the quantity, is not secreted, at least in all probability, by the mucous membrane of the bladder, but, on the contrary, it is the product of the renal secretion, which becomes morbid, so soon as the kidneys have fallen under the influence of the lesion of the medulla. That mucus may be secreted by the kidneys themselves, we have a proof in the fact, that, in cases in which the bladder has been repeatedly washed out, and other precautions taken to remove the urine as soon as it reached this reservoir, and which would thus prevent its being mixed with any appreciable quantity of the mucus secreted by the internal membrane of the bladder, mucus has been found in this secretion. It must then be admitted, that individuals, affected with serious lesions of the spinal marrow, and who are, in consequence, paraplegic, emit urines containing a considerable quantity of mucus, partly secreted with the urine in the kidneys, and partly by the mucous membrane of the bladder. Which of the two is the sooner changed during its sojourn in the bladder? which is it that contributes mostly to cause urine, more or less acid, when emitted, to lose this quality? This might easily be indicated; but as foreign to the object of this memoir, I will content myself with merely referring to it.

2°. In cases of fracture of a vertebra, complicated by paraplegia, the alkalinity of the urine was remarked on the third day after the accident, by Messrs. Smith, Tyrrell (1837), and other observers. This, however, is not constant, since, in other cases, this phenomenon appeared only after seven, eight, or even ten days. This alkalinity may take place in the bladder itself, when that organ partakes of the paralysis affecting the lower part of the body, which is one of the primitive or consecutive phenomena of a serious lesion of the spinal marrow. The development of this alkalinity is facilitated by several circumstances:—(A) The urine, for two or three days preceding that on which it becomes alkaline, is not very copious, being hardly two, three, or four ounces in quantity. (B) All the component parts of the urine have with each other less affinity, and are more disposed to separate than in the normal state. (C) The bladder is in a morbid condition; it has lost more or less of its contractile power, and with it the means of counterbalancing the chemical and physical phenomena which take place in its cavity; its temperature is in conformity with the diminution which exists in all the paralysed parts, and which is compatible with the organization of the organs in the pelvis; and it is in these morbid conditions, that the internal membrane secretes a mucus of more or less adherence and abundance. (D) This mucus being thick, sticky, whitish, is partly mixed with the urine, and the vital forces being incapable of offering the usual resistance, it combines with the salts of this liquid, becomes

changed, and acquires a putridity which manifests itself by a fetid, alkaline odour, more or less ammoniacal. In some cases, this fetidity is very slight at the moment the urine is emitted, but becomes very intense a short time after. (E.) The urine, when removed from the bladder in the alkaline condition, may contain a certain proportion of phosphate of lime. Now, is this salt, as asserted, secreted by the mucous membrane, or does it result from the decomposition of the urine? When it is in considerable quantities, is not its presence owing to a morbid modification of the urine at the moment of its secretion in the kidneys, which, with the whole system, are more or less affected by the lesion of the medulla spinalis? If this be true, ought not the increased proportion of phosphate of lime to be considered, at least to a certain extent, as a tardy sign of the influence exercised by the traumatic or toxic lesion of the spinal marrow on the kidneys? (F) When the injury of the medulla is sufficient to produce complete paraplegia, the urine contains not only an altered mucous, and phosphate of lime, but likewise blood, more or less dark in colour. The separation of the blood has been attributed to an inflammation of a catarrhal nature, indicated also by an increased proportion in the quantity of mucus. It may here be remarked, that, if not impossible, it is at least not very probable, and hardly admissible, that the mucous membrane of the bladder, which partakes of the paralytic condition of the other parts, should become the seat of a real phlegmasia. It has been affirmed, and perhaps with truth, that the frequent introduction of the catheter is the cause of the sanguineous and mucous effusion in the bladder. But does not this blood, let the source be what it may, aid in producing the alkalinity and putridity of the urine, when it remains some time in the bladder? Moreover, the opinion of Messrs. Smith, Cline, Tyrrell, Stanley, &c., that death, in almost every case of perfect paraplegia, was caused by the inflammation produced by the alkaline urine in the bladder, and which led them to perform emollient injections several times a day, has been useful; inasmuch as it has led practitioners to examine with greater care the state of the bladder, and the influence exercised on its mucous membrane by the fetid and alkaline urine accumulated in its cavity.

(To be continued.)

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

(Reported by F. THOMAS, Esq., House Surgeon.)

FUNGOID TUMOUR OF THE LEG.

Charles Russell, æt. 27, a stationer, was admitted into King's College Hospital, on the 29th of July, about twelve o'clock, p.m.

Is a native of Hampton, where he has always lived, and enjoyed good general health; of intemperate habits; about four years ago he perceived a small, soft tumour, about the size of a hazel-nut, of the same colour as the surrounding healthy skin, on the outer side of the left leg, about three inches above the external malleolus. This tumour continued to increase very slowly; consequently, he took but little notice of it, till about two months ago, when the leg began to swell, and the tumour to grow more rapidly; still soft, and quite free from pain, or any inconvenience. To prevent the leg from swelling, he had a *calico roller*, applied from the ankle upwards (of his own accord). He continued to wear this roller, with benefit, till about three days ago, when, whilst walking in the city on business, he perceived blood trickling down his shoe; to suppress the bleeding, he had another roller applied over the first, which proved effectual for a time; on going to bed, he removed both rollers, and exposed the tumour, which was found to have increased much in size, and changed from its former colour to a livid hue; there was a small aperture at its lower margin, covered with a clot of blood, and a little above this was a fungous mass, which bled very profusely; Mr. Jephson, a surgeon, at Hampton, now saw him, for the

first time, who applied a compress of lint over the tumour, and firmly secured it with a bandage; the patient was ordered to keep quiet in bed, and the bandage to be kept continually wet with an astringent lotion. By these measures the bleeding was restrained, till the night of his admission; he had been walking a good deal during the early part of the day, and continued to do so till late, when the bleeding recurred very profusely. Mr. Jephson was called in, who sent him to the hospital, under the care of Mr. Partridge.

On his admission, he was pale, and felt faint from the loss of about a quart of blood; the roller was removed from the tumour, when a stream of venous looking blood poured from the sloughing mass; the tumour was covered with a bandage carried from the toes to the knee; at the same time the leg was elevated, and ordered to be kept continually wet with Goulard water.

July 30.—There has been no recurrence of the bleeding; slept well last night; has no pain in the tumour; appetite good; no thirst; there is no tenderness, nor enlargement, of the inguinal glands, or in the course of the absorbents of the leg or thigh, nor does he complain of deep seated pain in the loins; the roller was removed, in order to expose the tumour (for further examination), which was soft and elastic; the fungous mass had, by this time, attained the size of a man's fist, and was ragged on its surface. It seemed clear that the tumour was of that nature which is commonly called "*fungus hæmatodes*;" but, the patient's general health was good, and there was no indication of the existence of disease, either in the viscera, or in any other part of the body—the glands in the groin also perfectly healthy. The tumour, though firm, appeared slightly moveable over the subjacent parts, except where they cover the fibula—Mr. Partridge, therefore, determined to give the patient a chance of its excision, before having recourse to the more formidable measure of amputating the leg.

July 31.—The patient was placed upon his right side, on the operating table, and the outer-side of the left leg exposed. Mr. Partridge commenced by making two longitudinal semilunar-shaped incisions, with a broad blade bistoury; the ellipsis formed by these two incisions included the tumour, together with some of the healthy surrounding skin; the mass was more carefully dissected from its base, which rested upon and firmly adhered to the fascia of the leg; it was also intimately attached to the periosteum, over the fibula, behind which, a large lobule of the tumour dipped through the fascia, and passed deeply between the two peronei muscles, whose fibres it was necessary partially to divide before the diseased portion could be removed; it was, however, completely eradicated; the posterior peroneal artery was divided in the dissection, but readily secured; in consequence of the size of the tumour, and the requisite large removal of the adjacent skin, the edges of the wound could not be brought into apposition with adhesive plaster; consequently, broad strips of wet lint were applied around the leg, from the ankle to a little below the knee, in the form of a many-tailed bandage; he was now placed in his bed, and the leg well supported upon a cushion.

August 1.—Slept comfortably last night; pulse 120; appetite good; not thirsty; to have low diet, instead of middle, for a few days; has no pain in the leg. To continue the water dressing.

August 5.—The ligature from the posterior peroneal artery came away yesterday; the surface of the wound, which at first looked pale and flabby and at the margins sloughy, now begins to granulate. Continue the same application.

August 12.—The wound looks very healthy, feels comfortable; is free from pain in the groin and abdomen. Continue the water dressing; to have middle diet.

August 21.—The wound is cicatrising at the margins only. Omit water dressing; the leg to be strapped.

October 18.—The wound has healed slowly but uninterruptedly, up to this time, when there remains only an open surface, and that quite healthy about the size of an almond, at the lower part of the wound. Discharged at his desire, an

requested to come up once a week to show himself; the leg to be strapped and bandaged, and to take as much rest as he could get.

Remarks.—So far the progress of a constitutional disease seems to have been staved off, by its complete local removal. Mr. Jephthson, of Hampton, has kindly assented to give Mr. Partridge notice, should the complaint return, or reappear at any time in any part of the body. The patient has subsequently appeared at the hospital, according to Mr. Partridge's request, in perfect health, and the wound had healed without an untoward symptom.

November 27.—Was at the hospital to-day; the wound had healed up a fortnight ago; his general health was never better than at the present time. To continue the bandage a little longer.

ST. BARTHOLOMEW'S HOSPITAL.

Fever: Congestion of the left lung. John Ochilree, æt. 24, a Printer, of middle height, good conformation, and of fair complexion, was admitted into Mathew's ward, St. Bartholomew's, under Dr. Roupell, May 3rd. 1844. The countenance was highly flushed; breathing hurried, inspirations being 28 per minute; he complained of great pain in the head and in the limbs generally, occasional pain in the chest with slight cough, thirst, heat of skin, loss of appetite, and want of sleep: the skin was extremely hot, and covered with a slight scarlet rash; the pulse was 130, rather full but compressible; tongue coated with a thick brown fur; bowels open: urine abundant and high coloured: full inspiration occasioned an increase of pain in the chest; there was slight dulness on percussion over the anterior surface of the left lung, with diminished respiratory murmur: the sputa tenacious and streaked with blood. He stated, his health had generally been good, excepting an attack of brain fever, six years ago; had felt himself unwell for two or three months past, suffering from a severe cold, with cough and hoarseness; three days before admission, was attacked with sickness, which was followed by violent rigors, heat of skin, and pain in the limbs, with thirst and restlessness; he was ordered hirudines x. to the infra-clavicular region: pulv. ipecac. ℥j. as an emetic, to be taken in the evening; hydrarg. chlorid. gr. iij. s.; hst. sennæ comp. cras mane sumendus.

4th.—Passed a very restless night, but he does not appear worse this morning: there is rather less pain in the head; breathing easier; expectoration more copious and of an amber colour, but without blood; the pulse is 120, and has rather more power in it than yesterday; skin less hot; tongue still coated, but moist; thirst urgent: the emetic acted freely, bringing up a large quantity of dark, greenish fluid; bowels open two or three times: there still appears some congestion of the left lung; from the character of the breathing and from the expectoration, it was thought right to take a few ounces of blood from the arm; he was therefore bled, in the upright posture, to six ounces, the loss of which quantity occasioned faintness—the blood drawn was highly buffed and clotted.

R. Vin. antim. potass. tart. ʒss.
Hst. ammon. ac. ʒiss.

M. ft. haustus ter in die sumendus.

5th.—Slept better last night, but was at times delirious; expresses himself as somewhat better upon the whole, but complains much of debility; the skin is still extremely hot; thirst continues urgent; tongue cleaner; pulse 112, soft and compressible; expectoration about the same in quantity, and slightly streaked with blood:—continue the draught.

6th.—Slept well last night, but perspired profusely; feels himself better this morning; has less pain in the head; heat of skin not so great; tongue still furred, but moist; pulse 82, soft and compressible, and with little power in it; expectoration about the same:—to have a blister to the chest: continue the draught.

7th.—Much better in all respects; has now no pain in the head; thirst much less; skin cool; tongue cleaner; pulse 70, nearly natural; had a little appetite this morning: the cough is still

very troublesome, but the expectoration is much less tenacious, and has lost its amber colour.

9th.—Improving daily; complains now only of debility:—to have lbj. of beef for tea daily, in addition to his milk diet.

14th.—Had been going on favourably up to to-day, when, after breakfast, he was attacked with vomiting, head-ache, thirst, and heat of skin:—to have haust. ammon. ac., ter in die, and to leave off the beef tea.

15th.—Feels himself a little better than yesterday; the tongue is furred; skin rather hot and dry; pulse accelerated.

16th.—Going on favourably; bowels rather costive:—R. Hyd. chlor. grs. iij., jalap. pulv. grs. viij.—ft. pulv. statim sumendus: hst. ammon. ac. c. magnes. sulph. ʒj., ter in die.

20th.—Continues very feeble; the skin is rather hot; tongue furred, but moist; pulse 84, soft and compressible; ordered again to try the beef-tea, and to take the following draught:—R. Inf. rosæ co. ʒiss, magnes. sulph. ʒj.—ft. haust. ter in die sumend.

24th.—Has again experienced another relapse; was attacked this morning with rigors, and complains of thirst and great weakness; the skin is rather hot; tongue slightly furred; pulse 84, and rather full; has no head-ache or sickness:—to have pil. rhei co. grs. x, statim, and the following:—

R. Quinæ disulph. gr. i.
Acid. sulph. dil. m. i.
Aquæ cinnamomi ʒiss.

M. ft. haustus ter in die sumendus.

25th.—Not so well; the draught occasions sickness immediately after taking it; the skin is hot; pulse 104, and rather full; bowels freely open:—to discontinue the quinine, and to have the effervescing saline draught every four hours.

26th.—Stomach quiet; feels himself better in all respects:—continue.

29th.—Going on favourably; skin cool; tongue clean; pulse soft and compressible:—to have broth diet; continue the draught.

30th.—Has been going on favourably the last few days; appetite returned:—to have half meat diet. He continued in the hospital till the 16th of June, when he was discharged quite well.

ST. THOMAS'S HOSPITAL.

Ulcers of the legs, depending on Varicose Veins, cured by the Obliteration of the Veins.—George Watson, æt. 34, sailor, of a plethoric habit, was admitted into this hospital under the care of Mr. Green, with ulcerated legs. On admission, there appeared several large ulcers on the inside of the legs, with enlargement of the veins; on the legs being placed in the pendulous position, the veins increased in size to a great degree, being knotted and irregular in their course.

Sept. 19th.—Mr. Solly saw the man, and ordered the veins to be obliterated, which was accordingly done by making an issue of *potassa fusa* over the chief superficial vein, about midway of its course up the leg; to have *cataplasma lini* continually applied to the ulcers and the issue, and to take *mist. sennæ co. pro re nata*.

24th.—The slough from the issue has separated, and the ulcers are not so large nor inflamed.

31st.—The ulcers are looking better, and the eschar produced by the potash is granulating.

October 3rd.—The ulcers are entirely healed. The man is, therefore, to be presented, cured.

REVIEWS.

A Manual of Medical Jurisprudence: by A. S. TAYLOR, Lecturer on Medical Jurisprudence, in Guy's Hospital.

Principles of Forensic Medicine: by A. GUY, M.B., Cantab, F.R.C.P., Professor of Forensic Medicine to King's College, &c.—Renshaw.

We enter on the consideration of these two books with a relish we shall not attempt to

describe. The very sight of two such tributes to our favourite study infuses in us an inward contentment, highly propitious to the authors we have to pass sentence on. We feel before them much like a post-prandial judge, who (with an eye to which more full-bodied port than we shall cast up, has given its electric sparkle) has to try a pair of boon companions for frolics to which he himself had, once upon a time, but small objection. The "Noctes," so sweetly sung of by Catullus, were hardly more full of nectar and sweetness than those we have spent in the company of "medical jurisprudence." What study have we like it? It is the oasis of science—verdant as rich, fruitful as beautiful. With all the adjuncts which makes law of portentous consequence to life and property, it unites every charm which makes the best branches of medical research so fascinating. The practical recommendations which win into homage the sternest utilitarian, are illustrated by points the most curious and interesting that can enchain the painstaking labours of the most plodding antiquarian. It is the charm of mind, the awe of crime, the protection of innocence, the aid of justice—a great social regulator, that presents the state with a substitute for the waning consciences of its subjects. Whatever falls, medical jurisprudence must rise. A just and increasing sense of its vital uses, must, for ever, secure it an extending study and regard.

Before doing ourselves the pleasure of entering on our analysis of the merits of the two authors before us, we must remark that the ungracious odium of an invidious "comparison," which must mark our progress, has been imposed on us by a circumstance in literary history, which for some very unfavourable peculiarities has rarely had a parallel. A writer, who would seem conditioned for a bookseller's hackship in the worst days of the *Dunciad* epoch, has been allowed to pollute the columns of the "Medical Gazette," with a denunciation (under the name of an editorial review), of Dr. Guy, which, in its claims either as a piece of writing or part of editorial morality, crimsoned our face with an ignominious shame, that we belong to the same craft. The world knows, without our mentioning the fact, that Dr. Guy is an accomplished scholar, and a gentleman; one who with a mind fitted for the highest kind of reasoning and original thought, has given no common industry to the subject he was, years ago, so honourably chosen to teach to one out of the two largest classes of medical students in the kingdom; yet how is he handled by the writer of a journal which depends, or ought to depend, for its very existence, on its character for fairness and even-handed justice? Without one particle of evidence, without a circumstance to justify the revolting charge, Dr. Guy is accused of committing the most wholesale and clumsy plagiarism known in our not very honest literature—of writing an important book, which is nothing but a reprint of another's! In reading Taylor—the reviewer tells us—he had already read Guy, "the very turn of the language and phrases employed" were Taylor's, "every illustration" was Taylor's, and this, "paragraph by paragraph"—"page by page!" If the charge were doubtful, or simply unsupported by facts, it would be a daring thing to make it against such a lecturer as Guy; but when the positive evidence of its falsity existed on the face of every page the writer professes to have read—each leaf distinctly, plainly, announcing that every line of the criticism was an outrageous and slanderous fabrication,—we have a phase of action that reflects the deepest dis-

credit on the medical press, and loudly calls for our censure and reprobation. Where scientific character, and literary property, are at stake, we must have no more of this flagrant violation of the rules of truth and justice; reviewers must be taught that even they cannot safely be hired by any man—above all, by a trafficking tradesman—to write *up by all* means this favourite, and write *down by all* means this rival work.

Passing by, as completely unworthy of notice, the assertion that Taylor was old when Guy was a schoolboy, and that Guy was Taylor's pupil (it is well-known that at Guy's Hospital the two gentlemen were pupils together), we shall dismiss the brazen-faced affirmation of universal plagiarism we have been commenting on, by giving our readers the only attempt at even the slenderest proof which the writer offers of his wide and unhesitating charge. On the influence of habit on poisons, Dr. Taylor writes thus:—

"Habit, it is well known, diminishes the effect of certain poisons:—thus it is that opium, when frequently taken by a person, loses its effect after a time, and requires to be administered in a much larger dose. Indeed, confirmed opium eaters have been enabled to take at once, a quantity of the drug which would have infallibly killed them, had they commenced with it in the first instance. Dr. Christison has remarked that this influence of habit is chiefly confined to poisons derived from the organic kingdom; and I quite agree with him, in thinking that the stories related of arsenic-eaters, and corrosive sublimate eaters, are not to be credited. *There is no proof that any human being has ever accustomed himself, by habit, to take these substances in doses that would prove poisonous to the generality of adults. The only form in which I have known the question of habit to be raised in medical jurisprudence is this: whether while the more prominent effects of the poison are thereby diminished, the insidious or latent effects on the constitution are at the same time counteracted. The answer is of some importance in relation to the subject of life insurance:—for the concealment of the practice of opium-eating by an insured party has already given rise to an action, in which medical evidence on this subject was rendered necessary. As a general principle we must admit, that habit cannot altogether counteract these insidious effects of poison; but that the practice of taking them, is liable to give rise to disease, or impair the constitution.*"

One would suppose that there was nothing in this very new or original in a work treating on poisons. The facts are old as the hills. The wholesale accusation of Dr. Guy is, however, made to depend on his treating this single subject in the following manner:—

"*Habit.*—This has the effect of diminishing the influence of poisons derived from the vegetable kingdom, but of increasing that of mineral poisons. Thus, while opium, alcohol, and tobacco, lose their effect by repetition, and may be taken at length in doses which would poison a man not accustomed to their use; arsenic, and the preparations of mercury, produce more effect the longer they are taken. To this general rule, however, there are marked exceptions; for, on the one hand, digitalis and strychnia, like arsenic and mercury, have a cumulative effect; and on the other hand, the less deadly mineral poisons, such as zinc and antimony, may be taken by healthy persons in continually increasing doses. It must be borne in mind, however, that even those substances to the action of which the system most readily adapts itself, produce permanently injurious effects on the system. Thus, alcohol causes disease of the lungs, liver, kidneys, and brain; tobacco, however, frequently repeated, still excites the circulation, and opium raises the spirits, and gives increased activity to the mind."

Without saying one word on the different merits of style in these two paragraphs (and philosophical arrangement and generalisation evidently belong to that by Guy), was it

possible to treat the same facts, occurring in similar portions of two works on the same subject, in manners more diversified? Let us see what is said on the same subject by one to whose huge abilities this part of science is so much indebted (Christison):—

"On the contrary, the tendency of *habit* when it does affect their energy, is, with a few exceptions, to lessen it. By the force of habit, a person may take without immediate harm, such enormous quantities of some poisons as would infallibly kill an unpractised person, or himself, when he began. There have been opium-eaters in this country, who took for days together, ten ounces of laudanum daily."

Guy plagiarize Taylor! Why a man must want common sense, who does not see that Guy is as distant in arrangement from Taylor as Taylor is near in words and arrangement to Christison. Do we charge Taylor with plagiarism, therefore? Heaven forbid!

In hastening to end this unpleasant episode, let us hope so gross an attempt to practice on the unsuspecting goodness of the public; so grotesque an abuse of the *liberty* of the press, so unjustified an attack on that professional reputation which is so dear to us all, originated in some incomprehensible infatuation. If there were design or knowledge in the act, we should be disposed to give the reviewer credit for an indifference to human happiness almost fiendish, or an ignorance of the obligations of honour and morality nearly felonious.

The arrangements of materials is very different in the two authors. Taylor divides his book under thirteen headings, which run thus:—Poisoning—Wounds—Infanticide—Drowning—Hanging—Strangulation—Suffocation—Lightning (under which are the subheadings Cold and Starvation)—Rape, Pregnancy (with which is connected Delivery)—Birth (with which is connected Inheritance)—Legitimacy—Insanity. Guy thus divides his work:—Medical Evidence—Personal Identity (under which, age and sex are considered)—Impotence—Rape—Pregnancy—Delivery—Feticide—Infanticide—Legitimacy—Life Assurance—Feigned Diseases—Unsoundness of Mind—Persons found Dead—Real and Apparent Death—Sudden Death—Survivorship—Death by Drowning—Hanging—Strangulation—Suffocation—Wounds—Fire—Spontaneous Combustion—Lightning—Cold—Starvation—Poisons. The latter classification, though not to our minds quite perfect, certainly appears, of the two, much the better. The rule of descending from general principles, to those particular, is better observed, and certain subjects, which should be treated separately as having reference to all the divisions, receive, as they deserve, separate attention. The question of "personal identity," which one would think to be most important, is wholly omitted in Taylor; and the information on Medical Evidence, which, of course, applies to every question of fact under all heads, is treated by that learned toxicologist partly while giving his preface, partly while considering poisons. The general laws of evidence, of course, affect wounds, or any other mode of personal injury, quite as much as poisons, and should, especially in a student's manual, have been given in a separate division. Dr. Guy did well to make it his initiatory chapter. There it is well summed up, and is carried in the mind like a thread in a labyrinth, much to the student's ease, and reading advantage. On this subject, Mr. Taylor gives us, in a rather peculiar phraseology, information which, it appears to us, might well have been spared in a "manual." "A man may be wrongly or rightly accused (!) but it is for a

jury to decide *this point*, and that medical jurist *appears to me* to lose sight of the *true object* of the science who *devotes* the energies of his mind, in a case *otherwise* doubtful, to only one side of the question!" Under such circumstances, "he entirely forgets that his evidence should always be given with a view not to the acquittal or conviction, &c." "He appears for the country, and neither for the crown nor the prisoner; at least, however defective the present mode of summoning medical witnesses may be, this is the character which, *it seems to me*, he should endeavour to maintain!"—a very modest but imposing way, indeed, of uttering every-day truisms, plain as that two and two make four, or that one body cannot really—"at least, so it appears to us"—be in two places at once.

Let us hear Dr. Guy on the same subject:

(Quanto rectius hic qui nil molitur inepte?)

In stating facts, and in drawing inferences from them, there are certain precautions which the medical witness ought to observe, and certain legal requirements of which he should not be ignorant. In the first place, the medical witness should approach the performance of his duties in a proper frame of mind. He should be perfectly impartial, and altogether indifferent to the merits of the case. Against this rule, the late Mr. Abernethy transgressed; for, in the Lecture already quoted, in speaking of the necessity for examining the lungs in all cases of suspected infanticide, he says, "it is your duty, I think, to try to weaken the effect of your testimony on this point." This was a "great error; for if there is one thing more essential for the medical witness to remember than another, it is, that he has nothing whatever to do with the consequences to which his opinions may lead, provided always they are completely warranted by fact, and the result of sound knowledge and due reflection. The province of the medical witness is distinct from that of the counsel, the judge, and the jury. The counsel has a client, the medical men has no client; the judge is the interpreter and minister of the law; with the law the medical man has no business: the jury decide on the innocence or guilt of the accused party; the medical witness has nothing to do with either. Justice, as Mr. Abernethy says, always leans to the side of mercy; the medical witness knows nothing of the one or the other. If the existing laws are unnecessarily severe, on the legislature lies the odium, and on it devolves the duty of amending them: the medical man has nothing to do with their severity or their leniency, and so surely as he meddles with the one or the other, he does injury to the cause of justice. The name of Dr. Hunter will at once suggest an illustration of this last remark.

We mistake if language like this is not very superior to what we are ordinarily condemned to read in medical books; or if the author would be very likely to steal language, style, arrangement, or illustrations, from one who, with all his great excellences—which we should be sorry to depreciate—can boast certainly of no attractions of literary manner.

We must return to this subject in an early number.

Handbibliothek des Auslandes für die Organisch-Chemische Richtung der Heilkunde. Bearbeitet und mit Anmerkungen vermehrt von einem Vereine von Ärzten. Herausgegeben von Dr. SIGISMUND ECKSTEIN.—II. Der Speichel in Physiologischer, Diagnostischer, und Therapeutischer Beziehung, nach SAMUEL WRIGHT, (on the Physiology and Pathology of the Saliva.—London). 1842-1844. Mit einer borrede des Verfassers für diese Deutsche Bearbeitung.

The above gives us a collection, in a German dress, of the papers on Saliva, by Dr. Wright, which created, at the time of their publication, in a contemporary, so lively an interest among physiologists. The investigations given in them were commenced several years

since, and have been pursued, up to the present time, with a zeal whose perseverance has been equalled only by its success. It is needless to say, that so important a subject cannot be thoroughly investigated without achieving, for Medical Science—even in its practical applications—a great service; and that the Profession are much Dr. Wright's debtors for the erudition, the high ability, and the various original experiments, which marked his execution of the work he had imposed on himself.

In his preface, the author handsomely expresses his satisfaction at finding that his labours are sufficiently appreciated by a foreign country, to be collected and transferred into its language. We congratulate Dr. Wright on the circumstance, but could fain wish that our own countrymen would shew themselves more alive to the excellences of such English works as springing from men who scorn the quackeries of your professed book-maker, rely for success on their own inherent excellences. We are really a very dull people in estimating properly poor or unheralded worth. While Liebig's conjectural speculations have been the talk of every reader whom an advertisement or a catching review could reach, the magnificent views, on Vegetable Physiology, of Robert Brown—probably the first Botanist of the age—will sound from our mouths, in thousands of English ears, as a tale of wonder; while, in Germany, every scrap written by our distinguished contemporary, is carefully collected, and is made matter of universal study. Here, unknown—there he is the great teacher of Vegetable Physiology to the whole rising generation.

The translation before us is admirably done, and is illustrated with a learning worthy of the original. The references are numerous, and the notes of extreme value. We see, from one of them, that Dr. Wright's analysis of healthy saliva has been repeated and confirmed by Budge and Lehmann. While trusting soon to see Dr. Wright's already-published contributions in a collected form in the language that gave them birth, we have the gratification of announcing that the second series of these papers,—of so high a scientific value—at length find their appropriate place in the pages of the MEDICAL TIMES. The first of then appears to-day in another column.

The Use of the Blow Pipe in the Examination of Minerals, &c. By PROFESSOR PLATTNER; Translated by DR. JAMES SHERIDAN MUSPRATT; with a Preface by LIEBIG. Taylor and Walton. 1844.

Amongst the newest and most useful contributions to science in England is this translation, by our accomplished correspondent, Dr. Sheridan Muspratt. At a time when Liebig's views respecting the analysis of soils, are almost universally received in this country, and, when a new impulse has been given to Geological, and Mineralogical investigations in Ireland, by Professor Kane's work on its mineral resources, the appearance of Plattner's work in an English dress, must be hailed, as especially opportune. From the reports of the late meeting of the British Association at York, in which agricultural chemistry occupied a considerable share of attention, all appear to have agreed in one point, at least, viz:—in regarding analysis, as the only means of arriving at successful practical results.

The peculiar phraseology of German scientific works offers many difficulties to the translator, more particularly where technical terms abound, occasionally in some instances, a different collocation, in others, a total transposition of the members of a sentence. It will be observed by those, whose knowledge of German enables them to consult the original, that Dr. Muspratt was not unequal to the duties that devolved on him. He has translated freely, but correctly, lucidly—but concisely—and the work

reads like an original English composition. It is needless to say that the *science* of the work could not have fallen into better hands. The Giessen laboratory, could not we happen to know, boast a more attentive or practical labourer than Dr. Muspratt. The work is divided into three sections, the 1st. chapter of which treats of the improved form of blow-pipe, invented by Plattner, the superiority of which, in quantitative assayings, over that of Gahn, and Berzelius, is satisfactorily proved. The other chapters of this section are occupied with the several apparatus, instruments, re-agents, and requisites for analytical examinations.

The second division of the work is devoted to quantitative analysis. In this section appear diagrams somewhat altered, and improved from the original, and exhibiting at a single view in tabular arrangement, the changes which the alkalis, earths, and metallic oxydes undergo when subjected alone, or with re-agents, to the blow-pipe flame. The notes with which the translator illustrates various passages of the text, throughout this section, will be found most useful.

The subject of the 3rd. division is quantitative analysis, a department of chemical science, the importance of which cannot be too highly estimated, when we consider how a scarcely appreciable excess of an element alters the physical character and physiological effects of organic and inorganic substances into which it enters. It would exceed the limits, and perhaps the province of this paper to give an illustration of a principle which is an axiom with every practical chemist. Though Plattner's rules for quantitative assayings have for their more immediate object the success of metallurgical processes, we would suggest their value, in reference to several questions of medical jurisprudence. Amongst other evidences of the translator's industry, we would particularly direct attention to his description of Plattner's, and Harkort's scale for determining by diametrical measurement of the resulting globule, the per centage present, in gold and silver assayings. The explanation of the scale, (Dr. Muspratt informs the reader in a note,) has been selected from the French translation, by Dr. Sombroero, as being more lucid than the original. To the end of the work is appended a formula for determining, without a balance, the weight of minute metallic globules. This ingenious and original method was contributed to the translating Editor of Plattner, by Professor Oliver Byrne, a name not unknown amongst mathematicians. We cannot better close this short notice of the work, than by inserting Professor Liebig's preface, in which he expresses his opinion of the value, both of the original and of Dr. Muspratt's translation.

"Dr. Muspratt's translation of Plattner's excellent treatise upon the use and application of the blow-pipe, has been executed with as much fidelity as ability, and I consider that its publication in England will be of essential service. This instrument is of the highest advantage to the chemist, geologist, and mineralogist, as a means of ascertaining in a few minutes, with the greatest accuracy, all the constituents of a mineral. M. Plattner's work is the simplest, and best adapted for this purpose, as, besides the methods of Ghan, Berzelius, and Gustavus Rose, it embraces the valuable results of his own practical experience.

The translated edition is still further enhanced by Dr. Muspratt's annotations.

DR. JUSTUS LIEBIG."

Giessen, 23rd March 1844.

TRANSACTIONS OF LEARNED SOCIETIES.

ETHNOLOGICAL SOCIETY.—Admiral Sir Charles Malcolm, President, in the Chair.

The first meeting of the session was held on Wednesday, when upwards of 150 members were present. The proceedings commenced by the President congratulating the Society on its prospects in having a location in a central situation, and in having established a Journal. He alluded to the interest which Ethnological science has excited in this country and abroad, and stated his conviction, that in so large a field of research, co-operation was required, which could only be ob-

tained through the intervention of an Ethnological Society; for small must be the amount of personal research which an individual could bring to bear upon such a science. He stated that travellers were now paying increased attention to the subject, and that parts of Asia, especially China, were now more particularly open to us.

Dr. King afterwards reported his proceedings as a delegate from the Society to the meeting of the British Association at York, which had led to the formation of a sub-section for Ethnology.

The paper for the evening was by Chev. Schomburgk. This intelligent traveller combined in one memoir "a history of the tribes inhabiting Guiana, consisting of Arawaaks, Warraus, Caribs, Accawais, Macusis, Arecunas, Wapisianas, Atorais, Tarumas, Woyawais, Maopityans, Pianaghotto, and Drios." Their united numbers amount to 6,850. The Atorais are nearly extinct, there being not more than forty of pure blood. The Maopityans count only fourteen men, eleven women, eight boys, and six girls. They were formerly divided into two settlements; but they are now living united in one great circular hut, isolated from all others, their nearest neighbours being the Woyawais to the south, and the Tarumas of the Essequibo to the west. The form of the Guiana native hut marks the tribe by which it is raised; while that of the Warrau, Arawaak, and Carib is a mere shed, the houses of the Macusis and Wapisianas are frequently built of mud, surmounted by a roof of a pointed form, of almost eastern character, and thatched with palm leaves. Each tribe has its own hunting ground, and each family its own plantation. Although the same hut may be occupied by more families than one, each has its separate furniture. Marriage is not accompanied with any religious rites. They are betrothed in infancy, and the little lord is bound to assist the family of his wife till she arrives at womanhood. The child is named by the Paiman or conjuror, who receives a present of considerable value, and the strength of the incantations which he pronounces on that occasion in a dark hut, corresponds with that of the fee. When the boys verge from childhood, they are subjected to severe trials, as a test of their courage, such as being put into a bag with stinging ants, being lacerated in their breasts with the teeth of the wild hog, or the beak of the toucan. The girls are deprived of their long hair, and placed in a hammock, slung under the roof of the hut, where they are exposed to incessant smoke, and subjected to strict fastings. Chevalier Schomburgk concluded his valuable memoir by deploring in forcible language the rapid extinction of some of these interesting tribes, and by expressing his belief that without the aid of such a society as the London Ethnological Society, and of other kindred societies, the knowledge of the physical and moral history of many nations of man would assuredly be lost. The paper was extensively and beautifully illustrated by characteristic drawings, the work of Mr. Goodall, the artist to the expedition of which Chevalier Schomburgk had the charge. There was a living illustration in the person of an interesting Macusi youth.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, Nov. 26th.—Dr. Theodore Gordon, vice-president, in the chair.—*Case of immense accumulation of indurated feces in the rectum, and complete suppression of the alvine evacuations for a month;* by Edward Hocken, M.D., Physician to the Blenheim Street Infirmary, &c.

The patient was first seen by the author in consultation with Mr. Whidborne, of Queen Square, on the 10th of June, 1844. She was then much emaciated and exhausted; the pulse 136 in the minute, and very feeble. Complaints were made of severe agony in the rectum, and lower part of the belly; which latter was distended, firm, and highly intolerant of pressure. No feces had been passed for a month, and injections, which had been frequently used, came away only slightly coloured. Food was rejected by vomiting a few minutes after it had been swallowed, and even liquids rarely remained on the stomach. The vomited matters had been dark and offensive some few weeks pre-

viously, and, during the course of the complaint, there had been an offensive discharge from the vagina. There were frequent efforts to go to stool from the exhibition of purgatives, which occasioned the most frightful agony, and eversion of the mucous membrane through the sphincter. On examination, the rectum was found to be completely blocked up, and enormously distended by indurated feces, to within an inch of the anus, bulging into, and nearly obliterating the vagina. The rectum was, however, so intolerant of the slightest touch, that an opiate suppository, and a draught with hyoscyamus were directed, to prepare the parts for further proceedings,—the author intending to obtain the advice and assistance of Mr. Storks in the interval.

History.—Three months before, the patient fell over a tray whilst amusing an infant, by which her thighs were violently and widely separated. The accident occasioned much pain, followed by menorrhagia, constipation, and the formation of indurated lumps, which were passed with much pain and difficulty. This increased till about a month ago (from June 10th); since which, there has not been the slightest alvine evacuation per rectum. During her illness, she has been attended by several medical men, some of whom attributed the symptoms to "cancer," and others to a tumour, pressing upon, and obliterating, the rectum. Preparations of opium had been used generally and locally—frequent enemata and occasional purgatives.

June 11th.—The author met Messrs. Storks and Whidborne in consultation. The patient, who was almost incapable of standing from weakness, was placed at the foot of the bed, her feet on the ground, and the trunk of the body at right angles with the thighs, lying on the bed. By means of a lithotomy scoop and the finger, Mr. Storks succeeded with some difficulty, and much pain to the patient, in breaking down and removing portion after portion of the indurated mass, some of these lumps, of about three inches in diameter, which had been placed transversely in the rectum, until the gut was emptied as far as could be felt. It was then washed out by a powerful stream of water from a syringe. The portions brought away were very considerable in quantity, of a most firm and unyielding description, and of a dark brown colour. It required very considerable force to remove some of these masses, so that the sphincter was slightly ruptured at its posterior part, and the patient suffered much pain from the operation. Half ounce doses of castor-oil with five minims of liquor opii sedativus were ordered every three hours, and simple enemata with olive oil, every four hours. In the evening, the patient appeared much improved, and had brought off a considerable quantity of dark, liquid feces, with numerous indurated lumps, apparently moulded in the cells of the colon. Abdomen very intolerant of pressure. A flannel wrung out in hot water, and then saturated with purified oil of turpentine, to be applied,—and to continue as before. About forty masses of indurated feces were passed with the motions on the following day. On the 13th and 14th, the patient suffered much from severe pain and tenderness in the hypogastric region, and along the course of the rectum, for which leeches, counter-irritation, opiate enemata, and calomel and opium were used, with a poultice to the anus. She was much better on the 15th, a large quantity of dark bilious matter having been discharged from the bowels. Acute inflammation of the vagina, with ulceration and oedema of the vulva came on, on the 19th; the uterus was low down, swollen, and tender. This condition, with more or less relief, continued till the 25th, when she went into the Middlesex Hospital. During the whole time, the bowels were freely relieved, and on the 24th she had two stools of fluid feculent matter of a healthy colour, and unattended by pain or tenesmus. In a note to the author, Mr. Arnott has given an account of the case up to the 22nd of August. The inflammation of the vagina had continued, and from the complaints and resistance of the patient, it had been found impossible to use injections, and the vagina had become partially closed by adhesions. The uterus felt enlarged and indurated from the rectum, and

there was an offensive discharge from the vagina; hence Mr. Arnott inferred, that malignant disease of the womb existed. The author remarked, that it was curious that so many medical men had attended the patient without discovering the true nature of her complaint. He attributed this to their all having examined the patient per vaginam, and not per rectum. The value of the operation was seen in the restoration of the alvine evacuations, and the relief of the symptoms; for throughout the course of the complaint, there was a remarkable discrepancy between the severity of the pain complained of, and the quiet and favourable aspect of the symptoms. The impression of the author, from examinations per vaginam, was that scirrhus did not exist, but if it were present, as was Mr. Arnott's opinion, it was doubtful whether it was produced by prolonged local irritation in a predisposed individual, or had existed previously to the commencement of the symptoms, and previously to the accident.

Mr. Macilwain was desirous of drawing the attention of the society, to the tendency cases of this description have to simulate diseases of a more serious character, and thus lead to a misconception of their real nature on the part of the practitioner. He alluded especially to those cases where a large accumulation of feces in the bowels presented appearances resembling those of tumours. He had met with many such cases, of which he would, however, mention only one, which had appeared to him to have been peculiarly deceptive. A lady had a tumour in the abdomen, which had existed several months; it was situated in the left side of the body, low down, near the hypogastrium, and gradually extended itself. It was, at times, very painful, and she had been leeches and blistered for it with considerable benefit. When he (Mr. Macilwain) saw her, there was a well defined tumour, reaching far below the convexity of the ribs, extending in a mesio-lateral direction, which appeared to be within the cavity of the abdomen, but not connected with its parietes. The circumstances connected with the case being somewhat deceptive, although there were evidences of uterine disturbance, and bearing in mind the result of other cases which had occurred to him, somewhat similar in character, Mr. Macilwain thought the case should be regarded as doubtful in its nature, and he determined to try whether it was not caused by an accumulation of feces, by administering exceedingly small doses of a purgative, in such a way that they should not produce any action until after the lapse of thirty-six hours, for he believed that if the purgative influence were induced earlier, it would not be of any service in such a case, as the secretions would merely be ejected, and the bowels would not be unloaded. In thirty-six hours, accordingly, an enormous quantity of feces was discharged, and the tumour disappeared. He (Mr. Macilwain) had met with many such cases.

Dr. Edward Murphy enquired whether there existed in Dr. Hocken's case any mechanical cause for the obstruction? He had found bands stretching across the rectum in a few cases, and he thought it not impossible that they might act as a mechanical impediment to the expulsion of the feces.

The Secretary remarked, that nothing of the kind was mentioned by Dr. Hocken in the paper.

Observations on the Relaxed Rectum. By Henry Hunt, M.D.

The author describes this as a malady of not unfrequent occurrence, and productive of much inconvenience and distress. The most prominent symptoms are, obstinate constipation, a frequent desire to evacuate the bowels, a constant sensation of load in the rectum, which is not relieved by an evacuation, and the discharge, after much forcing, of mucus streaked with blood. The bladder, urethra, and other adjacent organs often participate in the irritation. On examination, the rectum will be found preternaturally enlarged, and more or less filled with large folds of mucous membrane pressing down on the anus, which impede the evacuation of the feces, introduction of instruments, and injection of enemata. This morbid condition of the mucous membrane, the author

attributes to a neglected state of the bowels, and repeated and great distention of the rectum by feces, which causes the mucous membrane, when the bowel is empty, to hang in loose folds. This disease, if neglected or mismanaged, gives rise to prolapsus, and an irritable and painful state of the sphincter; and an intro-susception of the upper and undilated portion of the intestine into the lower and dilated part. The treatment recommended for the simple relaxed rectum, is the avoidance of all aperient medicines, and the injection of a pint of cold water into the bowels every night previously to going to bed, the removal of the prolapsus, and the application of belladonna ointment to the irritable sphincter. In the case of intro-susception of the rectum, in addition to the use of the cold water injection, the exhibition of some mild aperient; taking care that whilst a costive or hardened state of the feces is prevented, purging is avoided; and a course of the hydragryum cum creta with hyoscyamus or conium, or of the iodide of potassium and sarsaparilla.

Dr. James Johnson observed, that to the description given by Dr. Hunt, of the pathological condition of the relaxed rectum, no objection could be made. It was by no means an uncommon disease. He (Dr. Johnson) did not think the curative measures advocated by Dr. Hunt the best that could be desired. He seemed to have a horror of aperients, and to rely solely on cold water injections, and those, too, not used in a large quantity. As constipation was to be prevented, and yet those medicines which soften the feces were to be avoided, and as the accumulation existed in the colon, he believed it would be found, that the injection of half a pint of cold water would not be sufficient, and further, that it is not so safe as has been supposed. He would rather employ mild medicines which act on the colon and rectum, such as the lenitive electuary, or the tartrate of potash. These would soften the feces in the colon, and empty the rectum without causing pain. Dr. Hunt's plan of treatment he thought was very defective. Ward's paste is very useful in corrugating the folds, and preventing relaxation of the mucous membrane. When this membrane becomes protruded, which may happen even when persons are walking about, if not carefully returned, it will be grasped by the sphincter, become strangulated, and inflamed. This may be prevented by a very simple plan; namely, by fastening a silk handkerchief round the waist, and securing another to it crossways, and bringing it between the legs. A piece of sponge or linen pad applied against the anus, and kept in *situ* by the secured handkerchief, after the bowels had been evacuated, will be quite sufficient to prevent the protrusion.

Mr. B. B. Cooper agreed in a great measure with Dr. Johnson with respect to the treatment, but he could not join the recommendation of the handkerchiefs. Dr. Hunt's paper contained a very important suggestion, that of always having an evacuation of the bowels at night, by which means, and the consequent night's rest, the mucous membrane had time to retire within the bowel, and to be relieved from irritation, which could not be the case with a person, who was walking about in the morning, just after having had an evacuation. He considered this to be very important, and far beyond Dr. Johnson's silk handkerchiefs.

Mr. Henry Lee stated, that it appeared to him that the pathology of the disease, under consideration, had hitherto been very imperfectly explained. In dissecting the rectum, a strong band of muscular fibres is found arising from the posterior part of the pubes; which, taking a course downwards and backwards, encircles the lower extremity of the rectum. These muscular fibres are part of the *levator ani*: and although not usually described, are very important with regard to the disease in question, inasmuch as they take the same direction, and perform the same office as the fibres of the sphincter ani: the lower two inches of the bowel are thus encircled by a strong band of muscular fibres.

Whenever it happens that a portion of the relaxed mucous membrane comes within the grasp of these muscular fibres, the very natural effect is, that the return of the blood in the veins of the constricted part is retarded; and this, in

reality, is the cause of the deep-seated pain, the tenderness, and the inflammation of the parts which are so frequently observed in these cases. The principal object of local treatment in such instances, is to relieve the inflamed portion of mucous membrane from the constriction caused by the muscular fibres which he had just described. Temporary relief is immediately produced by returning the relaxed and congested membrane to its natural situation; but the benefit thus derived continues only as long as it is retained in that position. It has been stated, that the different instruments which have, at various times, been employed in this complaint, instead of giving relief, have tended to increase the irritation of the part. This appears in a great measure, if not altogether, to depend upon the mode in which these instruments are constructed. They are generally so contrived, that the bulb (by means of which the instrument is retained in the bowel), is placed, when the instrument is worn, immediately within the grasp of the muscular fibres of the levator ani, and to this cause it is that the irritation complained of, is principally to be attributed. If, however, the stem of the instrument is made sufficiently long, so that the bulb, when introduced, is situated *above*, instead of *within*, the circular fibres of the levator ani, the instrument can be worn, not only without inconvenience, but often with the greatest comfort. Such instruments are kept at Messrs. Savigny's in St. James Street. With regard to the plan proposed of removing portions of the mucous membrane in this disease, Mr. Lee considered the application of the strong nitric acid to the part as a more safe, and much less painful, operation, than that which is usually performed by means of a ligature.

Mr. B. B. Cooper enquired of Mr. Lee if he alluded to the levator ani or sphincter? The levator ani extended for about four inches above the anus, and he (Mr. H. Lee) spoke only of two inches.

Mr. Henry Lee said, that he described the muscle as encircling the bowel to the extent of two inches.

Dr. Dixon had found a combination of blue pill and hyoscyamus of great service, when exhibited in large doses, and that, too, in many cases where there was stricture high up. He attended a female, who was subject to sluggishness of the bowels, and on one occasion she did not have any action for six days. He exhibited a combination of aloes and sulphuric acid, which proved successful in unloading the bowels, which were easily regulated for some time after. The patient died at the end of six months, her health being generally broken. He believed that in some cases of relaxed rectum, mechanical contrivances were of great service. Mr. Laundry, the instrument maker, had constructed one, which exerted the requisite degree of pressure on the parts, without any pressure elsewhere. He had effected a cure in several cases.

Dr. Leonard Stewart related a case, in which a prolapsus of the bowel had been very painful and distressing during eight years, and had been treated by local and other measures for the whole of that time. Upon the occurrence of an attack of apoplexy, bleeding and mercury were freely employed, and upon the first effect of the mercury the difficulty entirely ceased, and the function of the intestine was completely restored.

Mr. Macilwain bore testimony to the accuracy of Dr. Hunt's description of the disease, but thought that too confined a view was taken of its causation. One cause producing a diseased condition of the rectum, was a fulness, or distended state, of the portal system. The signs, enumerated by Dr. Hunt, were certainly present in general, but there was not any one of them which might be regarded as pathognomonic. The exhibition of purgatives was certainly requisite at first, to unload the alimentary canal; but he would not continue their use afterwards, as he had not seen more suffering produced—and his experience had been considerable—than from the imprudent and infelicitous use of purgatives. Local remedies, sometimes, certainly afford relief, but he (Mr. Macilwain) had never seen them do more than

afford relief. Affections of the liver are not, perhaps, more frequently productive of a diseased state of the rectum than any other complaint; but if there is any thing well known in surgery, it is that a loaded condition of the portal system will produce disturbance in the rectum. Although this fact had not been recognized during the debate, still it had been attended to. Dr. Hunt had advised the exhibition of small doses of hydrargyrum cum creta, and others had recommended a compound of blue pill and hyoscyamus or conium. These did not constitute the best treatment in such a case, but still they would act as a stimulant to the liver. In conclusion, he would observe, that in the painful state, in which intus-susception had taken place, and which had been so well described by Dr. Hunt, the introduction of a varnished catheter—no very easy task, but still one that could be accomplished with care—might serve to prolong life, although it could not effect a cure. The patients, under such circumstances, die from imperfect nutrition. He (Mr. Macilwain) had never seen such a case cured, although instances thereof were to be found in Morgagni's works, and in the Memoirs of the French Academy. The gist of his (Mr. Macilwain's) observations, was that the cause of the protrusion of the rectum was not always to be found in the gut; and that the means of cure, therefore, depended on putting the offending organ to rights; this is most generally the liver. The protrusion of the rectum, which, twenty years ago, he was in the habit of removing by operation, and that, too, with considerable success, was now cured by attending to, and removing, its cause.

The chairman announced that, at the next meeting, there would be read a paper on Cleft Palate and Staphyloraphy, from the pen of Mr. Fergusson.

NOTICES TO CORRESPONDENTS.

Numerous complaints are reaching us of the irregularity with which some country booksellers supply the "Medical Times." The remedy is to change the tradesman, or to remit our publisher an order for the stamped edition, which leaves London every Friday evening.

A. W. C.—Our last week's announcement on the Fellowship is in every point authentic. Without altering the Charter, of course the proposed changes could not take place.

Mr. Phillips (Manchester).—The communication is considerably too long for our columns.

X. and other Correspondents.—The Practical Formulary commenced in our Almanack for 1844, has been continued in the following numbers:—224, 225, 226, 227, 228, 229, 230, 232, 234, 236, vol. 9; 237, 238, 244, 247, 250, 251, 255, 256, 259, 261.

A Constant Reader, ab initio, with the surgeon's diploma, would not, we consider, be able, under the new Bill, to hold public appointments, requiring for their service a licentiate of Medicine and Surgery.

A Correspondent sends us a circular, announcing the descent on Hastings of Dr. Cornelius Black, and giving six certificates of his having been properly educated. We do not consider the step professional.

We think Mr. Cole's proposal to incorporate the 18,000 Licentiates of the Hall into a College, distinct from the Hall, premature.

Mr. Barker.—The Pharmaceutical number delayed a part of our subscriber's stamped copies, of our ordinary number (a single post) on Friday last. The delay will not recur.

A. Z. received.

R. N.—We know of no such acid, or preparation.

Mr. Jackson, who has taken the spleen under his peculiar protection, thus addresses us: "I do say, that if you debar me now from proving to your readers that Dr. Billing's view is not in accordance with a particular fact, you will act as unfairly as if when you saw one man striking another, you held the hands of the latter, and prevented him from using them in his own defence."—Unwilling as we are, that poor Dr. Billing should not have his view refuted by a particular fact, reluctant as we are that Mr. Jackson should imagine himself treated with injustice, we must adhere to our resolution of not continuing a

very protracted correspondence. We own that we do not see why Mr. Jackson should feel himself either knocked down, because what he considers an erroneous view has been expressed on the spleen, or deprived of a fair defence of his person, because our columns are too crowded to allow of his exposing the supposed blunder.

We are reminded by a valued subscriber, that in our list of respectable publishers, we omitted the names of Messrs. Taylor, and Walton, and Mr. Highley.

M. C. S. L. charges on a "cold-blooded, dictatorial, and influential member," of the Surgical Council, a main hand in excluding from the Fellowship, General Practitioners of the highest standing and largest practice residing in the neighbourhood of London. Their proximity made their presence at elections very probable; and when their high claims were represented, the insolent remark was "These, Gentlemen, are additional reasons why they must not be made Fellows." We agree with our Correspondent on the mad impolicy which seems to have been for some time past the sole inspirer of the majority of these Council gentlemen. The disgrace of the secret meetings is to our minds one of the greatest of the many that tarnish the body. Will any of the Council do us the favour of giving us verbatim reports of the proceedings? They owe it to the public: and we should think the service worthy of a high pecuniary remuneration. To prevent unnecessary applications, we take leave to announce that we shall reject proposals from either Messrs. Lawrence or Liston. N.B. We must have reports that our readers can rely upon, and written with a certain regard to English grammar, and literary rhythm.

We shall begin next week a reprint of some of the more important portions of the evidence given before the Parliamentary Committee on Medical Poor Law Relief.

A Reader (Pimlico).—We really cannot give space to comment on such practices. To pretend that success at high prices caused a journal to take low prices, is as silly as unprincipled.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

MEDICAL TIMES ALMANACK,

The Almanack for 1845, will be ready in the course of the ensuing month. Gentlemen wishing to give advertisements the advantage of its large circulation, should remit their orders immediately.

THE MEDICAL TIMES.

SATURDAY, DEC. 7, 1844.

In vitium ducit culpæ fuga, si caret arte.

A GREAT Meeting of the General Practitioners of Westminster and Marylebone—called by public requisition—is to take place this evening (Saturday), at the Hanover Rooms. Need we say that we look forward to it with no ordinary anxiety? Every possible circumstance seems to concur to invest it with importance. The large practices, the high personal characters, the old and respectable professional standing of nearly all the requisitionists, would at any time give to their united movement an immense and telling influence; but when we recollect the grand subjects they are to deliberate and decide on, at a moment when the whole Profession is in a state of vivid excitement, and when the large body of General Practitioners, in especial, are ready to make any sacrifice rather than submit longer to collegiate abuses and injustices, we are bound to acknowledge that no Meeting surpassing it in importance has yet been held by the medical men of the empire. It must deal a heavy blow somewhere. It offers the field on which one of our most decisive battles will be

lost or won. Influencing, more or less, each subsequent event, affecting, indirectly, every element of our future condition, it holds much of the future history of our Profession, and must, for better or worse, stamp on it a character that shall endure for ever.

In speaking thus, we speak not to flatter. We would exaggerate nothing, and in this epoch have certainly no cause. It is not speech that is vasty, but the *time*, which now quickens into vital movement circumstances the most insignificant. We are in a crisis when it is a first duty to speak out. It would not be right that men, forced by wrong out of the small duties of private life, should be untold the full height of their new position. They must know its importance, to feel fully their extreme need of caution, prudence, and foresight. One precipitate, one wrong step, now, would breed infinite mischief, and a thousand influences are at work to tempt to it the young Association.

Yes, there is danger. Some men are at work who have an interest—honorary and mercenary—in unsettled agitations, and they can advise only to perplex and mislead. Having blundered, themselves, their notoriety insists (in the cause of consistency) that they seduce all else to their example. They cannot be content to err singly; like Mokanna, doomed, they must fall, if they can, with hordes of their adorers.

Others—speculators in a small notoriety—have had a factitious importance extinguished in the natural progress of a very small-brained ineptitude: and in the loss of Papal supremacy in a dead establishment, to get eminence in a new one, would solemnly recommend any folly, utter *ex cathedra* any nonsense, and canonize into political fame even Satan himself.

A third party there is, worthy as dangerous—who have all our sympathy, if not our respect—whom very love of justice is apt to tempt to rashness. In the angry sense of grievous wrong, the eye of their judgment is almost closed to consequences, and revenge usurps the chair of rightful policy.

Against all these, let the new Association guard, or it will pay rueful penalties!

One evil we fear, and would much deprecate, is that the new Association will be committed forthwith to a complete breach with the College of Surgeons. We need hardly say, that we are no friends to that Corporation as it has been conducted up to the present time. We may claim—and with no hurt to justice, if to modesty—that, apart from the cause of opposition, we have been “the head and front” of the movement against the newly-chartered body. We were the first to announce and denounce the forthcoming grant of the infamous document—we were the first, when it appeared, to herald it into notice and condemnation—we called together the first meetings which expressed against it the voice of public indignation; and though a miserable and unsuccessful diplomacy divided and distracted, by treachery, a movement that then offered so much promise, we have never ceased for a moment—and our readers know with what triumph—to rouse, to stimulate, to concentrate, to direct every element of opposition against the Bill that lay within our influence. We may affirm, then, with some show of evidence, that we know in us of no partiality to this once rampant, and now humbled, Corporation, and claim for our deprecation of a premature collision with it, the Association’s earnest and deliberate attention. What really do the General Practitioners of this empire require? Do they want it thought

by the public, that their *Medical* knowledge is of a wholly different kind from that of the Physician? Would they wish it believed popularly, that, as *Surgeons*, they have had an education dissimilar from the gentlemen in Lincoln’s Inn Fields? Are they really anxious that the Surgeons and Physicians should be beld as a high scientific order, quite opposed to their own—that instead of being both, General Practitioners are neither the one nor the other? Such questions answer themselves. The General Practitioner wants to belong to a non-descript order which the public can never understand, and will ever underrate; he seeks to offer himself for general practice both as physician and surgeon, leaving the public, in extreme cases, the advantage of having a class of other Practitioners (called *par excellence* Physicians, or pure Surgeons), who, attending to special divisions of disease may, in certain circumstances, secure greater confidence. We much mistake indeed the General Practitioner, if he reciprocate the vulgar and very sickening prejudice against those of his brethren who have been nicknamed “*pures* and *dubs*.” Painful to us would be the day which would deprive medical men with fitting qualities of the common-place liberty of dissociating Pharmacy or Midwifery from their duties, and confining their mind’s attention specially to Medicine and Surgery as they choose. We have no objection to the existence of the two classes: no jealousy of their success. Freely, fully, let the Physician and Surgeon share the honours and profits of the medical commonwealth: as freely and fully let them be inhibited to monopolize them. We want not their destruction, but the destruction of their injustices. All we claim is, that as we do not excommunicate them, they cease to excommunicate us. If we share in keeping their corporations, let us share in enjoying their advantages. Let honours and rewards depend on science only: if they are better, society will do them justice: if they are not, corporate preferences are an injustice.

We say then, unhesitatingly, as we have been saying for two years past, the proper place for the General Practitioner—if justice be done—is in the two Colleges. Now may not this justice be done? Is it yet too late to hope for it? The College of Surgeons, by its Council, begin to see that justice is its interest. Bad as the body is, we shall not be surprised at its turning even to virtue when it finds it to its advantage. Why, then, shall matters be hastened till the Council be allowed some little, some very little further time to speak their mind? When Onslow, of the House of Commons, remonstrating with the waggoner, who had just repaid parliamentary insolence with a sound whipping, said, “You vagabond—I’m the Speaker—I am!” he was answered, “Why didn’t ye speak afore, then?” Agreed: Onslow, was treated properly: he had had his opportunity, and refused to use it—can we say as much for the Council yet? We think not. They are already conceding. Give them a little more time, and if they speak not, and speak plainly to the point, we shall not interpose between them and the soundest whipping a strong arm can give them.

Proceeding to the other Corporation—no argument can be adduced for a Surgeon clinging to *potecary* mire, but the refusal of the Physician to give him an honourable position. Will they refuse? The New Bill makes the General Practitioner a Licentiate of Medicine, with the diploma of the College to certify his competency; a Council of Health guarantees that the competency shall be uniform, and not degrading. Is it likely that Dr. Paris, and those now acting with him,

will oppose this proviso—will not go further and support it—will not see, in short, the importance of honourably receiving in their College a body of men who have raised to such importance the rival College of Surgeons? We think not: and, therefore, urgently press on the new Association the wisdom of deferring for the present the distinct proposal of a third Corporate body. Nor must the respectable gentlemen, who have advanced to the front of this movement, imagine that they have but to recommend, and agitate for, a College of General Practitioners, to get it. While any false step would be dangerous, the absence of unanimity would be fatal. The Profession has already witnessed one failure in a similar attempt; and though the very unfortunate character of its principal supporter (Mr. Wakley), which produced this result, may not be allowed to come into the most distant operation, in the renewed attempt, it is yet easy to see, by a prudent reference to the position, interests, and opinions of the Profession in the different parts of the kingdom, that, between the start and a successful end, not few nor small difficulties interpose.

STATE OF PROFESSIONAL FEELING.

(To the Editor of the “Medical Times.”)

Sir,—I am directed to forward you a copy of resolutions, recently passed at a meeting of the members of the Profession in this town and neighbourhood, on the subject of Sir James Graham’s Medical Bill.

I am, Sir,

Very respectfully yours,

J. BIRCHENALL,

Hon. Secretary.

Macclesfield, Dec. 2.

Nov. 20th, Dr. Swanwick, President, in the Chair. Present: Dr. Bennett, Mr. Milner, Mr. Lallemand, Mr. Bland, Mr. Firth, Mr. Turner, Mr. Newbold, Mr. Mayers, Mr. Hopkins, and Mr. Cleveland.*

A meeting of the medical practitioners of the Town of Warrington, was held at the Dispensary on Friday evening, Nov. 22d, to take into consideration Sir James Graham’s proposed bill; and, after resolutions expressive of satisfaction with those provisions, which were calculated to improve the character of the profession, to raise the standard of the education of its members, to establish a central council of health, and a registration of all legally authorized practitioners,—they regretted that the bill should allow mere pretenders to impose upon the public, and tamper with the health of the people,—and expressed their opinion that a clause should be added for the purpose of effectually and speedily checking all illegal and unqualified practice.

* The following were the resolutions:—

That this Meeting regards with respectful consideration the intentions of Government, in the Bill of Sir J. Graham, for elevating the character of the Medical Profession, though it deems the measure seriously defective, in respect to some of its provisions.

That it considers the constitution of the “Council of Health and Medical Education” incomplete and unsatisfactory, inasmuch as it contains no direct recognition of the great body of General Practitioners.

That the claims of the Worshipful the Society of Apothecaries on the respectful attention of the very numerous class of Licentiates practising in this country, demand from this Meeting a special notification, in any suggestions that may be offered by it to the Government, for the modification of the said Bill.

That the Registration Clauses of the Bill are likely to be virtually inoperative, because they embody no compulsory enactment, in order to a general adoption.

That the withdrawal of existing restrictions on unqualified persons, together with the omission of a summary mode of punishment in respect to unaccredited practitioners, is regarded as a capital defect in the said Bill, as it tends materially to affect the interests and respectability of the Profession, and the health and well-being of the community at large.

That a petition, expressive of these opinions, be by this Meeting adopted, and forwarded to the County and Borough Members, to be by them presented to the House of Commons.

Messrs. Sharp and Robson were appointed to prepare a petition, founded on the above resolutions, which will be intrusted to the care of J. J. Blackburne, Esq., member for the borough, and it was resolved that both he and J. Wilson Patten, Esq., member for the county, should be respectfully solicited to support the prayer of the petition.

Dr. Kendrick and Mr. Sharp were requested to confer with Mr. Blackburne and Mr. Patten on the objectionable clauses and deficiencies of Sir J. Graham's bill, and a conversation ensued as to the best means of obtaining the objects sought for. It was finally resolved—that this meeting pledges itself collectively and individually, to further the objects of the petition by using their personal influence with the members of Parliament in the neighbourhood, and through their friends who may have influence with those at a distance.

The thanks of the meeting were voted to the chairman, Dr. Kendrick, who stated that he had that day commenced his 52d year of practice in the town.

PROGRESS OF FRENCH SCIENCE FROM OUR OWN CORRESPONDENT.

Paris, Nov. 28, 1844.

On a New Mode of Dressing Wounds.—In several of my late communications, I mentioned the method adopted by Dr. Langier in the dressing of wounds. That surgeon has employed it in nearly all kinds of ulcers, as well as in a case of denudation of the whole inferior limb of the left side, produced by erysipelas, and which reduced the patient considerably, by the quantity of pus secreted. The manner in which it is applied, is as follows:—After cleansing the wound, it is covered by a thick solution of gum, and over it is placed a piece of gold-beater's skin. The result obtained differs; for sometimes the wound dries, and cicatrization takes place under the coating of gum; and at others, the secretion of pus continues more or less abundantly; should this be sufficient to detach the greater part of the dressing, the whole must be removed, and a fresh one put on. When cicatrization is complete, the apparatus must be allowed to fall of itself, or this may be aided by gently raising it with the finger. The following case is related, in one of the last numbers of the *Gazette des Hopitaux*, as illustrative of the utility of this method. An officer of the staff had his leg crushed by a fall from his horse, the result being a contusion with sanguineous effusion on the outer side of the leg. The usual remedies having failed in obtaining its absorption, an incision was made on the part, but was followed by ulceration, owing to the enfeebled state of the patient. Different modes of treatment were employed, but the cicatrix obtained soon gave way, and the ulcer re-appeared. It was under these unfavourable circumstances, that Dr. Langier's method was had recourse to; the next day, the patient was able to perform his duties, and, at the present time, the ulcer has completely healed; the apparatus is still kept on the part. (It may be asked, will this cicatrix be more lasting than the former ones?)

On the Treatment of Erysipelas: by Professor Velpeau.—Numerous clinical facts prove, that the sulphate of iron is one of the most efficacious topical remedies in erysipelas. This substance may be employed in solution, or as an ointment; Professor Velpeau prefers the former, and has recourse to the latter only when it is impossible to apply compresses, soaked in the liquid, on the seat of the disease. The proportions of the solution are:—R. Sulphat. ferri ʒj., aquæ puræ lb. j. M. Ft. lotio parti dolenti secunda vel. tertia q. q. hora applicanda;—or, R. Sulph. ferri ʒiiss., adipis præp. ʒj.—3x. M. Ft. unguentum parti dolenti secunda vel. tertia q. q. hora applicand. When these topical remedies are had recourse to, the erysipelas generally yields in the space of twenty-four hours; the skin becomes less tense, loses its shining aspect; the epidermis is drawn into small folds, and cracks; the tumefaction decreases; the pain and the heat disappear. Prof. V. insists particularly upon not confounding this

disease with angioleucitis, diffused phlegmon, cellular phlebitis, and erythema, as it is doubtful whether the ferruginous application is useful in these disorders. Erysipelas is characterised by a diffused inflammation, without any notable swelling of the sub-cutaneous tissues, extending gradually from one part to another, the edges of the inflamed spot being as red as its centre, and slightly elevated and festooned; the skin, a line beyond this edge, appears to be normal,—whereas, a line within, it is as inflamed as in the centre of the affected part. According to Professor V., this festooned edge is the pathognomonic sign of erysipelas. Finally, should the disorder appear to be produced by some internal cause, we must first direct our remedies against this, the sulphate of iron being only really efficacious, when the inflammation is purely local.—(*Bulletin de Therapeutique.*)

On the Composition of the Urine in Albuminuria: by M. Lassaigne.—The urine examined, was that of a young woman affected with a disease of the kidneys; it presented the following characters:—ammoniacal odour; restored, though slowly, to its blue colour, litmus paper, which had been reddened by an acid; was of a slight reddish tint; contained a few whitish flakes, which could be separated by filtration; density less than in the normal state, being, at 59° F., 10.023 instead of 10.025; when heated, it became opaline, and on reaching the boiling point, of a turbid appearance, and deposited, on cooling, whitish flakes, which presented all the characters of coagulated albumen. With the different tests, the result was:—1° Nitric acid produced a flaky precipitate, of a white colour, soluble in the alkalies;—2° A solution of bi-chloruret of mercury gave rise to a similar precipitate, somewhat more abundant, soluble on the addition of the chloruret of sodium;—3° Acetic acid was without action. Tannic acid, after a short time, precipitated yellowish white flakes;—4° Lime water rendered it turbid, but gave no precipitate;—5° The oxalate of ammonia, the nitrates of barytes and of silver, produced a very slight precipitate, whereas, it is abundant with normal urine. Analysed, its composition was found to be, in 1000 parts:—

Solid parts obtained by evaporation.	Parts.
Water	994.00
Principles soluble in water and alcohol	4.00
Albumine	1.88
Phosphate of lime	0.12
Traces of uric acid	

1000.00

But, as it has been remarked by Dr. Rayer, the composition varies in the different periods of the disease; the urine of the same patient—no change having occurred in her condition—was taken, its density being then, at 59° F., 10.061, and, when analysed, its composition was found to be:—

Principles obtained by evaporation.	Parts.
Water	981.30
Principles soluble in water and alcohol	16.62
Albumine	1.87
Phosphate of lime	0.21
Traces of uric acid	

1000.00

Case of Artificial Anus: by Professor Blandin.—A young lad was brought to the Hotel Dieu, for strangulated bubonocoele. The danger being imminent, the operation was performed immediately, and about 7½ inches of the small intestines were found to be the seat of gangrene, and were consequently opened, in order to give free egress to the faeces. Six days after, all the sphacelated portion of the intestine had sloughed off, leaving, after it, an abnormal anus, through which all the contents of the canal escaped; and, as the opening was at the upper part of the intestine, this took place ere a sufficient quantity of nutritive matter was absorbed, to supply the wants of the economy. The consequence was, that the patient grew weaker and weaker, every day, and evidently would ultimately fall a victim to the infirmity, if the obstacle to the passage of the chyme were not destroyed. Compression of the septum was tried, without any beneficial result; Professor B.'s enterotome was

successfully applied, giving rise to no accident. The opening having considerably decreased after the destruction of the septum, in order to obtain its occlusion, the edges were cut off, and the twisted suture applied, in three different places; but, whether because the patient was not sufficiently docile, or from some other cause, it succeeded only partially, leaving, still, an opening, which was finally closed by keeping the cut edges in contact, by means of the instrument proposed by Dupuytren. This took place on the 16th August, and the cure was complete on the 8th October: but as the passage of the gases could still be felt under the cicatrix, to obviate all accidents, the lad wears a bandage.

Parisian Medical Society.—This Society resumed its meetings for the winter session, on Thursday evening, the 14th inst. A great number of the English resident practitioners, and several foreigners of distinction, were present. The chair was taken at 7 o'clock, by the President, Dr. Ricord, who delivered the opening address; and after dwelling on the advantages held out to medical strangers, by joining the Society, expatiated on the merits of the scientific communications which had been afforded by its members, ever since its creation, in 1837. His observations were received with much applause; and having vacated the chair, which was taken by the V.P. Dr. McCarthy, he proceeded to develop his ideas on certain points connected with a new method of operating in Hydrocele. He began, by remarking that, as a general rule, the ordinary plan of puncture and injection answered very well; but that there was frequent danger of wounding the testicle; indeed, this accident had occasionally occurred to him and other surgeons, amongst whom, Boyer, and Dr. Lisfranc, might be mentioned; the former, strange to say, wounded the testicle in the first and last operation which he performed in Hydrocele. Having alluded to other inconveniences, such as fainting, vomiting, and the fluid being injected into the cellular tissue, with its attendant consequences, and having quoted numerous failures by the established system, he described his mode of operating. It consists in applying several points of suture, the effect of which is, to bring the two sides of the tunica vaginalis into contact, and thus, by establishing adhesive inflammation, to obviate the necessity of injection, and thereby spare the patient considerable suffering. He had already operated in ten cases by this method, and with perfect success. Its simplicity, and comparative absence of pain, induce him to recommend it strongly to the notice of the Profession. He considers the modified treatment, of injection with the tinctura iodini, first employed by Dr. Martin, of Calcutta, and subsequently introduced and promulgated by Professor Velpeau, and himself, in France, as generally preferable to the injection with wine, sulphate of zinc, &c. He had sometimes succeeded in effecting the radical cure of hydrocele, by the external application of iodine. The iodine injections are not always attended with success; for Dr. R. remembered a case, in his own practice, where it failed, though tried seven times; and he witnessed another, in which sloughing and gangrene had occurred after it. These facts led him to try this new method, and the fortunate results, obtained by him, induced him to consider it a most important improvement.

A visitor observed, that Dr. Ricord's method, though novel in its details, was not altogether new; so far, at least, as precluding the necessity of injections; and, in support of this observation, he adduced the system pursued by the late Mr. Earle, senior surgeon of St. Bartholomew's Hospital, which consisted in simple puncture, with the subsidiary means of walking, exercise, &c.

Dr. Ricord replied, that, in ninety-nine cases out of a hundred, the plan of simple puncture failed, and had been accordingly rejected by the Profession: as to the *modus operandi* proposed by him, he did not claim it as exclusively his own, so far as regarded the principle of the operation; but the particular manner, in which that principle was applied, belonged to him. After some further observations on this point,—Dr. Oliffe brought the subject of varices before the Society; and Dr.

Ricord entered into some interesting details upon his operation for varicocele, which consists in the sub-cutaneous ligation of the vein. Dr. Ricord had operated in two hundred cases, and had never met with a single accident. He thought that this plan was quite applicable to varicose veins of the leg; but a contrary opinion was advanced by Drs. Oliffe, M'Carthy, and several other members.

A very interesting discussion now took place, on the recent experiments of Dr. Auzias, who asserts that the syphilitic virus had been successfully inoculated by him on a monkey; and much curiosity was manifested by members, to hear Dr. Ricord's opinion on this subject. Dr. R. said that, up to the present moment, all attempts at inoculating lower animals with the venereal virus had failed, although he had repeatedly endeavoured to do so. He was at present engaged in experiments on the subject, and would shortly be able to communicate their results to the Society.* He had formerly tried, in vain, to produce chancres by inoculation on dogs and other animals; and he instanced, amongst other curious examples of non-success, the case of a pigeon, which had been punctured in different parts of the body, several times a week, during the space of six months. This victim of the syphilicotoxical researches of Dr. Ricord was at length eaten by the porter of the Venereal Hospital. (Loud laughter.)

A paper on Rheumatism, by Dr. M'Carthy, having been announced for the next meeting, the society adjourned at ten o'clock.

Case of Poisoning, by a very feeble dose of Hydrochlorate of Morphia: communicated by Dr. Danyau to the Société Médicale du XII Arrondissement. Mrs. —, affected with cancer of the uterus, suffered from violent pain in the stomach, accompanied by vomiting and spasmodic contractions of that organ. Several remedies having failed, a blister was placed on the epigastrium, and the wound thus obtained was dressed with R. Hydrochlor. morphiæ gr. 1-32. The only effect produced was to render the patient somewhat easier; consequently, it was renewed the next morning; shortly after, narcotism was induced, and when Dr. D. arrived, he found her in the following condition:—intense cephalalgia; coma; tinnitus aurium; vertigo; sight impaired and feeble; speech embarrassed and incoherent; skin hot and dry; pulse strong and frequent; but, besides these symptoms, there was another far more extraordinary, related by the patient the next day, viz: that she could only distinguish one half of the objects before her; thus, of a person, she saw only one arm, one eye, &c. The cerebral congestion was so considerable that, before Dr. D's arrival, two attacks of eclampsia had taken place. Venesection was immediately performed, but as this did not prevent a third attack, blood was drawn again, and compresses of cold vinegar and water were put on the forehead, replaced afterwards by a bladder full of ice; two blisters were also placed on the thighs, and sinapisms were applied to the calves of the legs and the feet. These remedies caused the cerebral congestion to decrease; the convulsions ceased; but the sight continued to be weak, and the speech embarrassed; at the same time, she was affected by hallucinations, which still persist, though three weeks have elapsed since the accident.

On the Changes in the Proportion of the Fibrine of the Blood, during Disease: by Professors Andral and Gavarret. In continuing their researches on this subject, the Authors confirmed the facts already announced by them, as to the augmentation of the quantity of the spontaneous coagulable portion of the blood, in that immense class of diseases, known under the denomination of phlegmasiæ, and which form in our nosological tables one of the most natural families, by the analogy of the anatomical lesions which characterize them, as well as by the similarity of their symptoms and of their treatment.

"Among these phlegmasiæ, there is one, highly

*Since the above-mentioned discussion took place, committees have been appointed by the Société de Chirurgie and the Société Anatomique, to repeat and test the experiments of Dr. Auzias, and the members of these committees have completely failed in producing venereal sores on dogs, rabbits, and cats.

important, and of which we did not speak in our former memoirs, because we had no opportunity of examining the condition of the blood in that disease, viz: acute meningitis. In 1844, we analyzed the blood of four individuals affected with this disorder. In all, we recognized during life, from the nature of the symptoms, the existence of an acute inflammation of the membranes which surround the nervous centres, and, after death, a purulent liquid was discovered in the pia mater of the brain or the spinal marrow, or in the cerebral ventricles. In the four, the changes in the composition of the blood were the same as those previously observed in patients affected with arthritis, pneumonia, pleuritis, peritonitis, angina, &c. The quantity of fibrine in nine venesections, may be represented by the following numbers: 3.4; 4.3; 5.0; 5.2; 5.3; 5.5; 6.0; 6.6; 7.0; the first alone indicates the maximum of the normal state of the blood. To what ought this to be attributed? To the circumstance that, when the patient entered the hospital, he was affected with pyrexia? the blood first drawn, when examined, was found to contain 2.8 fibrine; to the fever, other symptoms were added, such as delirium, alternating with coma, subsultus tendinum, &c. A second venesection was performed, and, instead of finding the fibrine less, it had, on the contrary, increased. This led to the conclusion, that inflammation was going on in some important organ, a fact which was soon proved by the appearance of symptoms indicative of cerebral disturbance, such as strabismus, tetanic stiffness of the muscles of the neck, and paralysis of the left side. To combat the acute meningitis, the vein was opened for the third time, and the quantity of fibrine was found to be 5.4. Thus, the increase of the fibrine was the first sign of the disease which was about to declare itself. The post mortem examination proved the exactitude of the diagnosis, for the lateral ventricles were full of a lactescent serosity, and the pia mater was infiltrated with pus at the base of the brain, around the cerebellum, and on the anterior portion of the medulla spinalis. This case confirms, in the most positive manner, the law of the increase of fibrine in phlegmasiæ, and shows how useful this knowledge is, in establishing the diagnosis of doubtful cases. But this increase is likewise to be met with in various other diseases, thus:—1^o The workmen employed in manufactories of lead, and especially of cerussa, are subject to a species of epilepsy, which, from its cause, is called saturnina. In several cases, the blood drawn during the attacks was found to contain the normal quantity of fibrine; in one alone, after repeated paroxysms, unwonted symptoms appeared, such as: paralysis of the left elevator palpebræ superioris, and loss of sight in the corresponding eye, with divergent strabismus,—caused, in all probability, by a lesion situated at the base of the brain, near the origin of the left motor ocularis communis, and the crossing of the optic nerves. After the appearance of these symptoms, the quantity of fibrine, instead of being 3.0, was nearly 4.0, and this augmentation coincided with the development of symptoms different from those caused by saturnine poisoning. Is it not evident that a phlegmasia, limited to a circumscribed spot of the base of the brain, had complicated the primitive affection and changed its nature? These symptoms, after lasting a fortnight, disappeared, and were followed by chronic intellectual disturbance, ending in alienation.—2^o Purulent Meningitis, complicated with pleuritis, and abscesses in the kidneys: the blood, obtained by two venesections, contained 7.0 fibrine.—3^o Icterus. This disease, symptomatic of a great many lesions of the biliary apparatus, may exist without fever, or with local and general symptoms. In the former case, the blood contains but its normal proportion of fibrine, a conclusion to which the symptoms presented would naturally lead the practitioner. In the latter, on the contrary, it is probable that inflammation has attacked the parenchyma of the liver; in fact, the blood examined changed the surmise into a certainty, for it contained, in two venesections, performed at an interval of twenty-four hours, 6.0 fibrine, and, in a third, an amelioration having already taken place, only 5.0.—4^o Metritis coming on a month or two after delivery: when slight, the fibrine varied from 4.0 to 5.0, but if fever

and other inflammatory symptoms were present, it increased rapidly to 6.0 and 7.0.—5^o Phlegmon in the left fossa-iliaca, in a recently delivered female: first venesection 6.0, second 7.0.—6^o Paralysis, caused by cerebral hæmorrhage, and complicated with an eschar on the sacrum. In this case, a short time before the formation of the eschar, the blood, taken from the arm, contained the normal proportion of fibrine, but, as soon as the suppurative process commenced, it was somewhat more than 6.0.—6^o But it is not necessary, as in most of the preceding cases, that the phlegmasia should proceed so far as the suppurative stage, since the fibrine was found to be increased in erysipelas, and, in a case of erythema, to be at 6.0. These facts prove, that, in all inflammatory disorders, no matter what organ is affected, the phlegmasia is invariably accompanied by an increase in the proportions of the fibrine.

"This modification takes place, let the condition of the economy, or the composition of the blood, be what it may, so soon as a phlegmasia declares itself. Thus, blood, containing very few globules, may, as well as that of a plethoric person, present a considerable proportion of fibrine, of which assertion the following case is a proof. A young man, during convalescence from a severe attack of typhoid fever, became anæmic to such a degree, that the bellows-sound was perceptible in the carotids; while in this state, pleuritis appeared, and rendered venesection necessary; the blood contained 5.0 fibrine.

"Another change which may take place in the blood, is the diminution of the spontaneous coagulable matter; this occurs in those diseases of which scorbutus is the type, in the chronic form, and typhoid fever, in the acute. One of the most remarkable and constant effects of this diminution, is the facility with which the blood escapes from the vessels, whether spontaneously, or from the slightest external cause, and the following case of purpura hæmorrhagica shews, that the fibrine alone of the blood is diminished in this affection. A man, aged 30, apparently of a powerful frame, came to the Charité in July 1844, ailing only for two or three days previously; the symptoms observed were: surface of the body covered with numerous ecchymoses; conjunctiva infiltrated with blood, and puffed up; epistaxis; considerable agitation; intense pain throughout the whole body; delirium from time to time; pulse 124; temperature 101½° F. Venesection appeared requisite, and, when performed, the blood was found to be composed of: solid substances contained in the serum, 83; globules 121; fibrine 0.9; water 795.1. In upwards of 500 cases, in which the blood was analysed, in only four was the fibrine found to be in such minute proportions: these were, two attacks of very severe typhoid fever; one of scorbutus; and one in a patient who was treated at the Charité for cirrhosis of the liver, and was seized all at once with prostratio virium, fever and delirium; the blood contained 0.6 fibrin. At the post-mortem examination, besides old standing lesions, a very fluid blood was found in the heart and large vessels, and ecchymoses in various parts of the sub-serous and sub-mucous cellular tissue. These alterations were likewise observed in the person who died from purpura hæmorrhagica. As to the quantity of fibrine, in 42 cases of typhoid fever, it was found—with the exception of two, complicated with phlegmon—to be diminished; the proportions in these 42 cases were:

In 2 cases complicated with phlegmon:—		fibrine.....	4.8
" 3	"	"	3.7
" 14	"	" from 3.5 to 3.0	
" 7	"	"	3.0 " 2.5
" 9	"	"	2.5 " 2.0
" 7	"	"	1.9 " 1.2

Thus, in these 42 cases, it was augmented in five; in three it was very slightly so; in twenty-one within the limits of the normal state; and in sixteen it was diminished; and their analyses prove, that the diminution of the fibrine was in an exact ratio with the signs of adynamia."

Academy of Sciences. Sitting of the 25th Nov. Baron Charles Dupin in the Chair.—Received: "Address to the Mayor and Members of the Artisan Well Committee of Southampton, July 27th,

1844" by the Rev. W. Buckland, D.D., Professor of Mineralogy and Geology at Oxford, and corresponding member of the Institute of France—"The Edinburgh New Philosophical Journal, exhibiting a view of the progressive improvements in the Sciences and Arts," conducted by Professor Jameson, July to Oct. 1844.

Description of an Insect which attacks the Olives in the South of France, causing them to fall ere their Maturity. Memoir read by M. Guérin Meneville. The inhabitants of the South of France and Italy, who cultivate on a large scale the olive tree, complain bitterly of the severe losses caused by insects, and which they seem unable to guard against. The author, after enumerating the different species which attack this useful tree, proceeds to give an abstract of a memoir, about to be presented, at the request of the Minister of Agriculture and Commerce, to the *Société Royale d'Agriculture*, containing the description of an insect which destroys the kernel of the olive. 1° The olives are attacked by a small caterpillar, which penetrates into its kernel, on which it lives, and escapes about the end of August, by an opening near the pedicle, and, by means of a thread which it spins, reaches the ground, where it undergoes its metamorphoses, and then becomes a butterfly; 2° The caterpillar, in making the hole through which it escapes, causes the pedicle to die, and the olive always falls before it is ripe; 3° Once on the ground, the caterpillar seeks for a dry leaf, or some crevice in the earth, constructs a light silken web, is changed into a chrysalis, and, in the space of from three to six days, the butterfly appears; 4° This *lepidoptera* belongs to the genus *œcophora*, of various authors, the *œcophore olivelle* of M. Duponchel (*Histoire Naturelle des Lepidopteres de France*), and the *tinea olivella* of Fabricius; 5° At the instant the caterpillar leaves the olive, it meets with numerous enemies; thus, birds, while it hangs by the thread; ants, as soon as it reaches the earth; and, finally, a small *hymenopterus* deposits its eggs on its body, and these produce small larvæ, which live on, and are developed at the expense of, its flesh and fat, without attacking the vital parts. As soon, however, as they are completely developed, they kill the caterpillar, or the chrysalis, and make under its skin from fifteen to twenty oval webs; 6° On twenty-eight nymphæ, received from the south of France, more than one-half were thus affected, and produced a number of small *chalcidites*, nearly microscopical, of a beautiful black velvety colour, with a green head. These *hymenoptera* belong to the family of *Pteromalie*, but constitute a separate genus, which may be denominated *trigonogaster*, from the triangular form of the abdomen; and, on account of the services it renders, the word *benignus* might be added; 7° In order to destroy a great number of these *lepidoptera*, the following plan may be followed. At the end of August, when the caterpillar leaves the olives, a trench, of about an inch or two in depth, must be dug around the tree, and filled with dry leaves, so as to furnish a convenient hiding place for the caterpillar to form its web. In the beginning of September, the leaves must be collected and burnt, and the trench filled up, so as to bury any that may remain under the clods.

Researches on the Structure of Cartilages; Memoir read by M. Valenciennes.—From his researches, the author concludes:—1° That, in the cartilages of the *chondropterygian* fish, numerous vesicles exist;—2° That these vesicles are not irregularly scattered about;—3° That they are disposed with so much regularity and constancy, that, by microscopical examination of the cartilage, the order and genus of the fish may be determined;—4° That all the cytoblastic or osteoplastic vesicles are hollow, and not full, as has been stated to be the case with the cartilages of other animals;—5° That canaliculi exist in none of the cartilages;—6° That the elastic substance which extends throughout the vertebral column of the *chondropterygians*, where the chord does not present any vesicles, belongs to another kind of tissue;—7° That the same structure is met with in the cartilages of the molluscæ;—8° That gelatine exists in abundance in the cartilages of the cephalopodes;—9° That the ligaments, &c. of the

molluscæ bivalves belong to another species of organic tissue.

Dressing of Wounds.—Dr. Laugier writes, stating that there is a marked difference between the method proposed by him, and that employed by Dr. Guérin;—that the one was a mere attempt, and the other a successful application, since Dr. G. sought the means, whereas he had found it;—that there is no coating in goldbeater's skin, by which it can be made available in suppurating wounds;—that the idea was suggested to him, while studying the cicatrization of wounds and scabs, so admirably described by Hunter, to whom ought to be attributed the first description of the immediate organization of wounds;—that the cicatrization of wounds, hermetically closed, is like that which takes place under scabs;—that the method proposed by Dr. Guérin, for the immediate organization of wounds, is chimerical.

M. Hamont, *membre associé* of the Academy of Medicine, presented a copy of his memoir on the plague.

Academy of Medicine. Sitting of the 26th, Nov.—Dr. Ferrus in the chair.—After some remarks from Professor Roux, Drs. Louis and Bouvier, and M. Barthelemy, the proceedings of the former sitting were adopted.

Dr. Louis, in the name of the committee, named to decide in what section the nomination for the places, vacant by the deaths of MM. Double, Pelletier, and Edwards, should take place, proposed the section of anatomy and physiology—adopted.

On Fractures of the Neck of the Femur.—Dr. Gimelle read a report on Dr. Robert's memoir, an analysis of which has been already given: conclusions—thanks,—memoir to be sent to the *Comité de Publication*—and name of the author to be inscribed on the list of candidates.—Professor Velpeau: If I understood aright, Dr. Robert does not make use of any apparatus for the species of fracture described in his memoir; in this, he does but follow the plan recommended long since by several surgeons, who admit that fractures of the neck of the femur, when intra-capsular, consolidate very well without any apparatus. A celebrated surgeon, Sir A. Cooper, recommended this method; and before him, Lallemand, of the Salpêtrière, constantly adopted a similar plan with the old women residing in that hospital. For my part, I have always had recourse to it, for the last 14 or 15 years, and I found that, in twenty or thirty cases, treated by me in the hospital, the patients were relieved sooner with the simple inclined plane, than with the most complicated apparatus.—Dr. Gimelle is of the same opinion, and follows this method at the *Hotel des Invalides*.—Professor Roux: Sir A. Cooper did not consider the intra-capsular fracture of the neck of the femur susceptible of being consolidated. On my visit to London, in 1814, I was bold enough to assert a contrary opinion, and, at the request of Sir Astley, sent over anatomical preparations as a proof.—Professor Lallemand, of Montpellier: For the last 25 years, I have treated all the fractures of this species without any apparatus; I have, however, seen cases where the consolidation was not perfect. The principal indication is to place the thigh in such a position, as to prevent the psoas and iliacus muscles dragging the inferior fragment upwards, and this is easily obtained.—Professor Velpeau: Three important questions here present themselves to be elucidated:—1° The possibility of a perfect consolidation;—2° The species of fracture;—3° The treatment. 1° The possibility of perfect consolidation, denied by Sir A. Cooper, has since been proved beyond a doubt, by Messrs. Syme, Chassaignac, and others. Evidently, Sir Astley's opinion was too absolute; but it must be confessed, that consolidation is not very frequent, and that, almost always, the patient limps, more or less, ever after.—2° There are two varieties: the intra and extra capsular.—3° As to the treatment: the inclined plane, proposed by Dupuytren, without the apparatus for extension, is all that is requisite. Most persons may get up after twenty days, and, sometimes, even in a fortnight; they are first to be seated in an easy chair, the limb placed in a proper position, and afterwards are permitted to go about with crutches; they must, however, be

careful not to lean on the foot, but must keep it suspended. This last position is useful, as the weight of the limb counteracts the muscular contraction.—Professor Blandin considers the opinion of some surgeons, as to the frequency of intra-capsular fractures, to be exaggerated, as they are far less common than has been stated; as to their consolidation, he thinks it possible, when the periosteum is not completely torn away. His successful cases are far more numerous than those of his colleagues, and this he attributes to his method of treatment: immobility is here absolutely requisite; and if he permits aged persons to get up from bed, it is only in order to prevent some serious complications coming on.—Professor Velpeau, requesting to be again heard, the discussion was postponed to the next sitting.—Conclusions of the report adopted.

Fibrous Tumour.—Professor Roux presented a fibrous tumour, which he had removed in the morning, and which, contrary to Professor Cruveilhier's opinion, presented, evidently, parts where the cancerous degenerescence had commenced.

Uretroplasty.—Communicated by Dr. Jobert de Lamballe.—(This interesting case shall be given at length in my next.)

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.,
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

Radix Ononidis as a remedy against Amenorrhœa.—Dr. Bernays states, that the above is a very safe remedy, and was formerly much vaunted in cases of obstructed menstruation. It was usually given in the form of powder. Its action is quite surprising in many cases, particularly if some gentle purgative be administered previously. The efficacious principle of the root seems to reside in an extractive substance, of a roughish taste, and which increases the flow of saliva. He prepares it in a manner similar to that usually adopted with the resin of jalap. No alkaloid is contained in the root. This remedy has also been tried by other practitioners with the most complete success.—*Buchner's Repertorium für Pharmacie.*

Action of Tincture of Galls on the Salts of the Oxide of Mercury.—Basic nitrate of the oxide of mercury (in solution) gives an orange-coloured precipitate on the addition of tincture of galls. If a little free nitric acid be present, the precipitate does not appear till after some time, nor does it present the same orange colour, but has a lighter appearance. If a larger proportion of nitric acid be present, no precipitate appears at all. From this varying quantity of free acid, contained in the above salt, the most contradictory views have been propounded by chemists, as regards the mutual action of the salts of mercury and the tincture of galls. Not only is there no precipitate formed by tincture of galls in the acid solution of the oxide of mercury, but the orange-coloured precipitate, produced in a solution containing but little acid, is made to disappear on the addition of a small quantity more of acid. With the liquid, thus cleared by the addition of nitric acid, ammonia produces a violet colour, which, however, passes very soon into a precipitate of a dirty brown colour. Bichloride of mercury yields only a weak yellowish tinge on the addition of tincture of galls. By treatment with caustic ammonia, this tinge passes to a rose-coloured, and afterwards into a bluish-red, precipitate.—*Frickhinger, ibidem.*

Preparation of the Unguent. Potass. Hydroid.—The Prussian pharmacopœia prescribes, for the preparation of the above ointment, one drachm of hydriodate of potash, and six grains of carbonate of magnesia, to an ounce of rose-ointment. The magnesia is intended to prevent the ointment becoming yellow. Kallhofert, however, failed repeatedly in producing a pure ointment by the above means, and he therefore instituted the following series of experiments:—1° He melted some fresh hog's lard, in silver, platina, iron, tin, glass, porcelain, and glazed earthen-ware vessels, and found that they all stood in an equal relation; inasmuch as the oint-

ment, prepared in each, remained of a beautifully white colour for the first four days, but all assumed a yellowish colour after the lapse of ten days.—2^o Beautifully white ointment, prepared with fresh lard, became instantly yellow on the addition of a few drops of oil of lavender, of thyme, and particularly of valerian, or of cinnamon.—3^o One ounce of hog's lard, a fortnight after it had been prepared, formed, with one drachm of hydriodate of potash and six grains of carbonate of magnesia, an ointment, which appeared yellow and inflated, even during trituration.—4^o He then prepared an ointment with one drachm of pot. hydriod., fifteen grains of carbonate of magnesia, and one ounce of hog's lard (twenty days after it had been prepared,) and placed it in a well-closed vessel. Fifteen hours after, the cover burst, the ointment spread about, and appeared of a yellowish colour, inflated, and seemed to produce no effect when applied to the body.—5^o Another ointment was prepared, with pot. hydriod. 3j, cret. alb. levigat. gr. xv, axung. porc. (twenty days after melting,) 3j; this ointment acquired only a slight change of colour after a fortnight, but its efficacy seemed to be very trifling.—6^o Pot. hydriod. 3j, pot. caust. fus. gr. iv, axung. suill. 3j (old lard); this ointment was but slightly discoloured after twenty-seven days, and now, after the space of three months, it is still tolerably white.—7^o Ol. de cacao, ceræ albæ, ol. amygdal. ana 3ss, pot. hydriod. ʒiv, borac. venet., aq. destill. aa ʒj, ol. rosar. gutt. j. M. ft. unguent. This ointment is still unchanged, although it was prepared three months ago.—8^o R. Spermacet. cct. 3ss, ol. provinc. 3vi, cer. alb. 3ii, pot. hydriod. ʒiv, ol. citr. ol. rosar. aa gutt. iii. M. ft. ung. After the lapse of three months, it is but slightly turned yellow.—*Kallhofer, ibidem.*

Olum Phosphureto-Camphoratum Rubrum.—A red oil, containing camphine and phosphorus, is employed externally, as Dr. Roche's embrocation, in Holland, against whooping-cough, with great success. Dr. Sasse has endeavoured to produce an imitation of this oil, and he believes the following composition to be pretty near the point:—

R. Ol. olivar. opt. 3xviij.
Rad. anchusæ q. s. ut fiat color lente ruber (ex. gr. 3ij.)
Decocto oleo, adde
Phosphor. gr. viij.
Camphor.
Ol. cumin. aa 3ss.
Ol. terebinth. 3i.
Solve ope calor. aq. fervent. &c.

Dr. S. found this embrocation very efficacious, not only in whooping-cough, but likewise in chronic rheumatism, and deafness proceeding from catarrhal affection of the meatus auditorius externus.—(*Ibidem.*)

On the Presence of Free Muriatic Acid in some Animal Secretions.—Muriatic, as well as acetic and lactic acid, is so intimately combined with some animal matters, such as glue, proteinc, and mucus, that the fluids, in which they are contained, may be evaporated or distilled, without volatilization of the acid. This circumstance is of very great importance, not only as regards chemistry, but in a toxicological point of view; for, in cases of poisoning, the contents of the stomach must be analysed, in order to decide the legal question, whether poisoning took place or not. As chyme displays an acid re-action in the normal state, and also contains combinations of chlorine, neither solution of chloride of silver, nor sulphuric acid, should be used as tests, for, even in the healthy stomach, oxide of silver will be precipitated and muriatic acid set free. Here, perhaps, it might be possible to compare the quantity of oxide of silver, precipitated, with that contained in the liquid, and thus a decisive result might be obtained. But it is preferable, first to precipitate the animal matters with tannin (as recommended by Orfila), and then to distil the filtered liquid without addition of sulphuric acid. The free muriatic acid will then pass into the receiver, and the distillation should be continued till the residue, contained in the retort, begins to grow dry. The distilled liquid must then be acted on by nitrate of silver, the precipitate washed with nitric acid, dried and

weighed, in order to calculate the quantity of muriate contained in the stomach.—*Ibidem.*

The poisonous Action of arsenious Acid, heightened by Nitrate of Potash.—Several doses of nitre were given to a cow, which was suddenly attacked with inflammatory symptoms; the disease immediately grew more severe, and death took place in the course of an hour. This excited suspicion of previous poisoning, and the animal was in consequence opened. The pharynx, œsophagus, and cellular membranes of the stomach, were found to be strongly inflamed, the gastric mucous membrane excoeriated and ulcerated. On further analysis, the author succeeded in obtaining arsenic. This result led to a legal investigation, and it was found that the fodder, destined for the cow, was mixed with some flour, containing from half a drachm to two scruples of arsenic. This was certainly a small dose to produce symptoms of poisoning in a cow, and could not of itself have induced so rapidly fatal an effect; it was, therefore, probable, that the poisonous effect of the arsenic was heightened by the nitre, which had been given as a remedy. To ascertain this point, the following experiments were made: 8 grains of arsenic were given between two rabbits (4 grs. to each); to one, 10 grains of nitre were administered immediately after; it died within about 29 minutes. The other animal, which received no nitre, lived for a long time afterwards. Similar results were obtained from a repetition of the same experiment on dogs and cats. The solubility of arsenious acid in water, and in the gastric juice, is probably increased by the addition of nitre. This observation furnishes a new proof of the fact of remedies frequently possessing different effects from those of the separate ingredients which compose them.—*Dr Artus: Ibidem.*

On the Preparation of a Pure Carbonate from the Common Salt of Potash.—The potash is first dissolved in a small quantity of water; the solution saturated with distilled vinegar, evaporated, and the salt then reduced by heat.—*Dr. Artus: Ibid.*

On the Preparation of Lead-Plaister. (Emplastrum lithargyri.)—Professor Artus recommends the following mode of preparation for this compound (improving on that communicated in the *Reperitorium*, by Perngruber): 5 lbs. of finely-powdered litharge are rubbed down with a sufficient quantity of water, and half a pound of vinegar; this is left for an hour, at a temperature of 36° R., being frequently triturated, and is to be then gradually introduced, by means of a spatula, into the heated oil, &c. In this manner, the plaister is obtained, in a very short time, of a beautiful white colour, and loses nothing of its efficacy, even after the lapse of a year and a half.—*Ibidem.*

Preparation of Pure Antimony.—Mix 100 parts of pure algaroth-powder, with 80 parts of carbonate of soda, and 20 parts of powdered charcoal; cover the whole in a crucible, with a layer of coarsely-powdered charcoal; heat it to a white heat, and the metal will be reduced almost instantaneously.—*Ibidem.*

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

The following are the only points in a recent number of the *Medical Gazette* of interest to our readers.

TRANSVERSE DIVISION OF THE TRACHEA AND LARYNX.—Mr. Stanley narrates two cases to shew, that it sometimes happens, that it will not do to trust to position alone for the approximation of the divided structures, in cases of transverse wound of the larynx or trachea. In the first instance the thyroid cartilage was divided, and the lower portion retracted considerably, and continued retracted, after cicatrization of the soft parts around had taken place, and the patient ultimately left the hospital with an aperture in the front of the neck, through which the little finger could be passed readily into the larynx, and the man was unable to articulate distinctly. In the second case, the lower portion of the trachea was very retracted, and gradually became contracted to such an extent, that the orifice of the trachea was reduced to the diameter of a

goose-quill, and then scarcely permitted the passage of sufficient air for the maintenance of life. The woman gradually sunk, and died two months after the infliction of the injury. On examining the body, it was found that the narrowing of the orifice of the trachea was the result of the thickening and puckering of the surrounding tissues, and that the division of the tube had taken place between the first and second rings. The trachea, however, had not been completely divided. Mr. Stanley recommends, therefore, when the larynx or trachea has been freely divided, that sutures should be passed, not through the soft tissues covering the larynx or trachea, but through the cartilages of the fibrous tissues which unite them; and he quotes Rust in favour of his opinion. During the first period of the case, sutures are scarcely admissible, from their probable effect in preventing the free escape of the blood through the outward wound; and they should not be delayed to the period when the integuments, &c., have firmly cicatrized around the lower retracted and sunken portion of the larynx or trachea.

SUBCUTANEOUS HYDATID.—Mr. Stanley opened a subcutaneous tumour in the neck of a healthy young woman, and let out a puriform fluid, and an acephalocyst hydatid of the size of a marble, which contained an echinococcus.

OVARIAN DISEASE.—Dr. Jeaffreson, in a paper on the pathology and treatment of ovarian diseases, while reviewing the operation of ovariectomy, observes that the fluid forms of tumour are the most appropriate for operation. They are, generally, the most rapid in their growth, and frequently refill with great rapidity after their evacuation by parentesis. The risks of adhesion are less; as also the probability of mistake in diagnosis, or of other organs being diseased. Remedies, too, have the least power in the cure of this form of affection. In the monocular variety, the operation could hardly be recommended so long as tapping afforded perfect relief, and the fluid was very slow to re-accumulate. The multilocular form of disease is by so much the more appropriate for extirpation, as the tapping is attended with greater risk, and is calculated to afford but a limited degree of relief. The mixed forms of tumour are the least appropriate for extirpation, and proportionately so, as they contain a greater amount of solid matter. There is a greater risk of adhesions, and also of errors of diagnosis; the opening required for their removal must be large in proportion to the mass of solid. The more solid tumours, if of an inert character, are slower in their growth, and may never induce much suffering or risk of life. Their cure is sometimes effected by nature, or well directed medical skill, or their growth sometimes is suddenly arrested, and they continue stationary and comparatively innocuous. Should they, however, be complicated with ascites, Dr. Jeaffreson thinks it is questionable whether their removal is not then desirable. Extirpation cannot, with propriety, be recommended when the least suspicion exists of the malignant character of the disease; or when it is of strumous origin, and is connected with scrophulous disease of other organs, as the absorbent glands, joints, internal viscera, &c.

FOREIGN BODIES IN THE LARYNX.—Mr. Cole read a case of this accident at the Physical Society of Guy's Hospital. A child, a year and a half old, while playing with a large piece of plum-stone, placed it in its mouth, and was suddenly seized with the most alarming symptoms of asphyxia. The child was conveyed to the hospital, and Mr. Cole immediately passed his finger over the tongue into the larynx, and felt the foreign body; but being unable to dislodge it by these means, he directed the child to be held up by the heels, and in this mode, with the aid of a probe passed by the side of the finger, he succeeded in removing it. Artificial respiration was then induced, and the child ultimately did well.

LIEMOSIS AVENS.—By this title Dr. Alison describes a case of fatal emaciation occurring in an infant, brought up by hand. On examining the body, the stomach was much reduced in size, two inches in length; between the longer and the smaller curvature, at the cardiac extremity, it

measured three quarters of an inch; at the pyloric extremity, a quarter. The coats of the stomach were considerably thickened, but in no part was undue vascularity, discolouration, or ulceration found. The pyloric orifice was smaller than usual, but not more reduced than the other parts of the organ. The rugæ of the stomach were larger than usual; they lay flat, and resembled the very fine plaiting formerly in use for the fronts of shirts; each ruga was fully half a line in breadth. The entire stomach weighed a drachm and a half. The small intestines were also much contracted. Dr. Alison considers this state of the stomach to have been caused by the continued irritation produced by the exhibition of improper and irritating articles of diet; and the proper treatment to consist in the restoration of the breast, or if that is impracticable, the child should be fed exclusively upon an imitation of the human milk, prepared by mixing equal quantities of cow's milk and tepid water, with the addition of white sugar, in the proportion of ten parts to the hundred of milk and water.

OSSIFIED GALL-BLADDER.—Dr. Alison attended an old lady who died of acute bronchitis, not having suffered any symptoms of bilious disease. On examining the body, with the exception of the gall-bladder, the contents of the pelvis and abdomen were healthy. The gall-bladder was white or greyish, resembling fresh putty, hard and resisting to the touch. It was distended with fluid bile; the cystic duct was distended with solid cholesterine. The outer coat of the gall-bladder was greatly thickened, and contained much phosphate of lime. There were not any appearances of circumjacent inflammation.

ATROPHY OF THE LIVER.—Dr. Alison mentions the case of a man of intemperate habits, who died from hypertrophy of the heart, and ascites. The liver was much atrophied, and was retracted and hidden under the false ribs. It weighed two pounds nine ounces. The exterior was perfectly white, and resembled wet parchment or dressed sheep skin; this appearance being produced by thickening of the peritoneal coat, by which also the gall-bladder was so retracted and bound down, as to be discovered with difficulty. Dr. Alison ascribes the condition of the liver to the thickening and contraction of its investing membrane, consequent upon antecedent inflammation, probably of a subacute character.

A FORM OF DYSPERSIA.—Dr. Wigan describes a form of dyspepsia, which is caused, he says, by an accumulation of food in the œsophagus, from defective power in the œsophageal plexus of nerves, and also from a constriction in the orifice of the diaphragm. The symptoms are: flatulence and a sense of oppression immediately after a full meal; the distress becomes excessive, there is a sense of constriction at the pit of the stomach and at the sides of the neck, and exercise causes regurgitation of the food unchanged, or, at least, of a large quantity thereof. If the food remains, symptoms resembling angina pectoris succeed; there is an intermitting pulse; pain in the sternum, which becomes exceedingly tender to the touch, and a general feeling of lassitude, with an aching of the arms similar to that which arises after taking opium. Eructations are frequent and excessive, after each of which the pulse becomes regular, and there is an universal sensation of indescribable uneasiness. There is also a feeling in the throat like globus hystericus. The treatment is, to eat little, and often; take active exercise, and undergo an occasional fast of twelve or fifteen hours. Warm laxatives and condiments are also advisable. The stomach does not partake of the disease.

CEREBRAL CONGESTION.—Dr. Mayo narrates three cases in which blood was abstracted for the relief of cerebral congestion. In the second case, too large a quantity of blood was drawn, and the abstraction of that fluid was persisted in too long, although no apparent evil consequences ensued. We have seen, in more than one instance, in cases of apoplexy, paralysis follow as an indubitable consequence of too large and too free bleedings.

DISEASE OF THE HEART.—Dr. Ogier Ward has published a case of enormously enlarged heart,

without hypertrophy, which, apparently, by its insufficient action in carrying on the circulation, induced repeated attacks of sub-acute inflammatory action in the lungs, with congestion and œdema of the lower portion of the left lung, and which finally terminated fatally. The liver was enlarged and hardened, and of the nutmeg character.

SUDDEN BLINDNESS.—Dr. Synnot mentions the case of a laundry-maid, who, while reaching to take some clothes off a line, experienced a sensation as if something had fallen into the left eye, which was followed by total and instantaneous blindness. There were not any signs of inflammation, and the iris contracted and dilated actively. She complained of deep-seated pain in the orbit, and of supra-orbital headache. Leeching, purgatives, mercury pushed to soreness of the gums, and blistering, removed the complaint, which Dr. Synnot considers to have been caused by effusion of blood either within or around the optic nerve.

GANGRENE OF THE LUNG.—A case of pulmonary gangrene is reported from the University College Hospital. The patient was a young man who had suffered from cough and general debility for some time previously, when he was suddenly attacked with symptoms of a recent acute inflammation, followed, after a time, by copious foetid expectoration, rapid emaciation, and death. On dissection, there was found a large effusion in the right pleura, and gangrene of the corresponding lung, with evidences of inflammation in the left lung.

NATURE AND SEAT OF HOOPING COUGH.—Mr. Streeter regards the primary affection of the bronchial membrane as inflammatory in its nature, and he believes that it will be found, on careful observation, to be attended with more or less fever of an analogous character to that which attends contagious catarrh, or influenza. He is also of opinion that the presence of a saline secretion in the trachea is the proximate cause of the convulsive cough which we hear in the second stage.

GRINDER'S ASTHMA.—Dr. Hughes, while noticing the opinions of Dr. Calvert Holland on the pulmonary diseases to which grinders are especially liable, puts it forward as his opinion, that they labour under an emphysematous condition of the lungs, with dilatation of the bronchial tubes, the result of long-continued chronic bronchitis, and he states that the presence of long-standing bronchitis and emphysema have very rarely indeed, in his experience, been associated with tubercles. Persons who during childhood have suffered severely from pertussis, and who during their youth and manhood have been more or less frequently troubled with cough and bronchorrhea, are, as age advances, affected, not with tubercles, but with emphysematous lungs; or what is commonly called asthma. With this are generally combined dilatation of the bronchial tubes, and enlargement, particularly of the right side, of the heart. The same may be said of persons affected from their youth or infancy with contorted spine, and consequent malformation of the thorax, who have been supposed, but Dr. Hughes thinks erroneously, to be especially prone to consumption. The complaint of which they most commonly die is not consumption, but emphysema, and consequent dilated heart, ascites, hydrothorax, and pulmonary apoplexy; the whole of which appear to be, in great measure, the purely mechanical effects of obstruction to the passage of the blood through the emphysematous lung; a condition which, at least in many cases, is itself a simple mechanical effect of long-continued bronchial disorder.

POISONING BY PRUSSIC ACID.—Dr. Letheby states that the opinion given by him in the Court of Justice respecting the cessation of volition after the scream, in cases of poisoning by prussic acid, was founded on actual experiment and observation, and further, that the statement that prussic acid, instead of being hot, is inexpressibly bitter, was based on personal experience.

OFFENSIVE BREATH.—Dr. Wigan observes, that this is sometimes caused by the formation of a peculiar chronic abscess in the tonsils, which continues for years, gradually ulcerating, and

allowing the occasional discharge of a small quantity of a very offensive matter. This Dr. Wigan treats by inserting into it a hook-shaped knife, cutting on the inner edge only, the drawing of which towards the operator lays the abscess open, without any fear of danger accruing. The incision should be very free. A gargle of tincture of myrrh, and port wine, may be used afterwards, and it may perhaps be requisite to touch the part with caustic. As a preventive measure, Dr. Wigan recommends the habit of splashing the neck, and behind the ears, with the coldest water that can be obtained.

SPECIFIC GRAVITY OF POWDERS.—Dr. Nevins recommends the following plan to ascertain the specific gravity of powders. Take a common specific gravity bottle, capable of containing 500 or 1,000 grains of water, and counterpoise it; then take any quantity, 50 or 100 grains of the powder to be examined, and introduce it into the bottle, and fill this with distilled water. Place it under the air-pump receiver, and exhaust the air. When the escape of bubbles ceases, it will be found that the bottle is not full. Fill it, and weigh it. By subtracting the weight of the powder from the total weight, the quantity of water in the bottle is found; and by subtracting this from the quantity which it is capable of holding, we ascertain the space unfilled by water, which is, therefore, occupied by the powder. Then, as the weight of the deficiency of water is to the weight of the powder, so is the specific gravity of water to the specific gravity of the powder. In case the powder to be examined is a salt soluble in water, spirit may be substituted; and if both spirit and water are objectionable, oil of turpentine may be used. In many instances, if the air be exhausted before the water is added, these precautions may be safely dispensed with.

DISSECTION OF AN IDIOT'S BRAIN.—Mr. Solly dissected the brain of an idiot, 33 years of age, who became fatuous, as a consequence of convulsions when three years old. The principal pathological appearances were, small spots of sanguineous effusion on the arachnoidea reflexa, the effusion of about 4 ounces of sanguineous or serous fluid, part of which was in the ventricles, the convolutions of the anterior lobes being generally small and narrow, vascularity of the medullary substance of the brain, and entire absence of the *neurine* of the septum lucidum, so that all the longitudinal fibres of the fornix, which run through and from that septum, were deficient. The central portion of the fornix was soft, and the crura cerebri and both the thalami were also softened, but not discoloured. Mr. Solly attributes the idiocy of the patient to the destruction of the septum. He has long taught in his lectures that the commissures are the instruments by which impressions are conveyed between one portion of the hemispherical ganglion and another, just as the nerves are the instruments by which impressions are conveyed from the external world to the brain. If then a portion of the commissural apparatus be deficient, the individual in whom the deficiency exists, is deprived of the means of comparing the impressions which his organs of sense convey to the brain; and consequently he becomes idiotic from this serious defect in his mental apparatus. Mr. Solly explains the destruction of the septum, by supposing that the convulsions were indicative of slight inflammation of the lining membrane of the ventricles, and some serous effusion into their cavities, and that absorption of the septum lucidum followed the attack.

POISONING BY ARSENIC.—Dr. Letheby details the particulars of a chemical examination on which he was engaged in a forensic point of view. A man having died under suspicious circumstances, the body was disinterred twelve days after its burial. There were evident indications of inflammation in the alimentary canal. Chemical reagents shewed the presence of morphia and meconic acid, as also of saffron, and the carbonate of lime, but no mineral poison was detected. On enquiry, it was ascertained that the man had died apparently of dysentery, and that aromatic confections, with opium and chalk, had been administered. A subsequent examination of the liver chemically revealed the presence of arsenic. Dr. Letheby

observes, that the deceased had, in all probability, died from inflammation of the whole alimentary canal; but the upper portions of the small intestines were the most inflamed, and this, coupled with the absence of ulceration about the colon and rectum, indicated something more than dysentery. The real cause was found by examining the tissues in which arsenic was discovered.

EXCISION OF THE UPPER MAXILLARY BONE.—Mr. R. D. Mussey relates in the *Western Lancet*, the case of a man named Thomas M'Gilligan, æt. 22, who had a painful affection of the left side of the face, which had existed about eight months. The left nostril was entirely blocked up by an adventitious growth of considerable firmness, extending anteriorly within half an inch of the margin of the ala and septum, and posteriorly so far as to be felt by the finger above the floating edge of the soft palate. The ceiling of the mouth, on the left side, was pushed downwards, so as to present a slight convexity, and the cheek was more prominent than the other. He had had several teeth extracted, without any material relief. The general health was not much affected. As there was no doubt that the tumour sprung from the antrum, and as its progress had been somewhat rapid, Mr. Mussey removed the maxilla in the following manner. An incision through the integuments, commencing a quarter of an inch below the tendon of the orbicularis palpebrarum, was carried down by the side of the nose, and close to the convex border of the ala, thence horizontally to the median line, from which point the upper lip was cut through vertically. Another curvilinear incision extended from the angle of the mouth to the outer margin of the bony orbit, as high as the external canthus. The flap included between these incisions was dissected up, and thrown upon the forehead, and the malar bone was exposed by a horizontal incision of an inch backward along the zygoma from the margin of the second incision. An incision on the median line, from the incisors to the posterior edge of the hard palate, through the lining of the arch of the mouth, and another through that of the palate, separating it from the palatine plate of the palate bone, completed the section of the soft parts. By the aid of a saw and bone nippers the bony connections were divided, and the whole of the upper maxillary bone, except the point of the nasal process, which was left on account of the lachrymal sac, was removed, together with a part of the malar, and the whole of the palatine plate of the palate bone. The tumour occupied the cavity of the antrum, had pushed through its anterior wall, and attenuated its flooring, filled up the whole nasal avenue, pressed the septum somewhat into the right nostril, and had also invaded the cells of the sphenoid, filling up the whole of the body of that bone. The tumour was firm and somewhat fibrous in some parts, and decidedly encephaloid in others. There was not much hæmorrhage; three or four vessels only required the ligature. The flaps were preserved in situ by stitches, and a great part of the wound united by adhesion. The winter following the operation, Mr. Cook, an ingenious dentist, inserted a gold palate, with an arch of teeth, which restored completely the natural appearance of the mouth, and a perfect articulation. This he continues to wear, and so slight a deviation from symmetry between the two sides of the face exists, that very few would suspect any operation to have been performed upon it. Up to the present time, four years and nine months, he has enjoyed good health, without a trace of the disease since the operation.

INFLATION OF THE LUNGS OF NEW-BORN INFANTS.

(To the Editor of the 'Medical Times.')

SIR,—The query discussed in to day's *Medical Times*, by Dr. Guy—"Can the lungs of a newborn infant be successfully inflated by the mouth?" is certainly of great practical importance. I am anxious for more information on the subject. What is the best mode of effecting inflation on the

lungs? I have myself carefully and perseveringly on some occasions, for nearly an hour, endeavoured to resuscitate the still-born child by the use of the mouth and the tube; but never had occasion to be satisfied with the result, though I cannot charge myself with the want of skill in their use, nor can I think that much good is to be expected. What would be the amount of pure air blown into the lungs of the child, after the "deep inspiration" taken by the operator? How much oxygen would it contain? Would it not be chiefly, if not altogether a mixture of carbonic acid and nitrogen? A small proportion of unrespired air, by way of the nostrils, may possibly have been mixed with the air emitted in the act of expiration; but repeated and violent efforts would be needed to accumulate it in any effective quantity, and the carbonic acid would I apprehend completely neutralize its efficiency. A single deep inspiration passed into a vessel of lime water produces considerable turbidity. What must be its influence on the lungs of an infant, if the reflex action of the epiglottis, which we may suppose it would excite, permitted its ingress. In the two cases related by Schmitt, where the lungs were so perfectly inflated that not even a single point was to be found, in either lung, into which the air had not penetrated, were the children recovered? What was the chemical constitution of the air so permeated in those cases? as also in that mentioned by Dr. Brown, in which Dr. Guy gave it as his opinion that the lungs had received air?

I am simply desirous of being further enlightened upon this subject, and should be glad to elicit Dr. Guy's views more in detail.

Yours respectfully,

A. W. CLOSE.

Manchester, Nov. 30th 1844.

The means I have found the most efficient are: cold water, dashed on the surface of the body, and the introduction of air by the aid of a pair of small parlour bellows, or an instrument similarly constructed.

GOSSIP AND NEWS OF THE WEEK.

LONDON COLLEGE OF PHYSICIANS.—Since the list published in our Almanack, the following gentlemen have been entered under the following heads:—*Fellows*: David Plenderleath, Ramsgate; John Forbes, Physician to the Queen's Household, Old Burlington Street; Francis Henry Ramsbotham, New Broad Street; John Conolly, Hanwell; Geo. Cursham, Saville Row; Henry Marshall Hughes, St. Thomas's Street; George Owen Rees, Guildford Street; William Augustus Gny, Bloomsbury Square; Thomas Forbes Reynolds.—*Licentiates*: Robert Hunter, Great Queen Street, Westminster; Thomas King Chambers, Curzon Street; William Wegg, Maddox Street; Somerville Scott Alison, Gower Street; William Munk, Finsbury Place, South; John Abercrombie, Kensington Square; Geo. Tupman Fincham, Curzon Street; Samuel Thomson, Northampton Square; Henry Monro, Upper Seymour Street West, Connaught Square; William Smith, Weymouth; William Wilson, Devonport Street, Hyde Park; George Edward Day, Southwick Street, Hyde Park Square; Arthur David White, Winchester; John Nottingham, Liverpool.—*Extra-Licentiates*: Charles Edmund Hayes Newington, Ticehurst; Edw. Hodges, Syston, Leicester; John Spencer; Augustus Frederick Gooday, Tonrs; James Allan, Haslar Hospital; Thomas Oak, Blackheath Park; John C. Smart, Leeds; John Daniell Vittoria Packman, Puckeridge; John Hittelman; William Jonah Lambert, Lowerby, Yorkshire; Thomas Marsh; Jonathan Toogood, Bridgewater; James Joseph Power, Maidstone; Edward Williams, Cowbridge, Glamorganshire; Thomas Edward Ring, Clifton; Lewis C. Urquhart, Royal Dockyard, Sheerness; Fred. Harington Brett, Ilfracombe; John Robertson; George Ridsdale, Newcastle-on-Tyne; William Sall, Hounslow; William Maddocks Bush, Clifton; William Gill; Thomas Powell, Nottingham; William Grange Pater, Western Underwood, Bucks; Richd. Manuel Blamey, Truro; Joseph Dickinson, Liverpool; Thomas Hodgson Watts, Manchester; Frederic William Alexander, Newbury; Richard Hassall, Richmond Green; Henry Trevan; Thomas Henry Watson, Falmouth; Joseph Skelton; Joseph Stevens; Strickland Kearney Kingston, Hershman, Esher; Edward Morris, Hereford; Henry Peacock, Royal Dockyard, Chatham; Edw. Phillips, Coventry; John Coeks, Plymouth; Edward Bates, Cowbridge, Glamorganshire; Francis John Corbould; William Geo. Shepherd, Sherborne; William Henry Brown; Charles Edward Prior, Gloucester; Francis Plomley, Lydd, Romney Marsh; Glass Black, Exmouth; Wm. John Rundle, Gosport; Charles Radcliffe Hall, Cheshire; Thomas Williams, Swansea—Corseilis, Wakefield.

APOTHECARIES' HALL.—Gentlemen admitted Licentiates on the 28th November, 1844:—William Henry Meadows, Henry Powle Smith, Robert Bowie Walcott, Samuel Baker Rowland, John Lescombe Crosby.

THE LATE DR. DALTON, F.R.S.—This celebrated and

highly talented man has left the sum of £2000 to his executors, to found a Professorship of Chemistry at Oxford. All his manuscripts, we perceive, are left to Dr. Henry, late of Manchester, and now of Hertford. We trust, they will be carefully examined, with a critical eye, and such as may be deemed worthy of publication, be given to the scientific world.

We understand, that the Council of the College of Surgeons of England are on the eve of giving their opinion on the New Bill.

BACHELOR OF MEDICINE, 1844.—**EXAMINATION FOR HONOURS.**—*Physiology and Comparative Anatomy*: R. D. Harling, (Scholarship and Gold Medal) University College; H. March Webb, (Gold Medal) Guy's Hospital; Charles Henry Felix Routh, University College; William Thomas Edwards, ditto, Godwin William Timms, ditto; William Bird Herapath, Bristol Medical School and London Hospital; Edwin Hearne, University College.—*Surgery*: H. March Webb, (Scholarship and Gold Medal) Guy's Hospital; Godwin William Timms, (Gold Medal) University College; Peter Redfern, 1, Surgeons' Square, Edinburgh; William Henry Parsey, King's College; Edwin Hearne, University College; William Bird Herapath, Bristol Medical School and London Hospital.—*Medicine*: R. D. Harling (Scholarship and Gold Medal), University College; Peter Redfern (Gold Medal), 1, Surgeons' Square, Edinburgh; John Evans, University College; William Henry Parsey, King's College; Frederick William Marshall, University College; William Bird Herapath, Bristol Medical School and London Hospital; Henry March Webb, Guy's Hospital; Godwin William Timms, Unive sity College; Edwin Hearne, ditto; *Midwifery*: William Thomas Edwards, (Gold Medal) University College; William Bird Herapath, Bristol Medical School and London Hospital; William Henry Parsey, King's College; Henry March Webb, Guy's Hospital.—*Vegetable Physiology and Structural Botany*: Henry March Webb, Guy's Hospital; William Bird Herapath, Bristol Medical School and London Hospital.

The Medical Association of Marylebone had an interview, by deputation, with the Council of the College of Surgeons on Friday last, the 27th ult. The meeting we understand was entirely "private and confidential," at the suggestion, we may surmise, of the President, Sir B. Brodie. We are, however, sufficiently informed of matters to be able to state that there is some doubt admissible, whether the Council will recommend the increased concessions the Profession now demands.

The number of candidates for the Fellowship, who have presented themselves for examination to the College of Surgeons, is, we believe 25. We are told that twenty-four questions are given to each candidate, out of which he is at liberty to select twelve for his examination. The ordeal, we are assured, is of the easiest description, and that the man who cannot go through it successfully is unworthy of even ordinary membership. So much for the *honour* of the Fellowship!

We have been requested to caution the public against a person who has been calling upon several members of the medical profession, offering steel pens for sale, and stating himself to be a brother of Dr. Golding Bird, assistant-physician to Guy's Hospital, London. We have seen a letter from Dr. Bird, in which he denies any knowledge of the individual, and declares the whole story to be an impudent fabrication. The man is about 5 ft. 9 in. in height, with black hair, and rather Jewish cast of countenance; dressed in a black, single-breasted, frock-coat, and dark-green plaid trowsers.—*Great Western Advertiser*.

Metropolitan Mortality for the Week ending Saturday, November 30th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1075	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases.....	220	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	123	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	148	152	157
Diseases of the Lungs, and of the other Organs of Respiration	323	312	286
Diseases of the Heart, and Blood-vessels	39	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	80	66	69
Diseases of the Kidneys, &c....	13	6	5
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CLINICAL LECTURES ON SURGERY.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By GEORGE JAMES GUTHRIE, Esq., F.R.S.,
December 11th, 1844.

LECTURE X.

The Operation for the Extraction of Cataract
(Continued.)

Before the eyes are finally closed, great care should be taken to ascertain that the edges of the incisions are in apposition; and that the pupil is regular and clear. When the lens has not been hard at its circumference, some small pieces may have been broken off in passing through the opening made in the cornea, and remain beneath it: these may be removed by the eurette, which should always be used with the greatest gentleness and care. A portion of the capsule may occasionally remain in the pupil, and its removal must so often be a dangerous proceeding, in consequence of the great liability to injure the vitreous humour, that I do not recommend its being done, unless it stands up, or lies loosely upon the iris, so as to be readily seized with a pair of fine blunt forceps; but it must not then be forcibly extracted, as very little pressure at that time will readily rupture the hyaloid membrane, and cause an escape of the vitreous humour. This will cause a greater inconvenience, in all probability, than would occur from a considerable portion of opaque capsule remaining behind, which might all be removed by absorption; and, at the worst, would only require the introduction of a needle for its removal at a subsequent period, when it could do no harm. If the iris has been cut near the margin, giving the appearance of an additional pupil, the slip between them may be divided by a pair of fine scissors.

The cornea is not always in a healthy state, although the deviation from it cannot be perceived. I have, for example, in two instances, seen it curl or turn a little outwards, after the operation had been completed, and no effort could cause it to lie flat, or in apposition with the other incised part; union by adhesion could not take place, and the ulceration which ensued caused the total loss of the eye in one instance, and the partial loss of it in the other. It is a misfortune, or a state, over which the surgeon has no control, and could not foresee.

When a large portion of vitreous humour has been lost, and occasionally, though rarely, when this has not been the case, the flap of the cornea does not lie slightly convex on the opposite incised part, or even flat, but falls in, forming a hollow or concavity, the edge of the flap being evidently within the cut surface of the circumference of the cornea. If it should remain in this state, the eye will be lost; for although the secretion of aqueous humour will probably fill the eye, and raise it to its proper level, it may not, however, bring the edges of the cut in apposition, and ulceration will be the consequence. In such cases, the flat-ended probe

or eurette should be introduced under it, to bring it, if possible, into its proper position. It cannot, however, always be done, and the eye looks as if shrunk and half empty. If the flap is in apposition, although hollow or concave, a fair recovery may be hoped for; but if the flap cannot, under these circumstances, be adjusted, the eye will in all probability be lost. M. Maunoir, in such a case, injected warm distilled water into the half-empty eyeball, until he brought the flap to a proper level; and, he says, he succeeded in obtaining a good eye, with which the patient could see to read common print. I have never done this; but I would recommend its being done in similarly desperate cases, being satisfied that they will not succeed if some assistance be not given. Air does no harm; indeed some must always be admitted; and pure water may be less dangerous when used in a greater quantity than has hitherto been supposed. There is yet, you see, something to be learned from experience; and I can only hope that the cases may be sufficiently rare to render it a long time before a decisive opinion can be given upon it, at all events by me.

When the eyes are finally closed, the surgeon should carefully observe their appearance, with respect to rotundity, form, &c., so as to be enabled to form an accurate opinion as to whether any swelling has taken place, on a subsequent examination. If the eye-lid remains of its natural form and colour, the operation will be successful. If the eyelid swells, a greater degree of inflammation has taken place than is compatible with perfect safety, although every eye will not be lost where the eyelid swells even considerably. The swelling of the eyelid is as much a warning to the surgeon of impending evil, as the falling of the barometer is to the sailor, and requires equal precaution.

The last act of the surgeon should be to depress the lower eyelid, for the purpose of being assured that no tears are retained between the lids, that might by their quantity disturb the edges of the incision. Some surgeons apply small strips of agglutinative, or isinglass plaister, to retain the eyelids in apposition; they appear to me to be unnecessary, and if well applied, may prevent the exit of tears or aqueous humour, and cause inconvenience. The patient should, however, be directed not to attempt to move either eyes or eyelids, and small pads, or compresses, are applied for the purpose of preventing any motion from taking place. These compresses should be composed of soft, spongy old linen, folded twice of a reasonable width to cover the eye, and should be pinned on the forehead to a cap which has been fitted tight to the head to prevent motion, and to the back of which a bandage, made of the same old soft and elastic linen, has been properly fastened. This bandage should be again pinned, or sewed, as it passes under the ears, so as to admit of its being brought up diagonally over the eye on each side, and of a length to be pinned on the opposite side of the head; the two ends of the bandage thus cross over the root of the nose, and restrain the motions of the eye on their own side, with a degree

of pressure which the patient should just be sensible is sufficient to keep the compresses steady, but in no way to compress the eyes, or to do more, if possible, than to keep the eyelids closed. A greater degree of pressure would act on the cornea and do mischief.

The room in which the patient is to sleep should be large, airy, and of a temperature of about sixty degrees Fahrenheit. He should lie on his back, with the head a little raised, and with a sufficient quantity of bed clothes to keep him moderately and comfortably warm. As little motion as possible should be allowed, and the room should be kept perfectly quiet, and nearly dark, but not so much so as to prevent the nurse or attendant from seeing what they are doing by day; and by night the candle or light should always be shaded and held behind, not before the patient, when any examination of the eye is going on. The nurses should watch the patient carefully and incessantly for the first two or three days, so as to prevent his attempting to assist himself, to rub his eyes when he awakens from sleep, or even to turn in bed without aid. If the patient should have a habit of putting his hands to his head, they may be tied or fastened, so as to prevent it; he should neither blow his nose, cough, nor sneeze, if he can avoid it.

The eye should not be disturbed until the morning subsequent to the operation, after some twenty hours or so; the compresses should then be raised, when it will be satisfactory to see that the eyelids are not swelled, and that but little watery fluid has run out on the pads. The eye-lids should be carefully and gently cleansed at their edges, by a very small piece of fine sponge and warm water, the patient being cautioned not to raise the lid, and to prevent alarm, the chin, and then the nose, should be touched by the wet sponge, before it is applied to the eyes. The less that is done to the eyes the better, the examination being principally to ascertain their state from the appearance of the lids, and to change the pads, which become uncomfortable, from the overflowing of the tears, and, in the first instance, of the aqueous humour which continues to be discharged for three or four days, if the adhesion of the edges of the incisions should not take place. The eyelids, under the most favourable circumstances, should never be opened before four complete days have passed away, during which time the patient should be kept in bed; he should then only be allowed to sit up.

After the eyelids have been carefully cleansed, he may be permitted to place his hand on the bed clothes, and to raise the eyelids very slightly, to enable him to see his hand, which effort brings the pupils downwards; and if the light falls with moderate power on his hand, he will see it and the fingers move, and the surgeon will be able to observe whether there is any undue redness, which, under favourable circumstances, will not be the case. I do not allow the patient to sit in an arm chair until the sixth day; nor do I examine the incision until the eighth, and that in the simplest manner, by making the patient look downwards, whilst I retain the upper lid for a moment,

which has been raised voluntarily by the patient. If the incision should appear to have united, the patient may sleep without a compress or bandage; he may wash or foment his own eyes as frequently as he pleases; open them a little occasionally, and finally, in a day or two more, use a shade to protect them from too strong a light. It is desirable that no effort should be made to evacuate the bowels, if possible, for the first forty-eight hours; and bread and milk, or sopped toast, rusk, or biscuit only, should be given for food twice a day. This may be gradually augmented, as the case proceeds favourably, by a little jelly, broth, and fish, until the success of the operation is assured, by the patient's being able to wear a shade.

Now for the difficulties: and the first is from excess of inflammation which may come on at any time. There is always some little soreness, and sometimes pain, after the operation, and which continues from two to four hours, but it should gradually diminish, and at last subside, probably with a discharge of tears, leaving the eye quite quiet and easy. If, however, towards evening, supposing that these operations are always done by the middle of the day, the pain returns, or not having subsided, becomes more acute; there can be no doubt that the inflammatory action which ought necessarily to follow on such an injury is in excess, and must be subdued. If this pain should come on without any acceleration or augmented force of the pulse, a full dose of opium, after gently fomenting the eyelids and changing the pads, will often remove it altogether; but this should only be relied upon where the patient is of a weakly habit, for the opium will act much more efficiently after the loss of a quantity of blood proportioned to the age and state of the patient than without it, and there are few people who cannot bear one bleeding well. It is of importance, however, that the pain should be arrested, and if one means does not succeed, the other must, or the eye will be lost. It is desirable, on the other hand, that the powers of the patient should not be too much reduced, or adhesion will not take place; hence the effort to relieve the pain by opium, and by removing any unnecessary irritating cause, and by watching the state of the eyelids. The inflammation is sometimes principally seated in the conjunctiva; there is more of a sandy, gritty sensation, than of throbbing pain; lachrymation is followed by muco-purulent discharge, and the chemosis which usually accompanies this complaint; the lids stick together and are cleansed with difficulty. Compresses as such, even in the slightest degree, do no good, and recourse must be had to the application of cold water or hot anodyne fomentations, as may be found most agreeable to the patient. Leeches should be applied to the neighbouring parts, and calomel and opium should be administered at intervals, the activity of treatment being dependent on the seat of the inflammation, and judged of by the throbbing, or deep-seated, nature of the pain. The subsidence of the swelling of the upper eyelid is the first sign of improvement after the cessation of the pain, and a purulent discharge on the linen covering the eye, is among the worst. In a case of this kind, adhesion very rarely takes place, and the upper lid should not be raised for many days, the surgeon confining his observation to what can be seen by depressing the lower lid.

Some cases go on very favourably until the third day, promising a favourable result, when a fierce attack of gouty or arthritic inflammation, as it is termed by the Germans, sets in suddenly, and often does fearful mischief. The pain is sudden and severe; the pulse rises and becomes full, as well as quick, and as the patient is probably subject to gout, he considers it himself as that complaint flown to the eye; a vigorous antiphlogistic treatment combined with full doses of colchicum, aconite and opium, will alone arrest the inflammation which is certainly of a specific nature, and not to be trifled with.

A frequent cause of mischief occurs about the fourth day, and sometimes immediately after the patient has attempted to open the eye and see his hand—it is a separation of part, or of the whole, of the incision, which had not been sufficiently firmly united to resist the slightest pressure occasioned

by the muscles of the eye on moving it, shewing the necessity which exists at this time, as much perhaps as at any other, for the greatest gentleness and care being observed in touching the eyelids. The yielding of the parts which had adhered, allows the aqueous humour to escape, like a gush of water from the eye, of which the patient is sensible, and is accompanied by a sudden pain, which is often considerable. This is frequently relieved by a hot fomentation, a gentle compress, and a full dose of opium. The eye remains, however, sore, slightly inflamed, perhaps a little swelled, and may require the application of a few leeches; and even, in persons of a full habit, the loss of a little blood from the arm. In these cases, the iris is always brought in contact with the external edges of the wound, and generally protrudes a little. A compress, gently applied, is always as agreeable as it is useful, until the first inflammatory effects caused by the accident have subsided, when the eye may be examined by causing the patient to look downwards, whilst the upper lid is retained raised. The protruding portion of the iris will be seen between the edges of the incision, having a tendency to advance rather than to be withdrawn. It should be lightly touched with a fine point of argentic nitratum, which occasions some pain at the moment, to be followed by a sense of relief, and a diminution of the size of the protruded part, which will often require to be thus touched, two, three, or more times, at the interval of three or more days, before it has diminished sufficiently to allow a covering from the cornea to be laid down upon it. Great care is necessary, in applying the argentic nitratum, not to make too much pressure in trying to fix the eye, lest more iris should be forced out, when a fresh attack of inflammation ensues. The eye, in fact, should not be fixed at all; the nitrated point should be applied by an unsupported hand, quickly and dexterously, so as not to cause the destruction, but merely the shrinking, of the iris. The pupil is sometimes drawn towards the incision, as a consequence of the accident; but it is rarely so much so as the retraction this part undergoes, even without a hurt, when the first incision in the cornea is made too near its junction with the sclerotic and iris.

The flap of the cornea, in some rare cases, seems to remain applied to the opposite cut edge of the circumference, agglutinated, or sticking to it, without any real adhesion having taken place, and without any inflammation, or inconvenience, having been experienced. The first case I saw of this kind occurred many years ago, and was very remarkable. The eye on the fourth morning looked remarkably well, and as if the flap had adhered; before I left the house, however, the patient complained of severe pain, and I was induced again to examine the eye, when I found the flap had separated through its whole extent. Inflammation set in with great severity, and the eye suppurated; the other, which had also been operated upon, proceeding to a fortunate termination, utterly regardless, as it were, of the accident which had occurred to its fellow. I have never since examined the edge of a flap of the cornea made upwards, before the eighth or tenth day, unless the patient was able to keep the eye open, and was almost entirely free from inconvenience.

I am led to believe that it is the separation of the flap, or the commencement of ulceration on its edge, which gives rise to almost all the serious attacks of inflammation which take place after the fourth day, and which are sometimes considered to be dependant on damp, cold, or a decayed state of the constitution. In some rare cases, suppuration seems to be induced almost without sufficient cause, and without pain; the patient complaining of a little uneasiness only, and a slight muco-watery, or purulent discharge, from the eye, on the third or fourth day, without swelling of the lid. I have, in three or four instances, seen this occur in one eye, which was ultimately rendered useless, whilst the other has proceeded to complete recovery, without a fault. I consider that union did not take place, perhaps from the apposition of parts not being perfect, and that the inflammatory action being low in these cases, it at once passed on to the suppurative stage, without any sign which

could indicate the probability of such a serious evil, although the eyelids were carefully examined morning and evening.

Mr. Soden, of Bath, mentioned to me some time back, that he had had two cases in which hæmorrhage, from the internal part of the eye, came on the second day after the operation, and was followed by the loss of the eye. I considered that, under these circumstances, the vessels of the choroid coat were, in all probability, in a varicose state, and which might, perhaps, have been discovered, and have prevented any operation being done. I have, however, had one case lately myself, from which I augured the most favourable result, both from the appearance of the eye, and the successful manner in which the operation was accomplished. Hæmorrhage supervened on the second morning, and did not cease until the eye was lost. It is an accident which has occurred to me but once, and, as far as I know, could not have been foreseen, nor avoided.

Operations, for the various causes I have assigned, are not always accomplished in the most favourable manner: the incision may be irregular, and the cut edges do not adapt themselves readily to each other; they may not be, after the frequent introduction of instruments, in a proper state to admit of adhesion; the iris may be bruised more than is consistent with safety; and the deeper-seated parts may be more or less deranged, so as to render some degree of inflammation an almost necessary consequence. This, however, takes place within the first forty-eight hours, and must be treated in a strictly antiphlogistic manner, in order to prevent suppuration, and to keep the ulcerative process within bounds; and calomel and opium will in these cases be sufficient remedies, when not carried to too great an extent; and the general health and strength, in elderly persons, will require to be supported by a nutritious but not stimulating diet, almost from the first, in a manner commensurate with the debility which is likely to ensue, and which is as much as possible to be obviated.

In some cases of elderly persons, of irritable habits, in whom the powers of the constitution are weak, and in whom the cut edges of the cornea do not readily adhere, inflammation takes place about the third or fourth day, of an unhealthy character, and which has been called asthenie, in opposition to phlegmonous; here it is sometimes difficult to decide upon the proper treatment to pursue, except in extreme cases, where the pulse is weak, the hands and feet cold, the countenance pale, and the debility of the patient evident. The attack, in these cases, is sudden; the pain is not confined to the eye, but extends to the orbit, and to the top and the side of the head; considerable lachrymation follows, the eyelid swells; and, on depressing the lower lid, a serous chemosis is seen protruding, of a yellowish-red colour, looking somewhat as if contained in a loose sac, rather than within the cells of the sub-conjunctival membrane; the swelling of the eye-lid does not remain of its natural colour, nor does it become red as in the phlegmonous attack about to terminate in suppuration, but takes on the yellowish-blue colour of serous erysipelas, in persons of a weakly habit. The eye, under these circumstances, should not—and indeed, cannot—be opened, so as to shew the edges of the upper incision, and it should not be attempted. The eye should be fomented, whilst the pain continues, with a hot decoction of poppies, or of hot water and opium, and even of belladonna, or hemlock. Opium should be given in such doses as will allay pain and procure sleep, combined with the carbonate of ammonia and camphor, and the patient's strength should be well supported by a nutritious diet, and even by stimuli, if the state of the pulse should render it necessary. On the decline of the attack, mild stimulants applied to the eye sometimes do good, in removing the irritability which is apt to remain, but such patients seldom recover without some defect in the cornea, and the eye is always in the greatest danger. The general treatment, in all these cases, must be an object of the greatest attention; and it is in consequence of such attacks, and of those which are dependant on a gouty and rheumatic diathesis, that it is advisable to refrain

from operating in winter, in damp and cold weather, unless the patient is really in good health, and can have every possible comfort and attendance which may be deemed necessary.

Spectacles should never be used until from two to three months after the most successful operation; and they should be of two kinds, one for near and one for distant sight.

In elderly people, the cure is frequently delayed by an inversion of the lower lid—the consequence of irritation; which is sometimes obviated by the application of small strips of adhesive plaster, which draw the edge of the lid towards the cheek. If they should not succeed, a fold of skin may be removed by the scissors; or if a thread be passed through the fold, and fastened under the chin, by sticking-plaster, to the skin of that part, it will generally succeed without cutting off the fold, and thus save the patient from some alarm.

J. F.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Continuing the subject of *hepatitis*: there are certain irregularities in the secretion of the bile, from a disordered state of the liver, which give rise to jaundice; this is present in some forms of indigestion. The local symptoms, most distinctly indicated, are those found in connection with dyspepsia; they are, a loaded tongue, and nausea, accompanied by vomiting, sometimes of mucus, occasionally tinged with bile, and sometimes even blood is vomited. This arises from a congested state and imperfect action of the liver. Likewise, there are the symptoms of duodenal dyspepsia. The tongue exhibits, generally, more disorder than in the gastritic form of dyspepsia; it is more loaded, and the fur is of a deeper hue than usual. The most distinct indications are the physical signs which accompany it: the large bulk of the liver, causing a swelling downwards towards the umbilicus and to the iliac region, and upwards into the chest towards the diaphragm, giving increased dulness in all, or some, of these situations, and with this increased dulness, a greater or less amount of tenderness in these regions. This last sign is very uncertain; but in general it exists to a great degree. The point of tenderness is at the pit of the stomach, or the epigastric region, and it may extend around the inferior and posterior part of the chest. There is, generally, pain, and uneasiness, referred to the right shoulder blade. This sort of action may go on with these uncomfortable feelings, the appetite not always diminishing in proportion, but the whole system being disordered, until, by and by, there comes on febrile reaction, accompanied by bilious symptoms, sometimes with jaundice, sometimes with bilious vomiting, or with diarrhoea. In connexion with this febrile reaction, jaundice is often present, and bile may frequently be detected in the urine, especially on the addition of nitric acid, which causes it to present a green colour. A common cause of these affections is a sudden transition of temperature from heat to cold: the prevalence of liver complaints is very great during the occurrence of easterly winds; the liver is, under these circumstances, considerably congested. Headache is one of the most common symptoms in connection with congested liver; there is pain felt over the balls of the eyes, more especially on turning the eyes upwards; sometimes, giddiness occurs without actual pain, and we notice the increase, or the approach, of the symptoms, by the exacerbation of headache. These attacks, that go under the name of bilious attacks, are extremely common, and therefore require particular attention. They are excited by sedentary habits, especially where such habits are combined with full living. A change from an active country life to that of town living, as is the case with many students, who, from an active life in the country, with considerable exercise, suddenly give themselves up to their studies and sedentary habits, is exceedingly apt to be attended

with a bilious and congested state of the liver. The treatment of these affections consists in means calculated to promote the action of this organ. Remember that it is connected with congestion, and congestion may, sometimes, border on inflammation. It is, sometimes, necessary to draw blood from the region of the liver, by cupping or by leeches. This is often useful, not only by reducing the congestion, but likewise by enabling remedies to act more freely. After cupping, mercurial medicines will exert a most beneficial effect on the liver; whereas before they would only tend to produce an increased stimulation in this organ. Where the patient is weak, and you do not like to draw blood, the application of mustard poultices, once or twice a day, is often of great efficacy, and blisters may also be used with considerable effect. The chief remedies are those that increase the secretion of the liver, especially mercurial preparations, given with a frequency proportioned to the strength of the patient, and the severity of the symptoms. Generally speaking, a blue pill, twice or three times a day, carried off by a mild senna draught, and continued for several days successively, will suffice to remove the congestion, and promote the return of the secretion of the liver. In some slight cases, two or three doses will suffice to do the same thing. Where the patient is more robust, and can better bear the action of stronger medicines, two or three doses of calomel will effect this more promptly and certainly. If the congestion continues, and there is a good deal of derangement in the system generally, so that the liver will not act, in spite of the exhibition of mercury, it is useful to combine it with antimonials, particularly James' powder; conium, also, is a good combination, rendering the operation of the mercury more mild, and causing it to linger for a longer time in the upper part of the canal. It is, also, at the same time, necessary to promote the other secretions. The action of the liver, however, can hardly be increased, without relief being given to the other parts. Diuretics, sulphate of potash, and tartarised antimony, some gentle saline medicine, and a little nitre, to increase the secretion of the urine, may be given for several days together. If the disease goes on, and re-action takes place, with the declaration of fever, this treatment is more necessary, and requires to be continued for some days: in some cases, it is necessary to continue the mercurial plan, until the gums are slightly affected; and when such is the case, usually the symptoms of disorder of the hepatic secretion are diminished; but even then, it is necessary to use various aperients from time to time, such as saline medicines, or rhubarb, for the purpose of keeping up the flow of bile. It sometimes happens, that there is a great disposition to congestion, from the imperfect action of the kidneys, and this is very often connected with a disposition to structural disease; under these circumstances, the nitro-muriatic acid is a good substitute for mercury. When the gums become affected, you must stop the mercury to give other remedies, which exercise a slighter action on the liver. The nitro-muriatic acid is one of these. It should be given in the proportion of ten drops of diluted nitric acid, and two drops of hydrochloric acid, with a sufficient quantity of water;—this combination answers better than the usual preparations. A nitro-muriatic acid foot-bath is useful in some cases;—two ounces of the acid may be added to about three gallons of warm water, the feet to be placed in it for half-an-hour, and the strength increased until a slight pricking sensation is felt in the feet and legs. This has a very powerful effect on the system. It sometimes produces salivation, as perfectly as mercury itself. In the more chronic cases, especially in those cases accompanied by a tendency to structural disease, the mercurial ointment, rubbed into the side, is of use, where it is desirable to produce an effect on the system, as well as a local action on the liver itself. I may mention that friction is a very useful agent in cases of congested liver, as well as in congestions of other organs generally. Where the liver is very torpid, and liable to these attacks, considerable advantage will be derived from using friction, once or oftener in the day.

There are other remedies supposed to keep up the action of the liver, and, therefore, regarded as useful in this disease. Muriate of ammonia is supposed to have this property in some degree; and taraxacum or dandelion is considered a very useful remedy, after mercury has been given, when it is not desirable to keep up the mercurial influence, on account of the prejudicial effect it has on the constitution. Extract of taraxacum, in doses of a scruple to a drachm, is a very useful remedy; it should be combined with muriate of ammonia or nitre, for I am quite sure that the combination with nitre has a good effect on the kidneys. In some instances, particularly where the bowels are torpid, the addition of colchicum to some aperient tends to keep up the action of the liver, after mercury has had its effect; given every night, with rhubarb and aloes, or some of the common aperients, it has a very good effect. The diet must be attended to, such being of great importance to persons of bilious habits, and those who are liable to these congestions of the liver. During an attack of congestion, the diet should consist of slops, tea, and so forth, and light broths may be occasionally allowed. Where animal food is allowed, it should be of the lighter kind,—fish, as whittings or soles—and chickens, rabbits, and the whiter kinds of game. These may be continued in for some time, before other meats can be entered upon. Mutton is then to be preferred; but beef, pork, and all such things, should be carefully avoided; as, also, should fat of every description. Malt liquors or fermented drinks should not be given, whilst there are any symptoms of indigestion connected with a congested state of the liver. The diet may be gradually restored to the ordinary kind; but any excess of fat or rich articles of food, such as pastry, &c. should be avoided, as rich things are exceedingly apt to interfere with the action of the liver.

Jaundice is the subject next to be considered.—Jaundice itself merely implies a yellowness of the skin, manifest in various parts, those least covered shewing it the most: more especially the conjunctiva, or white of the eye. No doubt, this depends on the presence of the colouring matter of the bile in the tissues; but this may arise from very different causes. Sometimes, there is an obvious reason, in the obstruction to the passage of the bile through the gall-ducts, or the common biliary duct, through the presence of gall-stones, and, under these circumstances, there is no difficulty in referring jaundice to the re-absorption of bile into the system. The obstruction may not only be in the common duct, but in the biliary ducts scattered throughout the substance of the liver. Then there are obstructions arising from other causes: for instance, tumours compressing the gall-ducts; and it has been supposed that spasm of the gall-ducts may cause it. inspissated mucus will act in a similar way. Inflammation, too, or the products of inflammation, will be likely to account for it. Enlarged mesenteric glands, pressing on the gall-ducts, will cause obstruction. Under these circumstances, the bile may be re-absorbed, and then the symptoms of jaundice will occur. Sometimes, after jaundice has been manifested, and the patient has died, there has been found, on examination after death, no obstruction whatever in the gall-ducts; and in some cases of persons who have recovered from jaundice, they have exhibited no deficiency of bile in the evacuations. This shews that it does not always depend on mere mechanical obstruction. Sometimes, jaundice has been found where bile has been present in very large quantities in the stools, as in the case of bilious cholera. In spite of the quantity of bile discharged by stool, there may yet be great symptoms of it in the system. All these circumstances will depend on the excess of bile in the system, as well as on its re-absorption from the liver. There is another condition, too, more mysterious in its character, which is accompanied by jaundice. Cases have occurred, in which there has been a sudden suppression of the secretion of bile; none has been found in the evacuations, and yet the patient has been affected with jaundice, and various serious symptoms have occurred, such as: coma, syncope, and the other symptoms of sinking, the patient perhaps dying in the course of a few days,

and, on examination of the body after death, there has been found no obstruction, and no particular appearance of disease in the liver or adjacent organs. These cases appear to depend on a retention of bile in the system, and under circumstances such as we know to attend suppression of the urine. There is another curious circumstance connected with this disease, viz., that jaundice is found to occur in other cases, to a great extent, without any such violent symptoms. Jaundice is not commonly a very serious disease; but we have already found it accompanying various conditions: as, for instance, obstruction from gall-stones, or arising from duodenal dyspepsia, duodenitis, and, likewise, a congested state of the liver. It may be a matter of no serious moment when present in some of these conditions; but it is often accompanied by other symptoms, and even by inflammation. Besides the pallor, apparent in various parts of the body, there is commonly, in a person affected with jaundice, great languor, depression of spirits, loss of appetite, nausea, and a bitter taste in the mouth, or a bad and perverted taste; thirst, and a sense of fulness, with uneasiness at the pit of the stomach; chilliness or shivering, alternating with great heat of the surface, is likewise very frequently observed; also, emaciation and loss of flesh. The bile, besides being deposited in the cellular texture, may be traced, by its colour, in the serum of the blood, and also in the secretions. I have stated that it is found in the urine, giving to it a remarkably deep colour. If this depends on the bile, the addition of a little nitric acid will turn it green. It does not, however, pervade all the secretions. It is not found in the saliva, nor is it commonly met with in the intestinal secretions. From the state of the excretions referred to, we can judge as to the intensity or decline of the jaundice, the dark colour of the urine, and the lighter, or more clayey, colour of the stools, being well marked indications in the more severe forms of jaundice. As the jaundice diminishes, the urine generally becomes at first lighter, and the stools begin to show the presence of bile, by the yellowish-green, or dark brown tint, which they acquire. If the disease goes on, the tinge gradually changes from a yellow to a bright saffron colour, then to a brownish yellow, and, finally, the body assumes a greenish-yellow colour, being what is commonly called—green jaundice. Sometimes, the colour becomes so deep, that it is called, black jaundice. This extreme stage is found only in connection with other structural changes. We then find various other symptoms manifested, as: great emaciation and loss of strength, and, ultimately, the blood indicates other signs of disease, particularly a scorbutic state,—in which a disposition to effusion is manifested in the different textures, giving rise to patches on the legs, and hemorrhage from the intestines; the patient, in fact, ultimately dies dropsical, sometimes in a state of coma from a gradual effusion upon the brain. The causes of this affection, besides those that produce inflammatory states of the duodenum and the liver, are various other circumstances inducing functional derangement: circumstances which likewise produce congestion. I believe that, in by far the greater number of instances, where there is not mechanical obstruction, congestion is the main cause. Accordingly, excess of heat or cold, sedentary habits, feculent accumulations in the colon, great mental anxiety, &c., are the causes which are most frequently known to produce jaundice. Although many of these causes operate by inducing congestion, and disturbing the circulation through the liver, I should mention, in addition, that there are some circumstances which seem to operate especially through the nervous system, and produce jaundice in this manner. Certain mental, or moral, emotions may belong to this class, and, it is said, that some affections of the head, or blows inflicted on this region, are followed by jaundice. Certainly, they are apt, through the medium of the nervous agency, to disorder the function of the liver, and thus affect the secretion of bile. I must revert, for a few minutes, to the subject of gall-stones, as a cause of jaundice. These we find to be, a

mechanical cause of obstruction to the passage of the bile; but they are indicative of some previous disease,—some disordered state of the bile, tending to the deposit of matters that constitute gall-stones. By far the most common deposit, is that of cholesterine—a fatty and resinous matter, forming one of the normal constituents of the bile. Sometimes, inspissated bile, not merely cholesterine, but other matters that enter into the composition of the bile, form these stones. In connection with jaundice, they produce especial symptoms. Their passage through the duct, is often productive of violent spasmodic pain in the right side, along the course of the hepatic duct, or running across the epigastrium towards the opposite side; and, sometimes, the pain is so severe and violent, that it seems to pass quite around the body, bending the patient double, and causing him to perspire most profusely, accompanied, first of all, by great weakness, and, afterwards, by some febrile reaction, owing to the intensity of the pain. All this occurs in paroxysms, the patient previously shewing no indications of jaundice. These fits may recur again and again, and, in some instances, gall-stones will be passed by stool during the paroxysms. After the relief thus obtained, the bile flows as freely as ever. It must be admitted, that gall-stones, of considerable size, have been passed without the manifestation of these severe symptoms; and, on the other hand, such symptoms have been present, to a very severe degree, without gall-stones having been detected, or even without jaundice occurring. Gall-stones are, sometimes, formed in the gall-bladder in very great numbers, and thus lead to obstruction of the various ducts. A case is recorded of more than a thousand such stones having been passed from one person. There is a preparation in the Hunterian Museum at Glasgow, in which several hundreds of these concretions were found in the gall-bladder. When several are together, they often exhibit smooth surfaces, just as if they had been rubbed together by the motion of the parts, closely fitting to each other, and showing that some degree of friction has been exercised on them. They vary from the size and shape of a grain of wheat, to that of a small hen's egg. There have been cases known, in which gall-stones have weighed an ounce, and one would almost wonder, how stones of this size could have been passed during life.

We now come to the *treatment of jaundice*; but before entering on this subject, I may again state that you can ascribe this disease, in most cases to one or two pathological causes: either to obstruction to the passage of the bile in the gall ducts, or else to congestion in the substance of the liver; and the treatment will, therefore, necessarily range itself under these heads. The measures to be adopted, in these two cases, will, of course, be somewhat different. The treatment, in cases of congestion, will be that of mercurials, antimony, and saline aperients. Muriate of ammonia seems to render the bile more liquid, and therefore prevents the tendency to the formation of concretions, and assists in dissolving any that may be present. Nitre and taraxacum may also have a beneficial effect. But if there be spasmodic pains, like those indicative of the passage of gall-stones, it is necessary to use every means to relax the system, and to counteract the spasm, such as: hot baths, mustard poultices over the region of the stomach, and emetics, or even blood-letting. If the pain is severe, opium, combined with calomel, will be found to have a good effect, and may be followed by saline aperients, with an excess of alkali, or castor oil, given from time to time. It is necessary, under these circumstances, to watch the state of the evacuations, to see whether any gall-stones are passed. Their presence may be considered as a very satisfactory symptom, and, in fact, as the precursor of the removal of the affection. If jaundice continues, after this treatment has been persevered in for some time, especially if the colour becomes deeper, and more green, then there can be no doubt of the existence of some organic disease; and this must also be apprehended, when the attacks of jaundice come on frequently, recurring from time to time, in spite of the remedies I have been mentioning, and with-

out any obvious connection one with another. Sometimes, the frequently recurring, or continued, formation of gall-stones, will lead to disease of the structure. Structural diseases of the liver are of various kinds: hepatic venous obstruction is commonly met with in conjunction with diseased heart, leading to the formation of dark-coloured curves, or patches, and partial condensation of the tissue. Again, this structure may become nodulated, or filled with encysted tumours, or hydatids; or it may be softened, and apparently broken down, by purulent infiltration, as a consequence of various forms of diseased action set up within it. Another form in which congestion is found, is that of a red circle around a white, or light coloured, spot, in the centre of which is found an hepatic vein: this is regarded, by some, as indicative of congestion of the portal system of veins. We may also mention, as another condition, a distended or congested state of the hepatic, and portal, venous plexus.

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. CORRIGAN, M.D., Consulting Physician to the Richmond Hospital, Lecturer to the Dublin School of Medicine, &c.

WE have in our last lecture made some progress, in becoming acquainted with the different lesions of the function of nutrition, or secretion; there still remain for our consideration some points which it is necessary for us to examine, before we come to the consideration of diseases in detail. You are all aware of the power possessed by mucous or serous membranes, when inflamed, of throwing out albumen, or, as it is called, lymph. This is a wise provision of nature, to guard the surfaces which secrete it, such as the pleura, or pericardium, from the effects of disease; and this lymph, when thus effused, often plays an important part in the economy of our systems. I have already told you, that you may have three-fourths of the cavity of the pleura completely filled with purulent matter, which is generally said to be the effect of inflammation, and yet you may not have a single symptom to indicate to you that such a process is going on. How is this?

You must recollect that diseases of mucous and serous membranes are alterations of the balance of power between the function of nutrition, and the other systems; and that this preponderance of power or increased action, whichever you choose to call it, may, and often does, exist, without at all implicating its coadjutors. When lymph becomes effused upon the surface of a serous or mucous membrane, it presents, after some little time, a reticulated appearance. This arises in consequence of organised bands shooting from all directions of the fluid, and crossing each other at right angles; each of the little cavities, thus formed on the reticulated surface, contains a portion of lymph, somewhat firmer than when first effused. When effusion takes place into the bag of the pleura, organised bands are often met with after death, connecting the lungs to the costal pleura. In this way are formed the ligamentous adhesions which are found in the dissecting room, on examining the chests of most persons. In this jar, you have a beautiful specimen of the reticulated appearance which effused lymph presents, when organised. This preparation is made from the pleura of a lama, from South America, which, however, during life, betrayed no signs of inflammation. In this other jar you may see the same product developed on the pericardium, in consequence of an attack of pericarditis. The inflammation in this case extended to the heart itself, which, as you may perceive, is coated externally with a dense layer of false membrane. This effusion of lymph is, as I have told you already, an effort of nature to shake off the disease which may be weighing her down; and it is sometimes of trifling consequence, when effused into parts which are not absolutely necessary to life: as into the joints, for instance; or into the eye, as in iritis. From these situations it may be removed

by the process of absorption, quickened by the operation of medicine; but, when effused into parts which are necessary to life, its presence in any considerable quantity must inevitably prove a cause of death, if not quickly removed. I have told you before, that parts in which lymph has been effused, to any considerable extent, acquire a proportionate increase of volume. This you have well exemplified in the case before you, where the liver has become enlarged, to three or four times its natural size. This enlargement depends upon an increased action of the function of nutrition, or secretion, termed by Andral, *Hyperkrinia*. This effusion takes place slowly, but surely, every day, into the interstices, between the purple matter of the liver and the cellular tissue, which forms the matrix of the gland, until the liver finally reaches this size.

This affection of the liver is confined to females generally, and to males of great delicacy of constitution. Now, this enlargement of the liver is generally stated to be the result of inflammation, yet we shall find presently the same agent playing a part directly contrary, in contracting to a very small bulk the same organ. Though it may seem paradoxical, yet it is strictly true, that the same agent can, and does, produce two directly opposite conditions of an organ, namely, morbid enlargement and morbid diminution. This power depends upon a peculiar property which lymph (though organised for a considerable time) possesses of contracting upon itself. Such of you as have attended the practice of a surgical hospital, must be familiarly acquainted with the change which frequently takes place in parts that have been deprived of a great portion of cuticle and cellular tissue, by the destructive effect of burns and scalds, even a great while after the parts have been completely healed. To remedy the mischief that has been done, and to replace the lost tissues, nature sets about the effusion of lymph, which subsequently becomes organised. If the fore arm has been the seat of injury, we often find, some time after cicatrization has been concluded, that it becomes flexed on the arm; or if the arm has been burnt, it becomes chained, almost, to the corresponding side; while, in cases where the lips have suffered, we often find the contraction and puckering of them so great, as to compel us to divide the constricted parts to endeavour to remove the deformity as much as possible. This contractile power of lymph is strikingly exemplified in a peculiar disease of the liver, called cirrhosis: it is a mistake to call it so; however, the name will remain sacred to the end of time, as having been first adopted by the immortal Laënnec, for the nomenclature of this disease. The liver in this disease, a specimen of which I send for your inspection, becomes somewhat of the shape of a ball, and gives rise to one of the most unmanageable forms of ascites that can be met with—to wit, mechanical dropsy. In the course of the circulation, through the liver being impeded (how, I shall presently explain), the vessels of the intestines become congested: the consequence of which is, that, by an effort of nature at self-relief, effusion takes place into the abdomen. This, however, gives but temporary relief; the congestive agent still being at work, the veins become so swollen, that the radicles of them sometimes give way, a discharge of blood, per anum, called melæna, takes place, and the patient perishes. The rationale of this shrunken state of the liver is as follows. Before I explain it, allow me to call your attention to the difference in the size which the liver exhibits in the two diseases, that of enlargement and of contraction; though this has been taken from the body of an old man, and that from a young subject.

To return. The membranous septa of cellular tissue, which intersect the purple matter of the liver, become coated with coagulable lymph, to a considerable degree of thickness; being naturally of a yielding nature, this takes place readily. However, a certain time after its effusion, the lymph begins to be acted upon by this contractile power, the septa of cellular tissue become condensed, and consequently shortened; the purple matter, between its cells, becomes by this means compressed, with such a degree of force, as to be subsequently

elevated above the surface of the organ, in seeming tuberculated accretions. When a section of the liver is made, in this disease, the white septa, lined with lymph, contrasting strangely with the purple matter of the liver, present an appearance somewhat similar to that of a nutmeg divided transversely, whence some writers have given it the name of the "Nutmeg Liver."

Of this contractility of lymph, we also have an example in cirrhosis of the kidney, forming a variety of that disease called "Bright's Affection of the Kidney." This power would seem to convey to us, from the lips of Nature, a hint, that the efforts of our art to remove this adventitious deposit, even at a considerable period of time after its formation, may not be wholly unattended with success. This power, possessed by effused lymph, is also the active agent in producing narrowing of the auriculo-ventricular opening, to which I have referred before. When effused in the tissue beneath the auriculo-ventricular opening, it, when contracting, gradually narrows it to such an extent, as to leave but an aperture through which a crow-quill, or at the utmost a goose-quill, can scarcely be passed. This you have an example of, in the heart before you, which was also affected with endo-carditis: the narrow opening you may perceive where the blue bougie is inserted.

You have thus seen how this power of contraction acts, in narrowing and compressing parts: it yet remains to be proved to you that it possesses, in some instances, another and a different power, namely: that of causing dilatation. I am sure you are all well acquainted with the structure and uses of the valves of the aorta. Owing to this latter power which lymph possesses, the valve of the aorta is affected with a disease called "permanent patency". The sigmoidal valve of the aorta is composed of two semilunar bodies, hanging from the internal coat of the artery. Its use is to prevent the regurgitation of blood back upon the heart, which, from its position and structure, it admirably performs, as the bodies composing the valve—being naturally free, and moving upwards with the column of blood—allow it to pass upwards readily; but, in a healthy state of the valves, not a single drop of blood can return to the heart, through the aorta, after they have given transit to the column of blood upwards; after this they flap together, and thus prevent any regurgitation of blood upon the heart. When deposition of lymph takes place into the tissue composing this valve, or any portion of it: and that, after some time, this lymph has begun to contract upon itself; it is very easy to understand, that the portion of valve which has been made the seat of such deposition, and subsequent contraction, can not, of necessity, approximate closely enough to its fellow, so as to perform properly the office which it has to fill in the animal economy. Of course, under such circumstances, dilatation of the valve must take place. The treatment of this state we shall not discuss here, postponing it until we come to treat of diseases of the heart.

This power of contractility is also evident in the lymph of blood, which has been drawn from persons labouring under an inflammatory affection of a mucous membrane. You are aware, I suppose, of the presence of what is called, the "buffy coat," in blood so drawn. This buffy coat is nothing more than a degree of coagulative power greater than natural, which the albuminous portion of the blood (commonly called lymph) possesses. But to this is, sometimes, added another appearance, namely: what has been termed, the "cupped coat." This is nothing more than the power, which effused lymph possesses, of contraction, which draws into puckers, and renders concave, the smooth surface which the buffed coat previously presented.

Whenever, after having bled a patient, you do not find the cupped coat present, be careful how you again bleed the same person; for, be assured of it, that he will not safely bear it. On the contrary, when you find this appearance present, it very rarely, indeed, happens, but that a re-insertion of your lancet, for a repetition of this evacuation, will prove highly serviceable in restoring your patient to health. But one other instance of

the contractile power of lymph, and we shall quit the subject of inflammation," reserving, until we come to speak of "fevers," the lesion of the function of innervation.

In the cyst you see before you on the table, and which has been taken from the parts "in situ," you have an example of these two extraordinary powers of the function of nutrition of which I have already spoken. Gentlemen, this cyst represents a stomach, enormously enlarged in all its parts; so much so, indeed, as, by its mere weight, to gravitate below the umbilicus; while the colon, which should have occupied its proper position in this direction (pointing it out), has been forced down into the iliac region by the weight of the enlarged stomach. This case is stated to have been one of "scirrhus of the pylorus." Now, no such thing has occurred; that is, if we take scirrhus in the usual acceptance of the term, namely, "cancerous inflammation unattended by ulceration." The pyloric orifice has been merely narrowed by effusion of lymph into the sub-mucous cellular tissue, which, after some time, exerting its power of contractility, has thus obstructed the opening into the jejunum; so much so, indeed, that not a particle of food could get through, and the patient died of inanition. You perceive, from the position of the pylorus in this subject, the inutility of making pressure upon its supposed seat; I should have said, rather, its usual one, in cases supposed to be scirrhus of the part. Its position, in this case, is a little to the right of, and somewhat below, the umbilicus. The only symptom in this supposed case of scirrhus of the pylorus, was as follows:—The patient's appetite was as good as in health; he continued to eat his usual allowance of food for two or three days, which, for so long, the increased capacity of his stomach allowed to remain there, without producing any disturbance: after this length of time, its bulk induced vomiting, when it came up by the bucketful. With all this, the smallest portion of food could not escape into the intestines, and he died of starvation. In mucous inflammation of the rectum, or dysentery, when the cellular tissue surrounding the gut becomes the seat of effused lymph, we find this process of contraction taking place. We find it occurring, also, in gonorrhœa, attended with severe chordee, when lymph becomes effused into the cells of the corpora cavernosa, and, subsequently, owing to this same power, causing narrowing of the canal of the urethra. For the purpose of removing these strictures, both in the rectum and urethra, we are obliged to have recourse to the agency of mechanical dilatation.

With the different modifications of lesion of the functions of circulation, and of nutrition, or secretion, I have done for the present; not, indeed, that the subjects have been exhausted by the observations I have made upon them. They might be made to extend (and advantageously, too) over a much greater space of time than I have devoted to them. Moreover, I am aware that the discussion of such abstract elementary knowledge is not the most congenial theme, upon which to expatiate before a class of pupils who feel, in general, thirsty for a knowledge of the means of treating diseases methodically. One of the motives which have influenced me, in treating the subject of inflammation at such length, and with such a seeming prodigality of your time, is this, that, when we might come to consider diseases methodically, we should find ourselves, *in limine*, at the commencement of our subject, so completely beset with seeming paradoxes, relative to the various powers of the same disease-exciting agent, which, if we did not understand them previously, would prevent us from deriving any information, or, at least, of a very limited character only, from the various accounts of disease to which our attention might be directed. I have wished to give you what information I could upon this particular, because, as I have said at the commencement, much of your future fame, and professional character, depends upon your knowledge of these topics; and trifling though it may appear to some, still, when understood properly, it may be the means of preventing many mistakes in your future career, which, harmless though they might be in their real nature, might still afford a cause for your condemnation among

the scandal-loving, and prejudiced portion of mankind. And believe me, that many such are to be found, who will contend for your erroneousness of opinion in every instance, because, forsooth, you may have made one false diagnosis.

ON THE DETECTION OF NEEDLES AND OTHER STEEL INSTRUMENTS IMPACTED IN THE HUMAN BODY.

Being part of a Lecture delivered at the Aldersgate School of Medicine.

By ALFRED SMEE, F.R.S., Surgeon to the Royal General Dispensary, to the Central London Ophthalmic Institution, &c., &c.

(For the "Medical Times.")

When the foreign body, retained in the wound, is either iron or steel, we have means by which we may readily and effectually determine its presence. Portions of steel are particularly liable to be introduced into the body, in the shape of needles, or as parts of cutting instruments; and, especially in the former case, cause irremediable injury. Some time since, I had a case under my care, where a small portion of a needle was introduced into one of the joints of the finger, but of which no indication existed beyond that which might have been expected from the presence of a foreign body. The exact spot of its insertion was unknown; and indeed it was equally uncertain whether it was inserted or not. Subsequently, the joint swelled, suppurated and discharged, and a small piece of needle was found firmly impacted in the bone. To this case I shall again draw your attention, when I shall come to my lectures on the diseases of the joints, because it shewed accidentally, on the human subject, the course of the inflammation and suppuration of the part, the subsequent ulceration of the cartilages and osseous tissue, and, finally, the course of the reparative process, by the termination of the inflammation by ankylosis. On reference to my note book, for the purpose of studying this case, it occurred to my mind, that had I known that the needle was actually present, and could have demonstrated its exact spot, I might possibly have averted the present inconvenience of a stiff joint to the unfortunate sufferer; and, after having carefully considered the matter, a plan suggested itself to my mind for the detection of needles in future cases. You are all acquainted with the curious condition which steel assumes under certain circumstances, whereby it evinces properties which are called magnetic; you know, moreover, that magnetic poles repel, and opposite attract, each other. You have, therefore, but to render a piece of enclosed steel, a magnet, and you will be able not only to ascertain its presence, but to determine by its polarity, its general direction; and by the amount of magnetism it evinces, you may even infer its probable bulk.

When you suspect the presence of a piece of needle, or other steel instrument, you must subject the suspected part to a treatment calculated to render the needle magnetic; and there are two principal methods by which this object may be effected. The first, by transmitting a galvanic current, at right angles, to the suspected part; the second, by placing a large magnet near the part affected, so that the object may be magnetized by induction. You may accomplish the first end, by taking a copper wire, covered with cotton, or still better with silk (in fact, you may employ the covered wire as generally used for the formation of electro-magnets), and wind it round the parts suspected to contain steel, several times, so that the same current may act at right angles, many times, upon the piece of steel; you may then take a galvanic battery (one of my little tumbler batteries will amply suffice,) and connect one end of the wire to the zinc, the other to the platinized silver. The current might be continued for half an hour, or more, when the steel would become magnetized, and, thereby, give strong indications of its presence.

For my own part, I should use the second plan, or the plan of magnetizing by induction, to render the needle magnetic. For this purpose, I have employed a temporary electro-magnet, which I magnetized by the voltaic battery, and you will

find, that by keeping the part affected as close as possible to the instrument, for about half an hour, you will sufficiently obtain the desired object.

The electro-magnet might be made of the horse-shoe form, if we knew the direction of the object; but, in that case, we should not require its use at all, as the proof of the existence of the needle is our only aim. I have used the horse-shoe magnet, but should prefer, in most cases, an electro-magnet, like this, made for me by Messrs. Horne of Newgate Street, which is made of a simple straight bar of soft iron, wound round with wire. Your chemical lecturer has, doubtless, made you aware that the magnetic effect is proportionate to the power of the battery, so that if you were desirous of producing but slight effect, you would employ this tumbler battery, but if you required the action to be manifested at a greater distance, you would use a compound battery, such as this trough battery upon the table; the compound battery will magnetize a needle, in conjunction with the electro-magnet, in the space of two or three minutes. A powerful permanent magnet would answer as well as the temporary magnet; but it would be very expensive, and not so constantly at hand. When soft iron is impacted in any part of the body, we do not require either the electro or permanent magnet, for on this substance we are unable to confer magnetic properties.

We should never think of taking the trouble of magnetizing a part suspected to contain steel, or iron, unless we could get no indication of its presence without; for, perchance, the object might be sufficiently large to give indication without being magnetized, or it may have been magnetized before its introduction.

Almost all my steel instruments, in common use, are more or less magnetic, from having been exposed to electricity whilst performing my electrical experiments; and, therefore, should I have the misfortune to introduce them into my body, they would be indicated without any process to render them further magnetic. Although foreign to a course of lectures on surgery, I may state, that, when handling powerful magnets, you should always put aside your watch, for mine has many a time played me most troublesome pranks from its springs having become magnetic.

To test the existence of a magnet within the body, we may take a magnetized sewing needle, and suspend it by a piece of silkworm's silk, when it will exhibit certain phenomena upon the approach of the suspected part, provided it contain a piece of magnetized steel. Although this simple contrivance will amply suffice, I, myself, possess a needle, which was made for me by Messrs. Willats, of Cheapside, and which is well adapted for the purpose.

It consists, as you perceive, of a delicate needle, about six inches long, centered upon a small agate cup, resting upon a steel point, so that the smallest possible amount of resistance is offered to its free play.

When a part, containing magnetic steel, is brought near the needle, it may be attracted, or repelled, it may move upwards or downwards, or it may exhibit disquietude according to the position in which the new magnet is held. We may detect the position of the foreign body, when it is of any size, by ascertaining where its north and south poles lie, and these are determined by their repelling and attracting the opposite poles of the magnetic needle. The disquietude, or motion upwards and downwards, merely indicates magnetism, but not the direction of the magnet.

You will doubtless be surprised when I tell you, that, in this manner, I have detected a piece of needle impacted in the finger of a young woman, although it weighed but the seventh of a grain. This gave such marked indications, that I found out tolerably well the position of its north and south poles, though I could not ascertain the presence of a foreign body in any other way. I tried experiments on smaller pieces, at short distances, such as half an inch to an inch, and I found that a piece of needle, weighing 1-60th of a grain, gave decided indications after having been magnetized, and, perhaps, even a still smaller amount of steel might in some cases be detected.

The batteries, electro-magnets, and magnetic needle, you may procure at Messrs. Horne, of Newgate-street; or of Messrs. Willats, of Cheapside; or by order of any other instrument makers; but, if you or any of your friends meet with doubtful cases of this character, I shall esteem it as a favour if you would allow me to be present at the examination, in order that I may see the varieties which different cases present.

A centered magnetic needle should always accompany the ordinary electro-magnets, used for medical purposes, as the medical practitioner, having that machine, might, with this addition alone, always determine the presence of steel particles.

I have now satisfactorily demonstrated to you, that magnetism may be used for the detection of steel particles, impacted within the body, with absolute success; and though but a very trifling application of natural philosophy to the practice of surgery, I have no doubt that, had it been adopted before, many joints would have been saved; and I confidently anticipate that it will be the means, in future, of frequently saving these parts from destruction.

7, Finsbury-Circus, Decr. 9th. 1844.

MAGIC, MESMERISM, HYPNOTISM, ETC., ETC., HISTORICALLY AND PHYSIOLOGICALLY CONSIDERED.

By JAMES BRAID, Manchester, M.R.C.S.E.

(Continued from page 204.)

In well attested cases of trance, the patients spontaneously fall into this condition. In several instances, the difficulty of discriminating between this and apparent death has been so great, that the patients have very narrowly escaped being buried alive. In the tenth volume of Duncan's Medical Commentaries, a case is detailed of a woman who endured all the horrors of seeing herself, or feeling herself, buried alive; for, whilst unable to move any part of her body, so as to give intimation of life, she was perfectly conscious of all which was going on around her, and of the preparations which were being made for her interment. In all doubtful cases as to whether there is real, or only apparent, death, if even a shadow of doubt remains, I quite concur in the propriety of the advice: "we must wait for the indubitable evidence of incipient putrefaction."

In all these cases, the circulation and respiration must have been reduced to an extremely low condition; and the blood must have been undergoing very slow changes, just as occurs in extreme cases of hybernation in the lower animals.

Thus far had I written, when my friend Mr. Sowler, the barrister of this town, directed my attention to some interesting and cleverly written letters which appeared in the October number of the *Dublin University Magazine* for 1843, entitled "Episodes of Eastern Travel." In the sixth, the author discusses "Egyptian Magic and Mesmerism." He says: "Egypt has been in all ages the reputed stronghold of magic and of mystery; she was the immediate inheritrix of the knowledge, the arts, and the sciences which flowed into other lands, with their possessors, from the concentrated wisdom of the world on the Babel dispersion." The author alleges that our progenitors were far more skilled in profound science than we are at the present day. Thus:—"The powers with which the early race of man was endowed, seem never to have been totally lost; at least, they lingered for centuries under the tent of the Chaldean and the caverns of Africa. The grandsons of Adam were skilled in sciences which the world, in these latter ages, are only beginning to have a knowledge of; and in those days, art and intellectual powers probably attained a height from which they continued to fall for four thousand years, and from which they can never rise again. In the busy and distracting life, consequent on the universal emigration from Babel, much of this knowledge was undoubtedly lost, as,

being oral, it was the first to suffer from the confusion of tongues; but astronomy still kept her watch on the starlit plains of Chaldea; architecture wrought her wonders at Carli, Ipsambul, and stupendous Thebes; and magic cherished its mysteries in the caverns of Dakke, Ekmim, and Domdamil. The Egyptian priests seem long to have retained somewhat of the ancient superhuman knowledge; but, being purely traditional, it was at any time liable to contract or expire under the jealous guardianship of some high priest, who wished to be the last of his order. In the mysteries of Isis, some of the great secrets were darkly shadowed forth; and enough has already been discovered in the hierophontic walls of her ancient temples, to prove the intimacy of their authors with subjects of which the wise men of our day are just beginning to obtain glimpses.

Magnetism appears to have been well understood by the Egyptian hierarchy; not only from some of the effects we find recorded, but in one of the chambers, whose hieroglyphics are devoted to medical subjects, we find a priest in the very act of that mesmerism which is pretended to have been discovered a few years ago. The patient is seated in a chair, while the operator describes the mesmeric passes, and an attendant waits behind to support the head when it has bowed in the mysterious sleep.

The study of magic is still pursued in Egypt, as it has always been. Our author does not take for granted, however, what he had the chance of investigating personally. Whilst at Cairo, he procured an interview with the most celebrated magician, and I shall here quote his own description of the most interesting part of the performance:—"A boy of about twelve years old was brought in, and the performance began. He took the child's right hand in his, and described a square figure on its palm, on which he wrote some Arabic characters; while this was drying, he wrote upon a piece of paper an incantation to his familiar spirits, which he burned with some frankincense in a brazier at his feet. For a moment a white cloud of fragrant smoke covered him and the cowering child who was before him, but it had entirely disappeared before the phantasms made their appearance. Then, taking the boy's hand in his, he poured some milk into the hollow of it, and began to mutter rapidly; his countenance assumed an appearance of intense anxiety, and the perspiration stood upon his brow; occasionally he ceased his incantations to inquire if the boy saw anything, and being answered in the negative, he went on more vehemently than before. Meanwhile, the little Arab gazed on the inky globule in his hand with an eager and fascinated look, and at length exclaimed: 'I see them now!' Being asked what he saw, he described a man sweeping with a brush, soldiers, a camp, and lastly, the sultan. The magician desired him to call for flags, and he described several of various colours as coming at his call. When a red flag made its appearance, the magician said the charm was complete, and that we might call for whom we pleased. Sir Henry Hardinge was the first person asked for, and after some seconds delay, the boy exclaimed: 'he is here.' He described him as a little man in a black dress, white cravat, and yellow (perhaps grey) hair. I asked if he had both legs. Alas! he declared he had only one. I then asked for Lord E—k—n. He described him as a very long man, with green glasses over his eyes, and always bending forward. I then asked for Lablache, who appeared as a little young man with a straw hat; the Venus de Medici represented herself as a young lady with a bonnet and green veil, and the boy was turned out."*

Who does not see in this the same condition of the mind, as explained in my paper in the *Medical Times* of the 13th January last, as the result of the extremely vivid state of the imagination induced by hypnotism. Thus: "ideas excited in the mind, whether from recalled past impressions,

or by oral suggestion, or otherwise, are instantly invested with all the attributes of reality. From this cause, patients make very striking remarks, not from any desire to deceive others, but because they are self-deceived; the extreme vividness of their ideas leading them, at that moment, to believe, as real, what are only the figments of fancy. Thus, *name any person, place, or thing, and instantly they will imagine they see or hear them, and will probably enter into elaborate descriptions regarding them.*" Now this state results with my patients from a steady fixed stare at any object, so as to induce a state of abstraction or intense concentration of attention, together with the suppressed state of respiration which accompanies this simple act. Now, all this was in full operation with the little Arab, when he "gazed on the inky globule in his hand with an eager and fascinated look, and at length exclaimed, 'I see them now!'" He had also the additional exciting causes of the magic and mummery already related, and the high expectation of seeing something to work up his imagination to a pitch of the highest intensity. But the grand question is: was he thus rendered really, and truly, and correctly, clairvoyant? Quite the contrary; for his answers, which were sufficiently minute, *were erroneous in every instance*: and the trial with another boy was still less successful, for he declared that he could see nothing. It was related to our author, that "Mrs. L—y, a most enterprising traveller, had the iuk put into her hand, and that she clearly saw the man with the brush, the soldiers, and the camp, though she could see nothing more."*

I shall make one more extract from this interesting article. "In one of the chambers of the tombs, is found a magnetizing priest under the figure of Anabis; one of his hands is raised above the head of the sick person, and the other is on his breast. When priestcraft began to wane in Egypt, magnetism, amongst other of its instruments, passed over into Greece," (I have adduced evidence that the Greeks derived it from Persia,) "and the Pythoness directed the politics of the world by her revelations, when in the extatic state of clairvoyance." If no more accurate than our little Arab boy, or if not more generally correct than our modern clairvoyants, woe be to those who acted from a reliance on the accuracy of their prophetic visions.

There can be no doubt, however, that this was capable of being made a tremendous engine in the hands of wicked and designing men; for they could thus excite the Pythoness to express whatever they wished, and by this means inspire with courage, or subjugate from fear, as best suited their purpose, the confiding populace.

A passage from Plautus has been frequently quoted to prove that magnetism was known to the Romans. In short, I believe, it will be found that the same peculiar state of the nervous system, induced by various processes, has existed to a much greater extent than we had any notion of; and that it has been at the root of most of the religious impostures, and epidemic irruptions of fanaticism, which at different times have manifested themselves in various parts of the world.

In proof that this is not confined to any particular country, sect, or party, I may refer to what took place in the Caverns, in the South of France, in the time of Louis the Fourteenth; to the visions of the Bohemian prophetess in 1627; the "Holy Maid of Kent," in the reign of Henry the Eighth, in our own country, as well as the "Entranced Female" amongst the Wesleyans, whose narrative was drawn up by the Rev. R. Young; and more recently, the "unknown tongues," in England, and Lord Shrewsbury's "Extatica and Addolorata" in the Tyrol. I exhibited experiments about three years ago, to prove that what his lordship saw and recorded was merely the result of self-hypnotism. Nor must I omit the interesting case of Sister Germaine, in Brazil, in 1808.

Since writing the above, I have had the pleasure

of reading "Mesmerism and its Opponents," by G. Sandby, jun., M.A., Vicar of Flixton, Suffolk, an able work, in which I am glad to find the author takes a similar view of the subject, and cites cases in detail in illustration of the said views. His work cannot be too extensively read, especially by those smitten by the McNeile heresy of Satanic agency, or a belief that mesmerism overthrows the Gospel miracles.

Not only so, but this same principle is at the root of all which is not downright imposture with the CRYSTAL SEERS, or FORTUNE TELLERS, at the head of whom ranks Dr. Dee, who became warden of Manchester, in 1595. I lately had an opportunity of scrutinizing the proceedings of two of these "SEERS;" but as they were desired to *see and describe PAST events*, there was little chance of the party under operation being deceived. I could observe a strong desire on the part of the SEER to get answers to some *ingeniously proposed questions*, which might have given a little help to unriddle the tangled skein; but I kept a tight rein on my friend, whom I compelled to be mum, and the result was as complete a failure as was the case with the little clairvoyant Arab. The mode of procedure was very similar to that of the Egyptian magician, with this exception,—the magician hypnotises himself instead of the subject. An invocation to some familiar spirit, and then a steady fixed gaze, *by the seer*, through an un-ground globular piece of crystal, which was turned a little, occasionally, *till the refraction of the rays of light represented some figure*; and this, aided by a vivid imagination, and *heightened by the semi-hypnotic condition induced by the fixed gaze, accomplished the rest*. I examined the glasses, and tried their effects, and there can be no doubt but this is sufficient to account for all which is advanced by these parties, save and except what belongs to the department of rank imposture. I am glad that I had an opportunity of investigating this subject, because this simple explanation of the supposed mysteries and powers of such practices, being made known, may save the overcredulous from being grossly imposed upon. My friend, who was quite prepossessed in their favour, left, an utter unbeliever in their clairvoyant powers.

There can be no doubt whatever, but this is the true *rationalé* of the marvels which Dr. Dee daily witnessed and recorded of visions seen, and conferences held, by him and his servant Kelly, with the invisible world, *by steadfastly gazing upon his magical glass*. Being ignorant of the nature or effects of self-hypnotism, which result from the processes they engaged in, it was not at all surprising that a person, of his turn of mind, should have attributed the result to some *supernatural influence, or virtue, residing in the glass*. Of this glass, Dee is said to have declared to the Emperor Rodolph, "that the spirits had brought him a stone of that value, that no earthly kingdom was of such worthiness as to be compared to the virtue and dignity thereof."

Dr. Dee's show-stone, or mirror, is still preserved, among other curiosities, in the British Museum. It seems to have been believed, and still is so by the same class of mystics, that by casting or moulding the glass, or mirror, at a particular hour, the presiding power of that instant of time, in answer to an invocation or prayer, addressed to him for the purpose, binds to their service, or imprisons in the glass, or mirror, a spirit, whose duty it is to appear when duly invoked, and render answers to such questions as the viewer shall at any time propose. Dr. Dee employed his servant, Kelly, as his viewer; and in many other instances it was entrusted to a third party—a boy or girl, usually under the years of puberty, or an old woman.

It is highly probable that many practised, as he did, in equal ignorance of the true cause of the phenomena, and thus the unfortunate beings who believed in the reality of their visions and intercourse, by these means, with the invisible world, or who were known to have cured obstinate diseases by their processes, were but too frequently convicted of witchcraft, and consequently underwent the extreme penalty of the law for that offence.

* Similar descriptions are given in "Lane's Modern Egyptians," and by the same magician. His subjects seem sometimes to be tolerably correct, but often wrong.

* This appears to be the same magician whose exploits were recorded by Lord Prudhoe, but as his subjects are oftener wrong than right, it speaks but little for magical power.

Nor should the fact be overlooked, that certain disordered states of the nervous system, especially of certain nerves supplying particular organs of special sense, may convey false impressions, and thus create great delusion.

I shall here transcribe some most interesting remarks on this subject, from the late Sir Walter Scott's "Demonology and Witchcraft," page 46:—"The abstract possibility of apparitions must be admitted by every one who believes in a Deity, and his superintending omnipotence. But imagination is apt to intrude its explanations and inferences, founded on inadequate evidence. Sometimes our violent, inordinate passions, originating in sorrow for our friends, remorse for our crimes; our eagerness of patriotism, or our deep sense of devotion;—these, or other violent excitements of a moral character, in the visions of night, or the rapt ecstacy of the day, persuade us that we witness, with our eyes and ears, an actual instance of that supernatural communication, the possibility of which cannot be denied. At other times, the corporeal organs impose upon the mind, while the eye and the ear, diseased, deranged, or misled, convey false impressions to the patient. Very often, both the mental delusion and the physical deception exist at the same time; and men's belief of the phenomena presented to them, however erroneously, by the senses, is the firmer and more readily granted, that the physical impression corresponded with the mental excitement."

I consider it highly probable that some may heighten the effects of their processes, by using narcotic drugs for their suffumigations, and the fumes may also irritate the eyes, and confuse the vision; but that similar results can be attained, merely from the effects of a steady gaze at any object, with excited imagination and expectation, I have myself demonstrated by experiment. The first I tried was a boy, who was made to look at an inky globule in his hand, and also on a piece of paper, and he very soon saw and described two friends, whom I told him he might expect to see make their appearance. I then tried the same with his father; and then with a lady, upwards of fifty years of age—and with complete success with both of them also. They also saw flags and other sights. But any one may perform an analogous experiment, by a steady gaze on a clear burning charcoal fire, at the same time exercising his ingenuity to discover what similitudes he can discover in the fire. If the range of vision is confined by looking through the partially-closed hand, it succeeds the better.

The Scotch "glamour," and "second sight," and the remarkable appearances which have been related as seen by those resorting to certain mystical and superstitious processes, on particular days, as is the custom throughout Scotland, England, Ireland, and other Countries, all admit of similar explanation. There are also many of the marvels of witchcraft which come under the same category, and have undoubtedly been produced in a manner similar to the "vigilant experiments," of some modern mesmerists, which I am about to touch upon. Those who perform those experiments allege that they arise from an existing sympathy excited by their processes between the operator and patient, making every idea of the former to be felt, understood (in some mysterious manner), and obeyed as an irresistible influence, owing to the harmonious concord of the nervous systems of the two parties, the one being active, the other passive. I am perfectly well aware of the great power of sympathy and irritation, especially with imaginative persons. This may be illustrated by the wag who sets a convivial company yawning; by the accidental terror of one or two individuals exciting panic in a whole army; or, from equally visionary grounds inspiring courage and heroism, which have led to deeds of daring, crowned with the most brilliant success. My mode of accounting for these "vigilant phenomena," I shall now proceed to explain; and those who consider it important that individuals should be able to distinguish between substance and shadow, to be able to rely on the evidences afforded by impressions on external organs of sense, as more trustworthy than mere ideal impressions, and to have their judgment and self-control unfettered by gross delusion,

will readily agree with me in condemning, in the strongest terms, the continual repetition of such experiments.

It must be obvious to every one who has attended to what is passing around us, that there is a remarkable similarity in the "vigilant experiments," as they are called, exhibited by some lecturers at the present day, to the performance of the Egyptian magician just recorded. I cannot help expressing my regret at the public perpetration of such experiments. I think they are calculated to excite a prejudice in the public mind against all which is real and of practical value in hypnotism and mesmerism; and the continual repetition of them cannot fail ultimately to have a most injurious effect upon the minds of those who are the subjects of such experiments, and also of those who witness them frequently. I have read reports of a public lecture, at which three lads were placed back to back, whilst wide awake; and the lecturer, whilst standing at a distance, by simply giving a movement to his own body, pronounced them to be thereby magnetically tied together, so that no effort on their part, even when stimulated by the offer of a bribe, could enable them to separate from each other, until the operator's wish had released them; and again, that by the operator retreating from them, they were thereby drawn after him *en masse*, and by his advancing, they were forced to retreat in like manner, so as to keep at the same respective distance from their magnetiser, or pathetiser. Thus, whilst wide awake, they were no longer voluntary agents, but, influenced by a charm or spell, were irresistibly directed in their movements in obedience to the volition of the operator. On other occasions, the patients have been exhibited as fastened to chairs, or to the floor, by the fascination of a look, or pass, or other talismanic token: and, after being thus fixed, and unable to move, even when large sums were offered to tempt them, the operator had only to pronounce that his omnipotent volition had decreed the contrary; and that they would now be unable to resist, for five minutes, the impulse to follow him, when he left the room, and to the amazement of the spectators of these marvels, although any one who evinced power to remain stationary was promised twenty pounds, the magnetic or pathetic attraction was still more powerful, and off the whole platoon marched in obedience to this mysterious power. The omnipotent volition of the operator still triumphed.

Now, I would seriously ask, what are rational men to think of such proceedings as these, but that the whole is a system of rank collusion, or results from the imagination and belief of the patients being wrought upon, till they have been brought into the confines of insanity? Yes, and insanity in its worst form too, in which the hapless victim feels himself irresistibly impelled to execute whatever idea or action is suggested to him by another party. That the latter is the true solution I am fully satisfied. It may have been all very well to perform a few such experiments, so as to determine the fact, that the human mind could be so acted upon; because this could enable us to explain much of the mysterious in respect to what has been recorded of the past, and by giving a candid and philosophical explanation of the cause of the phenomena, we might thereby prevent similar delusion and mischief occurring in future. I feel confident that the whole of this alleged mysterious power depends on the excited imagination of the patient, and HIS IMPLICIT BELIEF IN THE OMNIPOTENCE OF SUCH INFLUENCE, so paralysing his reason and will, as to render them for the time inoperative. In consequence of this, the subject implicitly obeys whatever he apprehends to be the will, or behests, of the operator, by whatever signals such suggestions are conveyed to him.

In proof that such is the true rationale of these "vigilant" phenomena, I beg to submit, that I have myself repeatedly performed such experiments successfully (even on powerful men, who had never been mesmerised or hypnotised), so long as they believed in the existence of such a power, and were kept ignorant of the cause of the remarkable phenomena; but, from the moment I explained my theoretical views, the spell was broken, and I could no longer exercise such power over them. Several of my friends have also tried, and proved, the same. The fact being established, however, that the

imaginative, and ignorant, and credulous, are liable to be so affected; and that the rationale I have now given, being known, and acted upon, is sufficient to shield any one against the malign influence of such fascination and delusion; I consider nothing can be more pernicious than reiterating experiments, in the waking condition, which tend to throw the faculties of the mind into such a morbid condition. The highest attributes of man are the strength of his reason and will, so as to enable him to control and direct his actions, in accordance with certain established and approved principles; but here is a systematic mode practised for dethroning these noble attributes, and reducing rational man to a state of abject and helpless imbecility.

The same argument applies to those "vigilant experiments," which profess to make the subject believe in the transformation of one thing into any thing else the operator may incline. This is accomplished by acting upon the mind, by false impressions, until the suggestions of the imagination become too strong to be corrected, or controverted, by the external organs of sense—a most unhappy condition of mind, indeed.

The pernicious influence of an over-excited imagination is well illustrated in cases of fright: such as where people have imagined they have seen a ghost. The impression recurs, with painful intensity, for some time after, as often as he is placed under similar circumstances. It was still more remarkably evinced in the extraordinary delusion which occurred to a multitude of people, on the banks of the Clyde, below Lanark, in 1686, where "many people gathered together for several afternoons, where there were showers of bonnets, hats, guns, and swords, which covered the trees and the ground; companies of men marched in order upon the waterside; companies meeting companies, going all through each other, and then all falling to the ground, and disappearing; other companies immediately appeared, marching the same way." Now, two-thirds of those who went to witness these strange sights, bore testimony to their reality, not merely by their words, but also by their physical manifestation of fright and trembling, which was visible to those who could see nothing of the apparitions, and martial array, themselves. No doubt, all this miraculous appearance resulted from excited imagination, and the confusion of vision, consequent on overstraining the eyes, by constant and persevering efforts to see the invisible phantasms. Had there been any reality in the objects of observation, they ought to have been obvious to the whole spectators. But, what is of most importance to my argument, as proving the baneful influence of repeating false impressions, and associations, is the concluding remark of Walker's history of the transaction; and I therefore wish it to be observed with particular attention: "Those who did see them THERE, whenever they went abroad, saw a bonnet, or a sword drop in the way."

Exhibitions of like phenomena, during the nervous sleep, are not liable to the same objections, for this reason: by proper management, the whole of the abnormal combinations of feeling, and acting, although perfectly remembered when in the sleep again, are entirely forgotten on the patient's awaking.

But, on the other hand, by another mode of acting, most beneficial results may be revealed. Thus, by exciting, and allowing it time to develop itself, any function or emotion which it is desirable to arouse into greater activity; by keeping it in the state of activity, up to the moment of awaking the patient; the impression will be carried into that state, as certainly as a person may be affected the following day by an impressive dream of the previous night.

(To be continued.)

P.S.—The following errata occur in the former part of this paper:—page 203, col. 3, last line of fourth paragraph, for "one" read "an;" col. 1, page 204, line 27, for "Capt." read "Col.;" col. 2, first paragraph, the two sentences in the 5th, 6th, and 7th lines, should have been included in one sentence, and the J. B. which follow, are my own initials to the explanation there given; in the 3rd line of fifth paragraph of same column, for "habits" read "habit is."

[We have received the following note from Mr. Braid.]

SIR,—I this day received a letter signed "A SURGEON," and dated "London, Dec. 11th, 1844," relative to my com-

munications to your Journal. He expresses himself anxious that I should reply to his letter through your columns, both for his own sake, and that of many others. I beg to state to that gentleman, that provided he furnishes me with his name and address in full, I have no objection to do so, if you can afford me space for the purpose; but I cannot condescend to answer anonymous correspondents, nor would I write for any journal which would publish strictures on any accredited articles by anonymous correspondents, or those who were not known as persons of respectability.

I am, Sir, your most obedient servant,
JAMES BRAID.

3, St. Peter's Square, Manchester, 7th Dec. 1844.

ON THE STATE OF MEDICINE IN ANCIENT EGYPT.

By E. CLARKSON, Esq.

(Continued from page 137, vol. x.)

The operations of the last were violent and dangerous, and like the Lotus of the Lotophagi, or opium chewers, commonly deprived such as partook of them of their senses. Lucullus, according to Cornelius Nepos and Plutarch, lost his life by these compounds. Lucretius, the poet, ended his life in the same way; and Caligula, according to Suetonius and Juvenal, was driven to madness by a philtre, given him by his wife Cæsonia. Medical charms were pressed into the service of disappointed lovers. The Thessalian and Hebrew women, as well as the Egyptian, were celebrated for their skill in this practice. The ingredients made up were of several sorts. A piece of flesh from the forehead of colts new foaled, of a black or brown colour, in shape and size like a fig, reduced to powder, and swallowed with some drops of the lover's blood, was thought mightily to conciliate affection. The Hippomanes, the love potion so called, is, by others, described as an Arcadian herb. These potions, and, indeed, the whole system of philtres, are derived from Egypt. Jason employed a small bird, called jynx, which some classics translate paperculus, to gain the affections of the Colchian enchantress, Medea. It must be remembered that the Colchians, famous in all ages for their drugs and philtres, were an Egyptian colony. The part of the jynx most valued by the enchanters was the tongue, which they looked upon as having sovereign virtue in love potions; sometimes they fastened the whole bird to a wheel of wax, which they turned over the fire till both were consumed; by this process, as they imagined, inflaming with consuming fires the party in whom they had a mind to create love.

The practice of composing an image in wax, and calling it by the name of the person to be inflamed with love; to place it near the fire, so that the heat might, at the same time, affect the image, and the person represented by it, descended to the witches of the middle ages. Virgil speaks of drawing it three times round the altar, in the spirit of the circular dance of the witches in Macbeth, round the cauldron, whose ingredients are of the same description as those of the Egyptian and Colchian enchantresses. Sometimes, enchanted medicaments were sprinkled on the house where the destined victim resided; sometimes they were thrown secretly on his threshold; triple love knots, woven and dyed with charmed medicaments, and of three colours, were employed. These are clearly traceable to Egypt. The knots,—constituting an element in conjunction with the masculine and feminine particle of the name of Ptha (love)—are seen in the hands of Atha (Venus), and the colours are the sacred colours of the temples.

These are identical with the love knot (translated erroneously, "paved with love") of Solomon's song and the *Veneris vincula* of the classics.

*Necte tribus nodis, Amarylli, colores.
Et Veneris dicit, vincula necto.*

The love knot in honour of Solomon's Egyptian wife was apparently of ruby colour, or of rubies, and, probably, tessellated, as it is often seen, in Roman pavements, at the bottom of the royal car or palanquin.

This curious association has somewhat led our inquiry out of the track of charmed medicaments; but we will now return to it. These medicaments, as we have stated, resembled the witch charms, or ingredients of the witch cauldron of the middle

ages. As in Macbeth's witch cauldron, the lizard, the remora, the toad, and the frog, were employed; the brains of a calf, screech-owl's feathers, the blood of doves, the bones of a rat's left side, the hair at the end of a wolf's tail, portions of mummy (afterwards used in medicine), and the entrails of a toad (*tenui pulmone rabeta*), to which Juvenal refers as a medicament used by impatient wives for disposing of long-lived husbands.

Several other ingredients for their love potions are mentioned by Apuleius:

*Philtre omnia undique cernit
Radiculi, herbarum surculi
Aureæ illius Bichordilæ, &c.*

Many of the customs, ascribed to the witches of the dark ages, would seem, from a description of the articles found, and produced against them on their trials, to be intended rather to create love than to destroy. The objects were, however, oftentimes combined. By melting images of wax, the old enchantresses meant to mollify the devoted person's heart. Sometimes, however, like modern witches, they placed an image of clay before the fire, together with some of wax; so that as one melted, while the other hardened, the heart of the victim might mollify in proportion as that of the operator became callous and indifferent.

It may be inquired whether these dealers in charmed medicaments had any means to allay the passion which they had raised. The process was like that of the Fetish and Medicine men. It was requisite to set the patient at liberty by the help of some more fatal medicament, or by the aid of demons, associated with charms more powerful than those which bound them.

The antidotes may be reduced to two sorts; they were either such as had some natural virtue to produce the desired effect; such are, *agnus castus*, and the herbs reputed enemies to generation; or, secondly, such as wrought the cure by some occult and mystical power, and the assistance of demons; such as the sprinkling of the dust, wherein a mule had rolled herself; the tying toads in the hide of a beast lately slain; with several others mentioned by Pliny, amongst which we may reckon all the minerals and herbs, which were looked on as amulets against other effects of magic; for these were, likewise, proper on such occasions, whence the poets usually mention Caucasus, Colchis, and other places famous for magical plants, as those which alone could furnish remedies and antidotes against love. I shall only set down one instance wherein the poet, inquiring what could be the cause for which his mistress had forsaken him, put this question among others:

— an cure
Lecta Prometheus dividit herba fugis?
"What! do those odious herbs, the lover's bane,
Growing on Caucasus, produce this pain?"

One concluding remark on the extent of the knowledge possessed by the scientific colleges of Ancient Egypt. Although jugglery was, doubtless, employed to deceive the people into submission, it must have been combined with a large amount of real physical and physiological knowledge. The latest of the order of magicians (to which Mr. Lane refers), according to Herodotus, practised medicine as well as incantations, with magic, before Pharaoh, a fact that pays tribute to their union of "knowledge and power." No supernatural aid is intimated. Three of the miracles of their natural magic (see Sir G. Brewster), the jugglers of the East can and do perform now. In one they turn water into blood. In the fourth—an attempt to produce the lowest form of life—they fail. From the whole statement one inference is safe: that the ambition of the priestly chemists and anatomists had been led, from the triumphs of embalming and chicken-hatching, to a *Frankenstein* experiment on the vital fluid, and on the principle of life.

Note.—The Sheikh Abdel Kader, according to Lane, had undertaken, as a proof of his art, to conjure into a sort of tragic mirror, made by pouring some ink in the hollow of a boy's hand, the image of any absent or deceased person whom the traveller might fix upon. Lane desired that Lord Nelson might appear. The sorcerer having gone through some preliminary forms of incantation,

directed the boy to call for Lord Nelson. The call was scarcely uttered ere it was responded to; "I see" said the boy "a man who has lost his left arm; he is holding it to his breast." This was, but for one point, an accurate description of the appearance of Nelson, who wore his empty sleeve in the position mentioned by the boy. The only particular in which the resemblance failed, was that the right arm should have been missing, or "held to the breast," instead of the left. Lane, however, without making any observation to that effect, asked the magician if objects seen in the ink appeared as they would if placed before the eyes of the beholder?—to which the latter replied, that they appeared as they would do in a looking-glass. This made the boy's description in all points correct.

In such magic there may be less of the preternatural than many suspect. What if the boy, hypnotised by the fixed stare which he is made to direct upon the ink in his hand, were brought into a certain state of "lucid dreaming," wherein, being, through the magnetic influence of the sorcerer upon both (helped by narcotic suffumigations), *en rapport* with the querist, he finds in the soul of the latter, not in the soulless ink, the image enquired after? While Mr. Lane was waiting for such description as should convince him that the image of Nelson was really present to the boy, was not his imagination—the imagining power within him—intently occupied with the image in request, full of it, and seeking to project it, seeking, however, unconscious of the drift of its own activity? for the imagination, as Kent says, is "a faculty that ever works in darkness—a blind medium to some reflection of it into other souls;" and the boy's imagination, was it not in an equal state of tension—void, and opening itself, waiting to receive a somewhat to be impregnated with, to it knew not what manner of shape? And these two imaginations, the one in its positive, the other in its negative activity, had not they given themselves, for the time at least, to the necromancer, to be swayed by him as he listed? For you cannot so much as give your hand to be peered at by a gipsy fortune-teller, but you give her its imagination with it. And so the imagination of Mr. Lane and the imagination of the boy uniting themselves in the magician, the image on the former must mirror itself on the latter, with the left arm, in all the mirror-images, where the right should be. "Persons magically connected," says Passavant, "form out of the distinct spheres of their individual vitality, a common one, and become fused together into one ethereal corporation." This seems a natural account of the whole matter.

HOSPITAL REPORTS.

JERSEY HOSPITAL.

Case of Diabetes. By J. M. Jones, Esq., Surgeon to the above Hospital.—J. Kelly, ætat 51, by trade a jeweller, was admitted into the General Hospital, on the 1st August last. He stated that, till within six months, he had been in the enjoyment of uninterrupted good health; that, about the beginning of January, he first felt a reluctance to follow his usual employment, in consequence of his experiencing great lassitude, general debility, and loss of appetite. Shortly after these symptoms came on, he gave up work altogether, and had lived, up to the time of his admission, partly on the money he had been able to save, partly on charity. When he came to this island, about a twelvemonth ago, he was rather corpulent; but shortly after his first feeling ill, he perceived that he was daily getting thinner, and that the more he became so, the greater was his appetite. It was about this period, that he first perceived the secretion from the kidneys to be very considerable, but he was unable to state the exact quantity passed. On being questioned respecting his habits, he stated that these had been uniformly regular, though, from circumstances which have come to my knowledge since his admission, I have every reason to believe that he has often given himself up to intemperance.

On his admission, the following symptoms pre-

sented themselves: excessive and general emaciation: this was more particularly visible about the face; the skin was not only shrunken, but being quite in folds, throughout the whole body, it had a feeling of great dryness, and the arms and legs were much more scaly than the abdomen, or any other part; the tongue was much coated with a dark fur, particularly towards its root, and the mouth was constantly dry; the pulse, though natural as far as regarded frequency, beating steadily at 65, was rather weak and thready. He complained of very little pain, and a slight twitching in the back and loins; an occasional sinking at the epigastrium, together with a burning sensation in the hands and soles of the feet, were the only symptoms which he said distressed him. I must not omit mentioning two others, a continual thirst, and a constant craving for food. The chest was minutely examined, and appeared healthy; and he stated that he had never experienced any pulmonary complaint.

As the treatment pursued in this case has been, till within the last three weeks, uniformly the same, I shall merely mention what were the remedies prescribed, without repeating what, day after day, was given. The quantity of water this patient passed, the first week after his admission, varied from twenty-two to twenty-five pints during the twenty-four hours. During the second week, it never exceeded twenty pints; the third week, it was often less than fifteen: never more. The fourth week, it averaged about eight pints in the twenty-four hours; and, by the time he had been in the hospital two months, the quantity passed was natural, and has remained so up to the present time. For six weeks it presented all the features of diabetic urine: sweet to the taste, straw coloured, with violet smell; and, occasionally, it was albuminous.

The treatment, adopted in this case, was the following. A diet, as alkalescent as possible; animal food twice a day, and some farinaceous food for supper. His common drink was either barley water, containing as much nitro-muriatic acid as he could take, or lime water. Fermented liquors were interdicted; and, at his desire, he was allowed a glass of brandy, diluted in half a pint of water, and three glasses of wine, during the twenty-four hours. The whole surface of the body was well sponged, night and morning, with the nitro-muriatic lotion, and the spine and loins were rubbed with a liniment, composed of equal parts of tr. canth., tr. opii, and sp. terebinth. The whole body was enveloped in thick flannel, and the vapour bath was occasionally employed; and three tablespoonfuls of the following mixture, with one of the powders, were taken every four hours, for about ten weeks.

R Tr. opii, ʒij.
Vin. antim., ʒss.
Acid nit. dilut., ʒij.
Tr. columb., ʒiss.
Mist. camph., ʒxij.

Ft. Mist.

R Pulv. ipecac. c. grs. iv.
—Rhei. grs. v.

Ft. pulv.

For one month, ʒj. of pulv. ipecac. c. was given every night, and from ʒij. to ʒiiss. of pulv. rhei were taken about twice a week, for the purpose of acting as an aperient; this did not always produce the wished-for effect, and then two or three ounces of a cathartic saline mixture were prescribed. Under the steady perseverance of these remedies, the quantity of urine diminished; and as this became less, so, in proportion, did the patient's general health improve; and though I cannot flatter myself that this case can be regarded as a cure, but must be numbered with the many which have been thought so, but which time proved to be but temporary ones; still it is gratifying to see, that there does not exist, at present, one unfavourable symptom: the bowels are regular; the tongue clean; and the appetite good, without being voracious; the skin has lost its scaly appearance, and feels moist; and, with returning strength, there is a visible increase of flesh. I have endeavoured to trace the proximate cause of the disease in this individual, but without being able to arrive at any satisfactory

conclusion; it does not appear to me to have originated from any nervous irritation, nor as a symptom of debility; and its cure (a temporary one, perhaps) does not lead me to infer, that the diabetic symptoms could be the result of a broken-down constitution.

Little attention is, I am convinced, paid (particularly in private practice) to the quantity of urine passed, and it is only when great emaciation follows corpulency, or some equally well-marked change takes place in the general appearance of the invalid, that we are led to ask a question, which most probably would have met with the same answer, weeks, or even, perhaps, months before, had such been asked; thus, much valuable time is lost, and a disease, at all times fraught with danger, is allowed to continue for a considerable time without suitable remedies being given. The individual, whose case I have given, had, from the commencement of his feeling ill, to the time of his admission into the hospital, consulted several medical men (and he mentioned my name among the number); he was never asked, whether the secretion from the kidneys was natural or not, and he did not think it of any importance to state, that he passed gallons of urine every day.

Diabetic cases, when they occur in private practice, offer much less chance of being cured, than do those which are admitted into the hospital; with the one class, it is next to impossible to have the rules laid down attended to, or the diet ordered, and the medicine prescribed, properly taken: the contrary happens with the other; and it is quite certain, that it is only by strict attention to certain rules, to medicine and diet, that this formidable disease can be, if not entirely cured, at least considerably mitigated.

St. Heller's, Jersey, December 4th, 1844.

PROGRESS OF FRENCH SCIENCE FROM OUR OWN CORRESPONDENT.

Paris, Dec. 5th, 1844.

Uretroplasty: by Dr. Jobert de Lamballe.—M. ætat 36, entered St. Louis on account of a considerable urinary effusion, following on several attacks of blenorragia, which had caused stricture, and rupture of the urethra, during a violent effort made by the patient to overcome the obstacle to the passage of the urine. This effusion was followed by abscesses and gangrene of the left side of the scrotum, of a portion of the perinæum, of part of the inguino-pubic region, of the skin covering the penis inferiorly, and of about three inches of the urethra. After having evacuated the effused urine and the pus formed, the patient rallied, and the tissues retracted to their normal state, when Dr. Jobert de Lamballe performed the following operation:—First, he cut off the edges of the wound situated on the scrotum and groin, united the parts by means of the interrupted suture, and, when the cicatrix was sufficiently firm, he proceeded to the second stage of the operation, viz.: the restoration of the urethra. To effect this, he cut off, as before, the edges of the lost portion of the urethra, and dissected carefully a portion of the integuments from the right side of the scrotum; but as this was insufficient, he continued the incision upwards on the penis, and thus enough skin was obtained to cover the lost part, to which it was fixed by means of the interrupted suture; and, in order to prevent the too prompt union of the parts, under each ligature a bit of agaric was placed. This done, a gum-elastic catheter was introduced into the bladder, and allowed to remain there until the union was complete. Three months have now elapsed since the operation, and the flow of urine is as easy as before the patient was ill. The organisation of the new tissue has pushed the testicle upwards towards the inguinal ring, and the penis is somewhat curved, but this was inevitable from the method necessarily adopted to repair the loss.

On Valerianic Acid and its Compounds.—Since the attention of the profession has been directed to this substance, several modes of preparation have been published. Thus, M. Rabourdin proposes the following process (*Journal de Chimie*): R Rad. valerian, lb. x., acid. sulph. ʒiiss., aque puræ q. s.

distill until about lb. xxx. have passed; separate the essential oil; saturate the liquid with carbonas sodæ, ʒij. ʒiiss., and evaporate until only lb. j. be left; put the liquid thus obtained into a retort, with a slight excess of sulphuric acid, and distil anew. By this process, from about ʒxij. to ʒxiv. of valerianic acid may be obtained. M. Wochlin, pharmacien at Strasburgh, recommends the following:—Add to the coarsely powdered valerian root a weak solution of carbonate of soda, taking care to act on small quantities at a time in a glass funnel. The liquid, thus obtained, must be evaporated to the consistence of a syrup, put into a retort with 1½ æqv. of sulphuric acid, diluted with half its weight of water, for each æqv. of carbonate of soda employed, and distilled. The product (on which a large quantity of acid floats) is saturated with carbonate of soda, evaporated to dryness, decomposed anew by sulphuric acid diluted with equal parts of water, and, finally, distilled a second time. By this process, about ʒiss. to ʒij. of valerianic acid may be procured from lb. j. of the root; and, according to the author, the variety called *valeriana datior sylvestris* ought to be preferred to the *valeriana datior uliginosa*, and ought to be collected during the spring. The addition of the alkali increases the quantity of the acid, by diminishing that of the essential oil; ought it therefore to be concluded that the former is the result of the decomposition of the latter? M. Barbet-Lartigue, Professor of Chemistry, at the Secondary School of Medicine, Bordeaux, thinks Prince L. Bonaparte's method, with slight modifications, quite sufficient. It consists in mixing powdered valerian root with water, and distilling until the liquid obtained is no longer acid; neutralize with an alkaline carbonate, evaporate, add to the residuum sulphuric acid, and distill, so as to procure the acid, which passes over partly in solution, and partly as an essential oil. The modification, or rather precautions, proposed, are the following: The root must be very coarsely powdered; the distilled water frequently tested with litmus paper, to ascertain the precise moment the liquid ceases to be acid, so as to stop the distillation; the wormpipe must be kept very clean, otherwise the loss of acid sustained will be in an exact ratio with the quantity of oxide contained in the pipe. The loss is, also, considerable, when the water is not very acid, so as to prevent the action of the calcareous carbonates contained in the water on the acids. The evaporation of the product of distillation, when neutralized and separated from the essential oil, must be performed in a porcelain capsule, and at a gentle heat, in order to avoid the decomposition of the organic matter, and its carbonisation; the same remark is applicable to the addition of sulphuric acid to the alkaline valerianate, sulphurous acid being in this case disengaged; to obviate this, a certain quantity of the solution of the valerianate must be separated and added as soon as the mixture no longer becomes turbid by the addition of sulphuric acid. *Valerianate of zinc* is obtained by adding pure oxide of zinc to a solution of valerianic acid. M. Lartigue states that there is no inconvenience even when the oxide is added in excess, as the solution always remains acid; if the quantity of water be not sufficient to dissolve all the valerianate formed, a species of flaky magma appears on the surface of the liquid, which is nothing more than the excess of valerianate; the whole must then be filtered, and the insoluble portion dissolved in a fresh quantity of boiling water. The liquid, evaporated at a gentle heat, furnishes, for every ʒiiss. about ʒij. of a salt in lamellated, pearly, flexible crystals, of a greasy aspect, which float on the surface of cold water, without appearing to become wet; heated to 122° F., they are softened and become flexible like a mixture of stearic acid and wax; at 212° they become viscous, and melt at from 302° to 320°, losing their water of crystallization, and a considerable portion of the acid. If the temperature be raised still more, an oily white gas, of an empyreumatic odour, is produced, and carbonised oxide of zinc left; should calcination have been performed on a platina plate, the gas burns with a bright white flame, and pure oxide of zinc remains. All the diluted mineral acids decompose it, setting the acid free; during this

process a curious phenomenon takes place: as soon as the crystals touch the acid, a rapid rotatory motion commences, and continues as long as the quantity of water is sufficient to dissolve the valerianic acid, as it is formed; but as soon as the water is saturated, it ceases, and oily drops appear on the surface of the liquid. Boiling nitric acid produces slight effervescence, rendering the solution turbid, and precipitating a white crystalline body, insoluble in the acid, but soluble in water. Boiling sulphuric acid produces a smart effervescence; the valerianic acid is disengaged, but no sulphurous acid. Finally, it is entirely dissolved in solutions of potash, soda, and ammonia. This substance is chiefly recommended in neuralgic affections, at the dose of gr. iss., grs. ij., grs. iij., and even grs. iv. per diem; and though, doubtless, useful, still it is not infallible, as may be seen by an article published by M. Fario, in the *Memoriale della Medicina contemporanea*, in which several cases are related, where it was given without any beneficial effect, though considerable quantities were taken. The same author states having prescribed it successfully in two cases of neuralgia of the scalp and eye; in one, \mathfrak{H} ., and in the other, grs. xvij., were given in the course of two days. He recommends it, also, as a collyrium (grs. ij. or grs. iij. in \mathfrak{Z} ij. of water) in ophthalmia blenorragica, ulcerations and recent spots of the cornea, chronic keratitis, and whenever a substance antiphlogistic and slightly astringent is requisite.

On the Nature and Treatment of Encephalocele.—In the last number of the *Journal de Chirurgie*, Dr. Malgaigne, after quoting the case of a child operated on by Professor Velpeau, examines the following questions:—1^o *In what spot may this hernia take place?* From the facts published, it would seem to be produced upwards, downwards, forwards, backwards, and sideways, (a) *Encephalocele superioris*: not common; two cases only recorded, one by Schneider, the other by Held; the hernia took place through the fontanella anterior; perhaps, a third may be added, by M. Plaisant; the hernial sac here contained nothing but serosity. (b) *Encephalocele inferioris*: as uncommon; M. Isidore Geoffroy St. Hilaire states, that Dr. Serres witnessed a hernia in which the cerebrum protruded between the two halves of the sphenoid and the ethmoid bones, and descended as low as the pharynx; Professor Breschet quotes a case of a little girl who lived several days with an encephalocele of the size of a walnut, near the root of the nose, between the os unguis and the frontal bone. (c) *Encephalocele anterioris*: three cases:—Professor Cloquet quotes one of a child, presented by Professor Moreau to the Academy of Medicine: the hernia, of the size of a chesnut, was situated just above the nose, and seemed to protrude by a separation of the two portions which form the os frontis. M. Is. G. St. Hilaire and Professor Breschet relate two others; in the former the child survived four days, in the latter a fortnight. (d) *Encephalocele lateralis*: the only case extant is that of Dr. Bennett of South Carolina, where two tumours existed, seeming to protrude by the occipito-mastoidian suture. (e) *Encephalocele posterioris*, the most numerous: may take place through the fontanella, the occipito-parietal suture, at the inferior portion of the occipitalis, and united to the foramen magnum, through the foramen magnum, finally—and this is the most frequent of all—at the occipital eminences, as in the case which was related at the commencement of the article. It would thus appear, that the hernia takes place through the sutures, and may be double or complicated with spina bifida:—2^o *What are generally the contents of the hernia?* (a) Cerebrum with or without serosity—(b) Cerebellum with or without serosity; seven cases related by Bennett, Lallemand, Beclard, Buffos, Reiselius, Breschet, and Isenflamm—(c) Serosity alone—(d) Serosity in the sac and that portion of the cerebrum in which were the ventricles; these last were full of serosity. Sometimes, a single tumour exists, and yet the hernia is double; in others the tumour is multiple and the hernia single.—3^o *What are the causes?* According to the author, it is the result of dropsy of the arachnoides; this may take place in several

ways:—from the effusion of liquid in the cavity of the arachnoides, the brain is forced out, and remains so after the absorption of the fluid and the retraction of the bones of the skull on the brain; here reduction ought never to be attempted, the cavity of the cranium being already full. The liquid may be in such quantities as to push the dura mater before it, so as to form a sac exteriorly, in whose pedicle the brain is situated; the serosity, even in this case, may be absorbed. The tumour may be congenital, or come on after the birth of the child, for Professor Breschet mentions a case, in which it appeared soon after birth, and another when the child was three months old. Mr. Bennett saw a case four weeks after birth: finally, M. Plaisant, one where the little patient was eight years old.—4^o *What is the prognosis?* Encephalocele is not necessarily mortal, since Adams, Bennett, Lallemand and Breschet relate cases in which the patients survived; it is, therefore, certain that, when the tumour remains stationary, the danger is not great: the contrary takes place when the effusion tends to increase, for the pressure exercised on the encephalon, and the hernia, gives rise to fatal inflammation, proved by the presence of the pseudo-membranes. This is the usual termination, it being very rare that the sac bursts; this has, however, been observed.—5^o *What is the most efficacious mode of treatment?* The different modes hitherto employed are:—*excision*, by Thiebault and M. Norgen;—*ligature*, by Schneider, Gistren, Professor Velpeau, and a surgeon, quoted by Forcst;—*incision*, by Freid, Lallemand, Held, Bennetti MM. Plaisant and Thierry;—*puncture*, by Becker, Earle, Horner, R. Adams, Professors Breschet, and A. Berard, and many other surgeons;—*taxis*, employed only once in a case mentioned by M. J. G. St. Hilaire, as performed by Drs. John and Jacobæus. It was attempted after incision by Dr. Thierry;—*compression*, by Adams and Professor A. Berard. Of these various modes, excision, ligature, and taxis, have constantly proved fatal, and ought, therefore, to be rejected; incision and puncture have each been successful once; compression is useless. To resume: what ought a surgeon to do in similar cases? When the hernia is formed of the cerebral substance alone, nothing; where not only the brain, but, likewise, serosity exists in the sac, or this latter alone, if the disease remains stationary, nothing had better be done; but if it increases so as to threaten fatal consequences, incision or puncture may be had recourse to.

On Pestis.—M. Hamont, *Membre Associé* of the Academy of Medicine, in a memoir on this subject, enumerates the following diseases as prevalent in Egypt:—palpitations of the heart, caused by overwork, and bad food; marasmus; pale, unhealthy ulcerations of the eye; staphyloma; atrophy; cataracta; diminution or abolition of the sight; scrophula; lepra; tinea; psora; phthisis; febris intermittens (contrary to the opinion professed of late, the author affirms, that these two last affections may exist simultaneously in the same individual); aqueous cachexia, characterized by an œdematous swelling of the hands and face, and a decoloration of the skin and mucous membranes; diarrhoea and dysentery, both endemic; worms; variola; elephantiasis of the limbs and the scrotum; both principally affect gardeners, and individuals who reside in humid localities, and live on fruit, and aqueous, mucilaginous, vegetables, &c.; finally, to complete the list, *the plague*. This dire affection is met with at all times on the Delta, but does not always offer the same symptoms; in general, it is sporadic, but, about every tenth year, it becomes epidemic; in the former case, it may affect an individual for several months, assuming, as it were, a chronic form; in the latter, on the contrary, it destroys in the course of a few hours. After enumerating the different symptoms, the author passes in review the various causes to which this disease has been attributed, and concludes, that any one alone is insufficient, but that it is their re-union which causes it, and that it is propagated by infection, and not by contagion.

On the Treatment of Subluxatio; by Drs. Salgues and Brulet.—The authors, after relating several cases in which the usual remedies—rest, refrigerants, astringents, narcotics, leeching, compres-

sion, had completely failed—propose the following method:—seize the diseased articulation with both hands, and with one or both thumbs seek for the seat of the pain, and the direction it follows. This ascertained, rub the part gently with both thumbs, increasing the force with which the friction is made; the pain augments with the frictions, and these must be moderated, or even discontinued, should that be very intense. The duration of this operation varies; in general, it must be continued as long as the pain lasts, and be repeated twice or thrice; seldom is it necessary to do it four times. Inflammation is not a counter-indication. In general, an hour or two is sufficient to obtain a cure, but to attain this, no organic lesion must exist. According to the authors, sprains persist, because an abnormal sensibility exists; and they state that the pressure, exercised on the part, in exasperating the pain, destroys it, from its very excess, and it is in abolishing this excessive sensibility, that astringents, narcotics, refrigerants, &c., act in this affection.—(*Revue Medicale de Dijon*.)

On the Mineral Waters of Chateaufort, near Schestel (Bas Rhin); report read by M. O. Henry to the Academy of Medicine.—The two springs of Chateaufort are situated at a short distance from each other, and are called after their proprietors (Bininger and Buckel); the water is cold, brackish, and ferruginous; of a sulphurous smell; deposits a yellow sediment; when taken at the spring, it is limpid, but soon deposits a greyish, rosy, ferruginous precipitate; heated, it gives off carbonic acid, and an abundant deposit of earthy carbonates, and sesqui-oxide of iron, takes place; analysed, they were found to be composed of:—

	BRINGER.	BUCKEL.
Free Carbonic Acid . . .	{ Traces, quantity not ascertained.	{ Ditto.
" Hydrosulphuric Acid . .	{ Ditto, perceptible.	{ Traces, not so much.
Chlorurets of..	{ Sodium grs. 3'200 Magnesium 0'078 Potassium 0'010	{ .. 3'263 .. 0'066 .. 0'010
Sulphates of..	{ Soda 0'086 Magnesia 0'050 Lime 0'020	{ .. 0'088 .. 0'070 .. 0'024
Silicate of ..	{ Soda 0'050	{ .. 0'050
Bicarbonates of	{ Soda 0'410 Lime 0'270 Iron and Manganese 0'020	{ .. 0'320 .. 0'198 .. 0'021
Alcaline	{ Bromurets } Traces very per- Iodurets . . } ceptible.	{ Traces very per- ceptible.
Organic Matter united to a little Iron, {	0'020	.. 0'021
Silica, and Alumina	995'786	.. 995'870
Water	1000'000	1000'000

These waters may, therefore, be included in the class of saline, ferruginous, iodo-bromurated, mineral waters, and have great analogy with those of Niederbrun.

On the Administration of Purgatives by the Endermic Method.—In many acute and chronic diseases, intense constipation exists; purgatives given are immediately rejected, and enemas cannot penetrate, whilst manual operations are useless when the fæces are contained in the colon. In these cases, Dr. Salgues proposes sprinkling different purgative powders on the skin, deprived of its epidermis by means of a blister, and quotes several cases, in which evacuations were thus obtained. The conclusions to which he has been led by experience are: that in many cases the practitioner may have recourse to purgatives by the endermic method, to overcome constipation, which may give rise to serious, if not fatal, accidents; that colocynth is more powerful, and ought to be preferred (dose from grs. v. to grs. x.); aloes is not so efficacious (dose from grs. viij. to grs. xv.); that when the purgative does not produce the evacuation of the retained fæces, it may cause irritation, or hæmorrhages of the stomach or intestines, and sometimes even an excitation of the whole system; that, as by this method only drastic purgatives can be employed, they are counter-indicated whenever any latent or ardent phlegmasia exists; that they must be discontinued when their application is not followed by evacuations; that when the purgative does not cause the symptom, against which it is directed, to yield, it acts as a perturbator, and if it has not an advantageous action on the primitive disease, it may produce serious accidents; consequently, the abdominal organs must be attentively examined ere it is prescribed.—(*Revue Medicale de Dijon*.)

Traumatic Tetanus successfully treated by Strong Doses of Tartar Emetic.—Dr. Allut, of Alais, after having employed, in a case of traumatic tetanus, without any beneficial effect, general and local bleedings, opium, blisters, musk, &c., prescribed (the idea was suggested on reading an article in the *Dictionnaire du Medicin Practicien*, published by Dr. Fabre, Editor of the *Gazette des Hopitaux*), as follows:—R. antimon. tartar. grs. viij. infus. flor. arnic. montan. ʒiv., syrup. papaver. ʒj. M. ft. potio. coch. magn. q. q. hora sumend. This draught was continued for a week, during which time the patient took nearly ʒj. of tartar emetic, without having vomited once, or the bowels being acted on more than once per diem.—(*Journal de Chirurgie*.)

Academy of Sciences. Sitting of the 2nd. of Dec. Baron Chs. Dupin in the Chair. At half past three o'clock, the Academy formed itself into *Comité Secret*, to discuss the titles of the different candidates to the place, vacant by the death of Geoffroy St. Hilaire; if report say true, the list presented by the section of Natural History is composed of MM. Duvernoy, Valenciennes, Dujardin, D'Orbigny, Biberon, Quatrefages, Gervéz and Guérin Meneville, *ex æquo*.

Book received. "Final report of the Geology of Massachusetts," in four parts, &c.,—by Edward Hitchcock, L.L.D. Professor of Chemistry and Natural History in Amherst College, Geologist to the state of Massachusetts &c.—"Letter from Mr. Murchison returning thanks for his nomination as corresponding Member to the Institute, and forwarding several copies of his speech on the progress of geography."

On Enterotomia in a case of obliteration of the small intestine: by Dr. Maisonneuve.—In this memoir the author passes in review: 1^o the different species and varieties of obliteration of the small intestines, which are of three kinds, according to their causes:—*a*, those seated in the interior of the intestinal canal, by which its calibre is diminished:—*b*, those situated in the membranes of the intestines causing stricture:—*c*, those which act mechanically on the parietes of the intestine, obliterating it by the pressure it exercises. From thence, three classes may be established, and called: obliteration by obstruction—obliteration by stricture—obliteration by strangulation. 1^o *Obliteration by obstruction* may be produced by foreign bodies, such as a cherry (Denonvilliers), a biliary calculus, a faecal tumour, by invagination:—2^o *Obliteration by Stricture.*—It is congenital or may be caused by a strong constriction of the intestinal tunics, by wounds, contusions, ulcerations, various degenerescences. Is primitive or consecutive;—the former is produced by the adherence of the opposite walls: the obliteration is then complete, but generally it depends on a puckering or swelling, or ulceration of the membranes, occurring in hernia, reduced by taxis, though far oftener in those which need the operation:—the latter where, in strangulated hernia, the parts are reduced, and the passage of the faeces re-established, but after a week or two they stop again, owing to the diminution of the intestine produced by the cicatrix resulting from ulceration:—3^o *Obliteration by Strangulation.* Several cases of strangulation, produced by internal hernias (diaphragmatic, ischiatic, obturator) or by abnormal adhesions, are here quoted. The author next enumerates the symptoms, describes the diagnosis and most efficient mode of treatment, and finally concludes:—1^o that the numerous varieties of obliteration of the small intestines can no longer be considered as beyond the resources of art:—2^o that enterotomia constitutes an efficacious mode of treatment;—3^o that it may be employed in cases which are not complicated by peritonitis;—4^o that this operation ought to be placed beside that for strangulated hernia, and enterotomia of the large intestine.

Physiological Researches Performed on Decapitated Persons: by Dr. Bonnafont, *chirurgien major*, correspondent to the Academy of Medicine. The author, in order to verify an assertion made by Dr. Wilson, as to the possibility of the head hearing after decapitation, performed several experiments which led him to conclude that, if life is not destroyed as soon as the individual is beheaded, it is very difficult if not impossible to ap-

preciate how long it continues; this however cannot be more than 5 or 6 seconds; and that if death does not take place immediately, no sensation can be perceived by the head.

On a Means of Preserving Alimentary substances:—by Drs. Lemasson and Dupré. The authors propose oxide of carbon as a means of purifying and preserving alimentary substances and especially animal matter. This gas (mixed with other gases or essences) is made to act on the substances, contained in hermetically closed vases, and, when the oxide is employed alone, the aliment assumes a rose colour and is perfectly tasteless.

Case of Lusns Naturæ—in a Kabyle, communicated by M. Guyon. A man, ætat 36½, came to Algiers, on account of a severe attack of eynanche tonsillaris, and presented on examination the following peculiarities: head small; forehead low; maxillaris superior projecting forwards beyond the teeth, for about an inch, and like a snout; teeth destroyed by caries, and so placed that their sides were directed forwards and backwards; nose flat; air passed through the nostrils with difficulty, and produced a noise similar to what is heard in a patient affected with coryza; intelligence but little developed. This man did not suffer from his deformity, and left for his home as soon as the affection which had brought him to Algiers was cured.

Case of Epispadias:—by the same; observed on the body of a young soldier who died at Algiers, in September last. Penis about 1½ inch in length; glans on its superior or dorsal surface; from the insertion of the præputium to the meatus urinarius, it offered a longitudinal furrow, which was nothing more than the canal of the urethra deprived of its anterior wall, to the extent of about half an inch; the inferior wall was formed by the union of the corpora cavernosa, which were *infra* instead of *supra*: on each side of the furrow, were two others, parallel, though not quite so deep; the prepuce was very short and could not advance on the glans penis, which was covered by a fringed fold of the mucous membrane; the urethra was abnormally distended, permitting the index finger to penetrate as far as the bladder; testicles of the size of a bean; epididymis hardly perceptible; serotum so small that the testicles touched the pubis. The man was tall, delicate, and of a nervoso-sanguineous temperament.

On the Influence of the different Secretions on the Economy: by Dr. Martini of Wurtemberg. The author considers the secretions as real poisons, which, by their prolonged contact with the various tissues, and their presence in the economy, are capable of producing all the morbid phenomena known under the denomination of inflammations and fevers. He devotes a chapter to each secretion: urine, gastric and intestinal juices, saliva, bile, synovia, milk, tears, bronchial secretion.

Dr. Dubois d'Amiens, in reply to several objections made by Dr. Poiseuille on certain phenomena relative to the capillary circulation, quotes numerous extracts from his *préleçons* published in 1844.

Academy of Medicine; Sitting of the 3rd. December: Dr. Ferrus in the Chair.—After the reading of the proceedings of the last sitting, a rectification made by Dr. Gimelle, stating that he did not say in his wards at the Invalid Hospital, but in the wards, and some remarks from Professor Roux, relative to the fibrous tumour presented by him in the former sitting; the President informed the Academy that, last week, the report had been adjourned, because the number of members present was not sufficient to render the decision valid; consequently, the *Comité Secret* would take place immediately, and the following reports be read; Dr. Martin-Solon on the prize given by the Academy; Dr. Poiseuille, on the Portal prize; and Dr. Ferrus on the Civrieux prize; and that the public sitting would take place on the 17th inst., when the *Secrétaire perpétuel*, Dr. Pariset, would read a discourse on Esquirol, and the annual secretary, Dr. Dubois d'Amiens, one, on the progress of Medicine in France, compared to that of Surgery.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.,
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

A Case of Noma is reported, as occurring in a healthy girl, nine years of age, who was attacked with a nervous fever, which shewed the general characters of typhus, and was accompanied by diarrhœa. Although the more urgent symptoms were soon removed by a proper treatment, the exceedingly rapid emaciation, the livid complexion, and the continuance of the fever, which became more and more typhoid, indicated an unfavourable issue. At the beginning of the third week, after having complained for some days of a disagreeable sensation in the mouth, she, without any pain, extracted four teeth from her right lower jaw. No bad smell was as yet perceived from the mouth. After a few days, a tumour was formed on the inferior lip and the right jaw, accompanied with a discharge, of a putrid odour. The swelling was hard, and of a bright-red appearance. On the sixth day, a livid spot was perceived on the under lip, becoming black, and passing into a gangrenous state, which opened on the following day, and emitted a discharge of black foetid blood. The gangrene now made rapid progress, and could be stopped neither by local applications, nor by the internal use of decoctum chinæ and acidum phosphoricum.—Death ensued, under symptoms of extreme exhaustion. The *post-mortem* examination was, unfortunately, not allowed.—Dr. Hensch, in *Journal für Kinderkrankheiten*.

Extensive Formation of Abscesses in the Cellular Tissue of a Child, 15 months old.—A weak, scrophulous girl, aged 15 months, and badly fed, had suffered for some time with diarrhœa, and a disturbed state of the digestive organs. Small, red, elevated spots soon shewed themselves on the neck, and seemed to cause much pain to the child. They were about the size of beans, fluctuating in the centre, and, when opened with the lancet, discharged about a thimbleful of pure cream-like matter. At the same time, several, hard, elastic tumours appeared on the shoulders, which seemed perfectly moveable; they were encouraged to suppurate by the continued application of poultices, and healed rapidly after having been opened. In this manner, 150 little abscesses were formed in the course of eight weeks, on the forehead, back, nates, thorax, abdomen, &c. The general health improved considerably, during the above time. Simple warm baths, and small doses of cod-liver oil, had an excellent effect, so that, after about six months, the patient could hardly be recognised. The author, therefore, suggests the question, whether the above might not be considered as a circumscribed deposit of tubercular matter in the cellular tissue, though the healthy character of the pus, and the speedy cure, might seem to contradict the presence of a scrophulous diathesis?—Dr. Cordts: *ibidem*.

Intermittens Quotidiana produced through Injury to the Head.—A powerful man, 30 years of age, who had been rendered senseless for three hours, in consequence of a heavy fall, was attacked, when he came to himself, with sickness, pain in the left temporal region, buzzing in the left ear, vertigo, and violent photophobia. Cold fomentations, applied to the wound, induced it to heal rapidly, without suppuration, but the headache, vertigo, and photophobia, remained; mental functions undisturbed. On the third day, a violent shivering took place, lasting from an hour and a half to two hours, then passing into a hot stage, and causing but trifling perspiration. This paroxysm returned every morning, and could not be removed by quinine. About eight days after the accident, symptoms of lobular pneumonia and hepatitis supervened. Two fractures were perceptible at the left side of the head, which were very painful on pressure, as also during mastication. The paroxysms of ague recurred; there was but little sleep, a troublesome kind of cough, and slight jaundice. The treatment consisted in the application of leeches, bleeding from the arm, and calomel. The pains diminished, but the affection of the lungs and the liver seemed to increase. When the patient sat up, he immediately felt an inclination to vomit, accompanied with vertigo.

Mercurial ointment was rubbed into the temporal region, and tartarized antimony (gr. iij., dissolved in 3vj. of water) administered internally. The shivering disappeared; the expectoration became yellow and more abundant; and after the use of infus. arnic., the symptoms of the head affection became less severe, and the fever ceased almost entirely. Subsequent paralytic symptoms shewed themselves in the right leg, but were removed by a proper treatment (Application of unguent. ciner. cum tart. emet. to the neck and temples, and infus. flor. arnicæ, with antimonial wine, administered internally.) This case is interesting, from the distinct connexion manifested between the intermittent fever and the lesion of the head.—*Dr. Schotten, in Casper's Wochenschrift.*

Cure of Singultus, of several years' standing, by Acupuncture.—The patient was a female, 30 years of age, of an irritable temperament (menstruated 17 years ago). She had suffered from singultus, with rare and short intermissions, for a period of seven years, and had undergone different modes of treatment, without any beneficial result. When she placed herself under the care of the author, she appeared rather emaciated, but not particularly affected in her general health. Thus, the disease was considered of nervous origin. The author performed acupuncture at the upper and middle part of the epigastric region, and used for this purpose from four to eight needles, which were left in the part from an hour and a half to three hours. The hiccough became less severe immediately that the needles were introduced, but returned as soon as they were removed. On the needles being re-introduced in greater number, and left there for a longer period, the hiccough was not perceived during the whole time of the operation; it returned afterwards, however, but with less violence. For a month, this treatment was continued; acupuncture was repeated eight times, and the hiccough was at last so completely eradicated, that, for the last three years, the patient has enjoyed complete health, and never perceived any re-appearance of her former complaint.—*Dr. Emiliani, of Faenza, in Schmidt's Jahrbuch.*

New Mode of Treatment for Whitlow.—The suffering part is to be moistened with water, and then touched with nitrate of silver, till the spot begins to be discoloured, when it is to be simply covered with lint and bandaged. If the complaint is of recent date, probably, on the following day, all pain will cease, and, on the third, the cure is effected; if of longer duration, the skin will be more thickened, and, after acting on it with the caustic, it must be removed with the scissors or knife, in order to give free exit to the collected matter underneath. If swelling and redness are still present, the application of the lunar caustic is to be repeated, till the tumour disappears, and the spot becomes free from pain. If whitlow happens on callous parts of the hand, it will be better to remove thin layers of the callous skin with the knife, before the caustic is used. Warm fomentations of linseed are likewise useful in such cases. In paronychia, the nail itself may be touched with the caustic, particularly if it has already separated at the root, so that matter escapes from it. It is thus made unnecessary to cut through or tear the nail. The lunar caustic must be used boldly, and thus the inflammation will always be arrested in a few days; the imposthume is soon resolved (frequently in the course of 24 hours), so that a bandage, rather tightly applied, will then effect the cure in a few days. Erysipelatous inflammations of the finger and hand are speedily cured by the application of caustic to the whole reddened surface.—*Dr. Behrens, in Hanover. Annalen.*

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

CELL-TRANSFORMATIONS.—Mr. Addison says, according to his views of the process of secretion and nutrition, the colourless blood, the pus, and the mucous corpuscles, are essentially living cells, containing within them a plastic element, and living molecules. When the cell bursts, the molecules retain their vitality, but the plastic element

may become subject to chemical laws, either fibrillating, and forming a fibrous tissue, leaving a residual albuminous material to mingle with the blood fluid, or combining with water to constitute a mucus.

DEPURATION OF THE BLOOD.—Dr. Barlow, in a paper, read before the Physical Society of Guy's, states that he conceives the depuration of the blood to be wholly effected by the two-fold agency of air and water. The atmospheric air acting through the medium of the pulmonary circulation, removes, in the form of carbonic acid, the carbon which has been formed in the capillaries of the aortic circulation, and which would act as a poison if returned to the left side of the heart, and again transmitted through the system. The water acts through the medium of the portal circulation, by the capillaries of which it is taken up from the stomach and small intestine, and is employed for the purpose of holding in solution the solid contents of the bile, the urine, and the perspiration, preparatory to their elimination by their respective secreting organs, and without which these solid contents cannot be separated from the body, unless they are brought to the emunctories in a state of solution. These views he supported by references to the symptoms, pathology, and effects of remedies employed in cardiac, hepatic, and renal disease, and also to dropsical effusion in the cavity of the peritoneum, and to the symptoms and state of the blood in Asiatic cholera: Dr. Barlow dwelling particularly on the impossibility of procuring diuresis, when disease of the liver has proceeded so far as materially to obstruct the entrance of water from the small intestine into the portal circulation.

DIAGNOSIS OF FRACTURES.—Mr. Stanley remarks that in a doubtful case of fracture, especially in instances of fracture of the lower end of the tibia and fibula, and also of the head of the tibia, there is one strongly presumptive sign, viz., an acute tenderness of the periosteum, manifested in handling the part, combined with deep-seated œdema, from serous effusion into the cellular tissue around the periosteum. An experienced hand and eye, he says, will readily distinguish these circumstances characteristic of fracture, from the general swelling and tenderness of the soft parts, the result of simple contusion.

CAUSES OF FAILURE IN ADJUSTING THE ENDS OF A BROKEN BONE.—These, according to Mr. Stanley, are as follows: the displaced ends of the bone have become firmly impacted together; or the bone having been broken in two places, and the middle piece displaced, the extension of the limb has not any effect upon it; or a displaced tendon or muscle has got between the ends of the bone; or one end of the bone has been driven into, and become firmly impacted in the substance of an adjacent muscle; or the muscles on one side of the limb having been lacerated, their antagonists acting inordinately on the broken bone, displace it.

STRANGULATED INGUINAL HERNIA.—Dr. Duncan states in the "Northern Journal of Medicine," that he attended a patient who had been affected with inguinal hernia of the right side for many years; it had never occasioned him any inconvenience, and he had no difficulty in reducing it until the period when Dr. Duncan was sent for. On examining the tumour, it was found to be of considerable size and very tense, and tender to the touch; any attempt to reduce it caused great pain. There was but little distension of the abdomen, and very slight tenderness; but the patient complained of twisting pain at the umbilicus, attended with vomiting. Several attempts, which were made to reduce it, failed; and, consequently, the operation of dividing the stricture, outside the sac, was decided on. An incision of about three inches in length having been made over the neck of the tumour, and the tendon of the external oblique exposed, the external ring was found to be the seat of the stricture. The constriction was exceedingly tight, and the edges of the ring were completely concealed by the projection which the tumour formed around them. The constricting parts were divided with the point of a bistoury; the only difficulty which was experienced, arising from the edge of the ring being concealed by the bulging of the tumour around it. This was overcome by drawing down the tumour, and com-

pressing it with the finger, immediately below the point where it was wished to divide the stricture. After four or five lines of the tendon had been divided, the constriction was relieved, and the intestine returned without difficulty. The edges of the wound were then brought together by a few points of interrupted suture, and a compress and bandage applied. Within an hour after the operation, the bowels were moved, and all the symptoms entirely disappeared. Every thing went on well, the greater part of the wound healed by the first intention, and the patient recovered.

WOUND OF THE CHEST FROM A GUN-SHOT BALL, AFTERWARDS EVACUATED BY STOOL.—A case is reported by Dr. Coca, in the "Repertorio de la Sociedad de Emulacion de Barcelona," of a lad, aged 16, who had received a shot from a height; the ball penetrated the chest. When brought to the hospital, he presented the following symptoms:—On the lateral portion of the left side of the thorax, opposite the middle of the sixth rib, there was a wound, the extent and form of which indicated that it had been produced by a ball, as the patient himself declared. No wound of exit having been found, it was suspected that the ball remained in the wound, and, on introducing the finger, Dr. Coca was convinced that it must have penetrated the thorax. The sixth rib was fractured above the middle. The edges of the wound were brought close together by means of adhesive plaster and a bandage, in order to prevent the entrance of air. Fever, bloody sputa, difficulty of respiration, and pain of chest followed. A bleeding to the extent of 15 ounces was prescribed, together with demulcents, absolute rest, silence, and absolute diet. Eight additional bleedings, to the extent of a pound each, were practised on the following days; but, notwithstanding this energetic treatment, the respiration became more and more difficult, and the patient sank on the twelfth day. On the sixth, he passed the ball by stool, without ever having exhibited the slightest symptom of irritation in any portion of the alimentary canal, nor any lesion of the diaphragm, or effusion into either the abdominal or thoracic cavity. On dissection, the ball was traced from its entrance to its exit. The interior surface of the fractured rib presented a number of spiculæ, which must have constantly irritated the corresponding portion of lung. A fragment of the internal lamina, about the length of an inch, had penetrated the base of the lung. The whole of the left lung adhered to the costal pleura, and was infiltrated with pus; the right lung presented the same appearances, but in a less degree. The fragment of the rib was so deeply imbedded in the lung, that the slightest pressure caused it to project into the internal surface of the pericardium. There were adhesions between the diaphragm and stomach. The wound traversed the base of the lung from above downwards and penetrated the stomach. The opening into the stomach was perfectly round, similar to that in the lung. The course of the wound explains the expulsion of the ball by stool.

DAMPNESS FROM STORING SALT.

(To the Editor of the 'Medical Times'.)

SIR,—I have recently perceived, in your excellent journal, an enquiry from a correspondent as to the means of preventing the dampness consequent on storing salt, in contact with walls and floors. Now, I think the following plan will be found successful. Chloride of sodium is a *deliquescent* salt; if therefore you can convert it into an *efflorescent* salt, the object will be attained. To do this, wash the parts, containing the chloride of sodium, with a strong, hot, solution of alum, which will effect a double decomposition, and sulphates of soda and potash, and chloride of potassium, will result, which are either efflorescent salts (sulphate of soda is so), or at all events not deliquescent in any degree.

Since the above idea occurred to me, I have seen it proposed in the "Mechanics' Magazine," so that it may be regarded as a certain remedy.

I am, Sir,

Your obedient servant,

JOHN MATTHEWS.

7, Spencer-street, Goswell-road, Dec. 3rd. 1844.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

MEDICAL TIMES ALMANACK,

The Almanack for 1845, will be ready in the course of the present month. Gentlemen wishing to give advertisements the advantage of its large circulation, should remit their orders immediately.

THE MEDICAL TIMES.

SATURDAY, DEC. 14, 1844.

Est et ab hoste doceri.

THE Meeting at the Hanover Square Rooms did not altogether equal our expectations. The attendance was not bad: the speeches were better, much better, than indifferent: the moving agents were certainly anything but disresponsible or unimportant, — but still there was something wanting. "Cheers" came few, far between, and were angelically unsubstantial: resolutions were carried by the cold support of about a dozen uplifted hands: and if the whole proceedings were neither stale nor unprofitable, it must at least be admitted they went very *flatly* off. How was this? How happened it that, in a vividly-excited Profession, at a most critical juncture, with momentous propositions in view, (that nothing but a fury of enthusiasm could realize) we had this show of apathy and apparent indifference? The answer is important, and suggests a useful lesson to the members of the Committee. Neither speakers nor resolutions carried their audience with them. Both were premature. Men's judgments were less in advance than the Committee's doings. Old Practitioners and respectable, they felt themselves injured, but not having brooded on the matter quite in the spirit, or with the intensity of the Committee, they were not to be committed at a moment's warning to secede forthwith from their old orthodox establishments; or to declare themselves irrevocably against every effort of turning the Home Secretary's attempt at Medical Legislation into an unequivocal boon to the Profession.

We say this, thus frankly, for we sincerely wish the Committee-men well. They are sensible, pure-minded, active gentlemen, who seek the redress of public wrong, plainly, industriously, and, as far as may be, prudently,—but we think that, on this occasion, they lapsed into a grievous impolicy. Ejecting and rejecting very properly from their body all equivocal companionship, and disdaining all leadership as at once an insult to their understandings and the sure sacrifice of their cause, they have a very different rôle to play, from the speculating Associations that have been founded or *managed*, to raise low names or fill empty purses. They cannot live by low trickeries and lying representations, but must stand or fall as they happen to turn out a reflection of a general opinion. They *do* not, or ought not, to aspire to *create*, or even precede, public opinion: that (the gift of few men in an age) is beyond their power, if not their province. They must aim, as the utmost of their hopes, to *reflect*, to mirror, to express, to direct the general sentiment. This is their *duty*, and their only policy. Their mistake, on Saturday evening, was, that they forgot this essence of their success,—that their

policy was like one born out of due season,—that they represented their own, not the aggregate opinion. They felt, thought, spoke, and acted, but not for the Meeting; and hence their best speeches reached the ear but as the sounding of brass, or the tinkling of a cymbal.

The gentlemen who conducted the meeting have not, we think, well read the signs of the times, if they have not learned that the wish is grown all but universal, to make the draft of the new law the groundwork of a moderate, or, if possible, a large, legislative improvement. There is now scarcely a provincial medical man who does not see that while the evils of the Bill are negative, its advantages, such as they are, are certainly positive and substantial. What then is the instantaneous decision of a man on whom knowledge of the world enforces practical wisdom? Conscious how little we can have that is perfect, and how dangerous it is to let slip one good, to take the chance of catching two, he will trust nothing to the fluctuations of the future that is a positive utility in the present; least of all, a subject so perilous and repulsive to Parliamentary men as Medical Reform. What is there in the last quarter of a century of our history, we ask, that foreshadows to the Profession any large achievements we can do some *future* day, in our busy, faction-fighting British Parliament, supposing we only beat the Government and the House of Commons in their present attempt? Does the retrospect pledge to us such enormous future fruits as to tempt us to the heroic self-denial implied in rejecting the first Parliamentary advantages offered us? Who are they that say so? Are they such Aristides that we may blindly abandon to them our common sense, assured that their recommendations, however extraordinary, conceal after all a wise and virtuous policy? We ask the question seriously.

Is it for the advice of such a person as Mr. Wakley (we trust the condescension of a reference to him will be pardoned us) that we shall move out of the well-marked track of an ordinary prudence? Forgetting every one of our adverse opinions or judgments (and was ever man so unfortunate in the universal judgment on his character?) and coming to facts no partisan disputes,—is it not an established truth that, well or ill-founded, the notion universally prevails that the Member for Finsbury—to speak in the mildest terms—never supported an opinion that did not, to his fancy, closely coincide with his personal interests? After for many years writing furiously every week *about* Medical Reform, (that was *his* profit,) he entered the House, and remained there for as many years without doing one thing *for* Medical Reform: *that* was our loss. As outside he gave it the vulgar taint of his advocacy, within he gave it the telling hostility of his silence. The Radical Parliament under Lord Grey—the Whig Parliament under Lord Melbourne—the Conservative Parliament under Sir Robert Peel—all were harassed or amused by his speeches; but in them all (made, too, on every conceivable topic, *save one*), there was no single proposal of Medical Reform. He opposed Warburton: he opposed Hawes: he opposed Graham: he would propose nothing, and have nothing proposed! Now, to a moderate share of impudence, in a public man, we have no objection—it is the Parliamentary qualification for a member for a London district—but is it not *too* bad for the Finsbury representative to think of trying us, simple people as we are, with *so much* of it? To dream of enacting *de novo* for us, at this late day, his old *very amusing* pranks?

To protract his daring trickery of us so indefinitely? To hope to make his customary profitable joke of us in this rather too palpable manner? Having so far befooled us as to do nothing himself, now so far to befool us as to make us let nothing be done? Cunning: very! But there is such a thing, with very cunning people, too, as reckoning without their host; and the simplicity for which we get such generous credit, is, after all, scarcer than Mr. Wakley imagines.

Beyond this individual—(our right worthy medical Autolycus)—the Bill's complete opposition rests wholly with the *Times* and the Apothecaries' Society. Remembering the *coup de grace* given to the latter body, in its trading supremacy over the Medical Practitioner, and the known personal hostility of the proprietor of the *Times* to Sir James Graham, we must be excused for thinking that their opinions have not the authority we would willingly extend to them under less equivocal circumstances, and we maintain stoutly that whenever the Bill has received a deliberate investigation, free of prejudice or passion, the conclusion has always been that the wisest policy is to concentrate the greatest possible influence, not in rejecting, but in altering and improving the Bill. The opportunity should not be lost: we have only to struggle well, to get the law made most satisfactory to the whole Profession; and, if we do not err, the immense development which a course of moderate measures must infallibly give the new Association, will offer a vast engine of doing every thing with the Bill which the warmest friend to medical improvements can desire. Our prayer, and we may add our hope, is, that these moderate measures will not be lost sight of.

"How best the fickle fabric to support
Of mortal man; in healthful body how
A healthful mind the longest to maintain."

WE were treating, a fortnight ago, of the influence of an impure atmosphere upon the physical condition of mankind. We mentioned some striking facts in support of our argument, and endeavoured to give them a general bearing: we will now consider the subject a little more in detail. We stated that (*ceteris paribus*) people are healthy in proportion to the amount of pure air which they have to breathe. And the converse of this is equally true. If an animal be confined in an atmosphere of nitrogen gas, it quickly dies for want of oxygen. The effect is negative on the part of the nitrogen, and the animal perishes by its own poison. The blood, unærated, carries its noxious carbon to the brain, and in a moment deranges that beautifully balanced relation of function between the sensorium and the heart and lungs. Either fatal apoplexy suddenly supervenes, or, the paralysed capillaries of the lungs refusing to transmit the blood, it accumulates in the right cavities of the heart, until they are completely loaded, and, then, the machinery of life stands still. The same effects follow, if an animal be placed in an atmosphere of carbonic acid gas; but then it is poisoned as well by this gas, as by the unoxysed carbon of its own blood. Both of these causes are at work in an atmosphere rendered impure by respiration and combustion. These processes consist in removing oxygen, and supplying its place by carbonic acid,—and mischief is done to those who respire an atmosphere so injured, as well from a want of a requisite supply of oxygen, as from the presence of a certain gas, which, when breathed, is deleterious or destructive to animal life.

That respiration and combustion produce these effects, and that they may be deadly, is proved in the many disastrous consequences which have resulted from ill-ventilation. In the Black Hole of Calcutta, one hundred and forty-six human beings were confined within a space of about five thousand cubic feet, with nothing but a small grating for the admission of air. Of that number, only twenty-three survived the night. The annals of history, and of crime, teem with instances of children being suffocated under their bed-clothes. Death, under such circumstances, arises chiefly from an insufficiency of oxygen gas. A common process of self-destruction is, for the individual, intending it, to secure himself in a close room, and burn coke or charcoal in a chafing-dish. The poison, in this case, is the carbonic acid generated by the combustion.

To all animals, then, the respiration of carbonic acid is destructive in the direct ratio of the quantity respired, and to all animals a certain amount of oxygen is necessary. Some require more than others. Thus, if a bird be confined in a close atmosphere for a sufficient length of time, it will die from a vitiation of the air; in this air, however, a dormouse will live for another period, and then it perishes; a frog will next respire it for a time, after which, it will still support the existence of a snail. Man, from his physical and intellectual condition, requires more oxygen, in proportion to the area of his lungs, than any other animal. He will consume, if it be supplied to him in fitting proportion, from thirty to thirty-six ounces daily. If he consume less than this quantity, that is, if it be withheld from him, he will suffer in a degree proportioned to the deprivation. The necessity for oxygen, the *besoin de respirer*, varies according to circumstances. As a rule, the more healthy and energetic the individual, the greater is his need of oxygen, and the more is he injured by want of it. A man in "first-rate condition" from training for prize-fighting or for running, will consume much more oxygen than another man in less vigorous and florid health. And if he be removed from the pure air in which he has been trained, to an atmosphere less salubrious, he quickly loses his activity and energy. They do not subside, however, sufficiently sudden to correspond with the imperfect oxygenation in his lungs; and that portion of food which was previously consumed in these organs, and converted into carbonic acid and water, is now deposited in the system as fat. Hence it is, that men often become corpulent by exchanging out-door occupation in the country, for sedentary employment in the town. In proportion as the circulation is quickened, from whatever cause, in that proportion does a supply of oxygen become requisite. In ardent fevers, for instance, the anxious hasty breathing is a necessary consequence of the increased frequency of the pulse. If the air the patient breathes be impure, and the room ill-ventilated, the malady rages with greater violence, and perhaps communicates itself by infection. Hence, the advantage of roomy apartments and fresh air in the treatment of fevers. For this reason, also, fevers are more rare in the country, and are less fatal there, than in towns—in the higher, cleaner, and less populated districts, than in those that are low, ill-ventilated, and dirty—in large and commodious hospitals, than in small ones—on land than on ship-board, &c. Formerly, before the necessity for ventilation was sufficiently understood, and its security provided for, fever was a constant attendant upon crowded hospitals, goals, and barracks, whilst transport ships seldom

voyaged without numbers of their crews being sacrificed by this disease. From which circumstance, the terms "hospital fever," "goal fever," "camp fever," and "ship fever," are amongst the most familiar phrases of medicine.

If the circulation be quickened from simple exercise, there is a proportionate increase of necessity for oxygen. If an animal be hard run, and then plunge over-head into water, he is pretty sure to be suffocated instantly. The pearl divers carefully inflate their lungs before descending under water, and make as little exertion as possible whilst remaining there. Violent and continued exercise, as in running, exhausts people, not by the expenditure of nervous energy, but from an inability of the lungs to counteract, by their function, the increased action of the heart. The faster the blood circulates, the greater necessity there is for oxygenation in the lungs, and, therefore, for the chest to expand and contract. But it is readily possible for sustained muscular effort to augment the heart's action to such an extent, that the lungs can neither transmit nor bear the immense torrent and volume of blood. At the moment that this occurs, a sense of suffocation comes on, which generally puts a stop to further exertion. In some cases, however, it is persisted in, and the consequences are: an increased engorgement of the vessels of the lungs, accumulation of blood on the right side of the heart, congestion of the vessels of the brain; the eye becomes prominent and staring, the face livid and bloated, and at last, and in an instant, the individual drops down dead. He is said to have burst his heart. This is a rare occurrence, but it has happened. A gentleman rode a horse a hundred miles in twelve hours; as he reached his home, he leapt the animal over a five-barred gate, and the poor creature died in a moment. The right auricle of the heart was found torn across. Instances of rupture of the heart, from protracted and violent running, have been met with in the human subject, but they are more common in horses, from the fact that these animals are oftener subjected to trials of endurance; and, being capable of breathing only through their nostrils, are liable to have these obstructed either by tumefaction of their lining membrane, or by the accumulation of mucus in their interior. But, to a certain extent, this casualty is guarded against by the nostrils of horses, that are destined for fleetness, having a larger calibre than the nostrils of those that are formed for slow draught.

During the process of digestion, or rather of sanguification, there is a great increase of necessity for oxygen. Not only is the circulation quickened, but the blood has an extra amount of carbonaceous material to throw off. Under these circumstances, a man, in a given space of time, will appropriate nearly two thirds more oxygen than he will, after the completion of the process of sanguification. The quantity of oxygen required, varies with the kind and quality of the food. More is needed after a meal of animal matters than after one of vegetables—tainted meat requires more than that which is fresh-killed—peas, potatoes, and cabbage, weight for weight, want more than bread. There is, to a certain extent, a relation between the digestibility of food, and the amount of oxygen necessary to its complete sanguification. If this relation were absolute and complete, it would be the easiest thing possible to determine the ratio of digestibility of alimentary matters. A healthy man, fed with them singly, would correctly indicate, by the amount of oxygen he consumed in a given space of time, their

relative facilities of conversion into blood. Unfortunately, however, the rule, though to a certain extent constant, is not altogether true. But it is sufficiently so, to indicate not only the desirableness, but the necessity, of free and pure air during the time of digestion.

Alcoholic liquids, whether in the form of wine, malt liquor, or spirits, increase the necessity for oxygen in a remarkable degree. If it be supplied in due quantity, and the individual be healthy, the spirit is for the most part consumed in the lungs, and the result is an augmentation of animal heat. This passes off with a rapidity proportioned to its facility of generation, and of course requires, for its renewal, a repetition of the cause—that is, more spirit must be taken. The consumption of it, in the process of respiration, is sometimes so complete, that large quantities may be taken without intoxication following. People who are travelling, especially in clear frosty weather, when the atmosphere is of the greatest specific gravity, and more oxygen is taken into the lungs at a single inspiration than in hot or hazy weather, will drink as much spirit with impunity as would intoxicate them five or six times over, were they sitting in a confined room. It is not an uncommon thing for a man, whose maximum of whiskey toddy is a couple of glasses, to find, after having ascended Ben Lomond, that he has unknowingly swallowed a whole bottle of undiluted Glenlivet. The Highlanders are proverbial for the quantity of whiskey they drink, and for the little injury it does them. Many of them habitually drink a wine-glass of raw spirit directly upon rising in a morning. To them it is a "cup that cheers but not inebriates." They are not intoxicated by it for the moment, nor do they suffer in any marked degree from the usual remote consequences of dram drinking. They are not like the tavern frequenter and spirit-tipler of the crowded city—jaundiced, consumptive, impotent, imbecile, or paralysed, dying before his time. They are hale, cheerful, and vigorous, despite their practices. And wherefore this marvellous difference? Fresh air and free exercise are the foundation of it all. The practice of spirit-drinking, under any circumstances than those of necessity, is both unhealthy and unnatural. But the poison is disarmed of half its virulence when taken under the mitigating circumstances that we have mentioned. Under opposite circumstances, there is no limit to its mischief. The system cannot throw it off. It wanders with the corrupted blood; taints and taints every organ.

And then what woes remain!—Life rolls apace,
And that incurable disease, old age,
In youthful bodies more severely felt,—
More sternly active,—shakes their blasted prime;
Except kind Nature, by some hasty blow,
Prevent the lingering fates.

THE ASSOCIATION OF GENERAL PRACTITIONERS FOR ENGLAND AND WALES.

A VERY numerous and highly respectable meeting of General Practitioners, principally resident in the Borough of Marylebone and City of Westminster, was held in the great concert room at the Hanover Square Rooms on Saturday evening, the 7th inst., in pursuance of a requisition published in the Medical Journals and daily Papers, in order to form an Association of General Practitioners for their own protection, and to obtain a Charter of Incorporation by Act of Parliament. The meeting was summoned for 7 p.m., at which time about one hundred gentlemen were assembled; but before the chair was taken, there were between three and four hundred present, including about eighty gentlemen on the platform. Among them we observed, Mr. Pennington the chairman, Mr. Nussey, Mr. Squibb, Mr. Propert, Mr. Tegart,

Mr. Freeman, Mr. Fincham, Mr. Pilcher, Mr. Fuller, Mr. Hammerton, Mr. Moore, Mr. Dodd, Mr. Browne, Mr. Beaman, Mr. Clayton, Mr. Bryant, Mr. Stocker, Mr. Ancell, Mr. Bird, Mr. Morrah, Mr. Daniel of Ramsgate, Mr. Peregrine, Mr. Lucas, Mr. Lavies, Mr. Maelure, Mr. Hodding, Mr. Craddock, Mr. Grant, Mr. Davies, Mr. Vickers, Mr. Phillips, and Mr. Norton, all gentlemen of extensive practice, and of the highest respectability.

Mr. Pennington having taken the chair amidst long-continued cheering,

Mr. Ancell, as one of the honorary secretaries, after having read the requisition calling the meeting, and the minutes of the preliminary meetings, stated that several communications had been received, since the meeting had been advertised, with reference to its objects, some of them having direct reference to general principles, others relating more to details. Among the latter were several from a very respectable general practitioner, Mr. Houlton, which, however, he would not read at present, as the subject on which they treated, the details of the Association, would come under consideration hereafter. Mr. Bryant of Finchley, had also written to the Association, highly approving of the manifesto issued by the Marylebone committee, and enclosing a subscription of £2 2s., and Mr. Ancell took that opportunity of informing the meeting, that the Marylebone Association would merge into the one which was about to be formed. A letter from Dr. Webster of Dulwich, had also been received, equally approving of the objects of the Association. Mr. Ancell next read a letter, signed by seventeen practitioners at Southampton, approving in every respect, of the step about to be taken by the Association, and offering their services, as a sub-committee, for Hampshire; and he concluded by stating, that the other letters which had been received, related chiefly to matters of detail.

Mr. Pennington observed, that as some misconception had taken place with respect to the remarks he had made on previous occasions, he had reduced to writing the observations he intended making, and would read them to the meeting:—

"Gentlemen,—We are here this evening to take into consideration a most momentous question, which arises out of a bill that is about to be brought into Parliament next session; it is a bill in which there are good points, and out of which a bill, connected with that of 1815, may be made useful to all: but its present meaning, as now presented to us, must prove fatal to our interests and that of the public. We wish now to organize an association of the general practitioners of medicine and surgery, and shall be happy to have the assistance of all the legally qualified practitioners of medicine and surgery.—In the present aspect of the medical profession, it appears to me to be a matter of the utmost necessity, that the vast and important body of the profession to which I have been allied sixty years, and in whose welfare I am most deeply interested, should take up a position by which they may regulate their own concerns; it becomes more necessary that they should be thus prepared, as the state of the profession is now under the consideration of the government, and many great and important changes in the existing law are under serious contemplation.—Changes, gentlemen, if carried into effect, which will most completely annihilate the entire body of general practitioners.—It is important, gentlemen, that we should do our utmost—that we should prevent such a bill coming into action, and that we should form ourselves into an association, the individual members of which shall consist of men legally qualified, and actually practising the profession in its two important subdivisions—medicine and surgery. The first important duty the association, when formed, may feel itself called on to execute, will be to oppose the introduction of this bill, or of any other bill that places the education, or examination of the general practitioner under the controul of a court of examiners out of their own body; from the peculiar connection between the community at large and the general practitioner, this duty becomes imperative; apart from professional consideration, the general practitioner must retain the undoubted privilege of educating himself to as high a stand-

ard of knowledge as he is capable of attaining.—You will, doubtless, hear this evening, a plan discussed for the general protection of our profession; but I trust, and believe, every plan proposed will advocate the necessity of a separate and independent organization—a charter of incorporation for the general practitioner, with such a modification of the Apothecaries' Act of 1815, as shall meet with the cordial concurrence and co-operation of that worshipful society.—I have now, gentlemen, only to express my hope, that the grave and important business we are about to engage in, will be discussed with the dignity and decorum of scientific men."

Mr. Morrah moved the first resolution—

"That this meeting is decidedly of opinion, that prior to the passing of any bill for the regulation of the practice of medicine and surgery, it is of the utmost importance to the interests of the public that the general practitioners of medicine, surgery, and midwifery should be legally recognised, and placed in an independent position; and that the executive government be respectfully and earnestly requested to suspend the further consideration of the bill laid before Parliament at the close of the last session, until this object has been attained."

He recommended the general practitioners to unite together, and observed, that if they formed one body, or association, they would prove too powerful and numerous to be neglected by government. He alluded to the great importance of the general practitioner in the rural districts, both to the gentry, and the middle classes, as well as to the poor, and considered that the bill, as introduced by Sir James Graham, if it should pass and become law, would utterly destroy them as a body, and reduce them to be mere vendors of drugs. Sir James Graham, in his opinion, deserved the thanks of the profession, as he had succeeded in rousing the spirit of practitioners, and in calling them together, which nothing else apparently could have done. They now saw their enemy face to face, and must fight him manfully, or else they must go to the wall.

Mr. Propert, in seconding the resolution, assured the meeting that he was heart and soul with them in defence of their position. They must all come forward manfully and fairly to assert their rights, which they must recollect concerned not themselves only, but posterity, for ages to come, who would have reason to bless them for their present exertions, if they succeeded. They would fail, however, unless they were unanimous and determined. They must struggle for their rights, for the sake even of the public, who apply to them for aid, as the most useful members of the profession. Every measure that had hitherto been introduced had failed, because the legislature was at a loss to know what to do with them; they were a body without a head. They knew how to proceed with the College of Physicians;—they also knew pretty well how to manage with the College of Surgeons. (A laugh.) But they were totally unable to make any arrangement respecting the general practitioners. They must, then, assert their own position in the profession, and take steps to obtain a charter of incorporation, so that they may become a recognised body.

The resolution was then put, and carried unanimously.

Mr. Nussey moved the second resolution, in doing which he thought it necessary to apologise for his feeble abilities. The observations he would make would be very brief, for the resolution spoke for itself, and was sure to be unanimously adopted. It recommended the immediate formation of an association of general practitioners in medicine, surgery, and midwifery. There were numerous examples around them of the utility of such associations, and abundant evidence as to the mode of proceeding, and it was a matter of wonder that they (the general practitioners) should have remained so long without an association of the character to which he had alluded, to afford them that protection which they could not obtain from the existing corporate professional institutions. The time had, however, arrived when it had become necessary for them to be up and doing. They must have an institution in which they should have the government and direction of their own affairs, and the power of advancing the interests of every one belonging to the association. The

profession might be divided into three estates; from the first they had evidently but little to expect, and as for the second, they have recently conducted themselves towards their own members in such a way, as to give rise to a well grounded opinion, that they had offered them a great indignity, and a marked insult (Great and continued cheering). What then had they to hope from two such bodies? Could they hope for their consideration and support? Many of them were justly regarded as inimical to the interests of the general practitioner. The latter had met from the two colleges with what might be called "public repudiation" (Much applause). The third estate, the body most to be relied upon, and which had been called upon for co-operation and association with them (cheers)—that body, he had thought, would have gladly come forward to support them in the position they had assumed; and he (Mr. Nussey) was at a loss to understand their reasons for not doing so.* They had been very reserved, and had acted with great shyness, and had not yet done what they ought to have done long since, that is, placed themselves in the very first rank with the general practitioner. He only hoped that the society would not meet with the fate of the old maid, who guarded her charms and her virtue so long, that when she surrendered them they were not worth having (Laughter.) He trusted they would take the right course, and would see fit to join the ranks of the practitioners throughout the country, and he hoped he should soon be able to furnish them with more decisive information on that point. As a member of that body—as a member and a licentiate—he thought himself entitled to claim for it some applause for what they had already done in advancing the profession (hear, hear): they had raised the general practitioner to a position which he never before had occupied; and, as they had been the means of placing him in the position he held at present, he trusted that they would not now desert them. In conclusion, he implored the gentlemen present to give the subject due consideration, and to discuss it without violence in manner or in language, but rather with the bearing that men should have who have grievances to be redressed, and who know that they are asking only for that which is just, and necessary for their interests. Their cause was a holy and a just cause; and if they were true to themselves, they might feel assured of success. Mr. Nussey terminated by moving the second resolution, to the following effect:—

"That, in furtherance of the object of the former resolution, it is the opinion of this meeting that an association should be immediately formed, under the title of 'The Association of General Practitioners of Medicine, Surgery, and Midwifery.'"

Mr. Squibb seconded the resolution, and observed that he concurred fully in the excellent remarks which had been made by Mr. Nussey. He regarded it as a subject worthy of the utmost attention, and he thought it very important that there should be a speedy, efficient, and well-organised association of the general practitioners, for the purpose of carrying that resolution into effect.

The resolution was then put from the chair, and carried unanimously.

Mr. Fuller moved the third resolution, which was to the following effect:—

"That this association use its best efforts to obtain a complete organization of the medical practitioners, for the purpose of petitioning for a charter of incorporation, to be sanctioned by act of Parliament, and for taking such other steps as circumstances may, from time to time, render necessary for the protection of their interests."

He thought that the resolution which he had the honour to bring forward, scarcely needed any observations from him to recommend its adoption, it was so evidently essentially necessary to the best interests of the body of medical men whose cause they were met to advocate. When the College of Physicians obtained their charter of incorporation, and their Act of Parliament, in the

* We understand that the Society of Apothecaries have since come to the determination to co-operate with the Association of General Practitioners to the fullest extent, in obtaining the charter of incorporation.

reign of Henry the Eighth, the Surgeons were merely their menials, to perform the operations which might be required, &c.; but after a time they relieved themselves from their position, and were formed into a corporate college. The example thus set them they should follow, and should seek to have a corporation of their own, especially as it would be for the general good of mankind. With regard to the operation of the bill, he believed that Sir James Graham was sincere in his desire to benefit mankind; but he had unfortunately consulted persons who were not aware of the position and requirements of the general practitioner, and he had thus been led to introduce a bill which, if it became the law of the land, would throw back the practice of medicine two or three centuries. He was of opinion that if the true state of affairs were firmly and respectfully brought before the notice of the Government, and they were made sensible of their error by proper reasoning, they (the general practitioners) would be spared the trouble of petitioning against it, as the bill would not be re-introduced. He thought that there was not any body so competent and able, and consequently so well calculated, to superintend the education of its own members, as the general practitioners; and the Colleges of Physicians and Surgeons, he was of opinion, would be placed in a false position were they called upon to do so, without the aid and co-operation of some of their own order. To obtain what they required, however, they must not be content with assembling in a few hundreds; it must not be for the practitioners of one district to come forward alone, nor of one county, but it must be a general movement of the practitioners throughout the country, and then they would succeed in obtaining what they demanded.

Mr. Tegart seconded the resolution, which he considered to be proper and just, and one that offered the only security that could be given to practitioners, by securing them a control over their own interests and institution. In all the regulations of the other medical corporations, there would be found nothing but local interests—they seemed to be bounded by "ten miles round London." The interests of the general practitioners in the country were consequently compromised. One great object they had in view, was to place the general practitioner in a position higher than he at present held; to make him an integral part of a corporate body, and not a mere dependant on an institution which he is at present forced, as it were, to call his Alma Mater. The secret of their success would be, he believed, unanimity. They must come forward with energy and decision, and must subscribe to meet the necessary expenses. It was not an unimportant feature in their present position, to see such men as their president, Mr. Tupper, Mr. Nussey, and other gentlemen of extensive practice come forward, and give their time and assistance in furtherance of their objects, and to promote the interests of that profession of which they had been so long honourable members. Such support held out a promise of ultimate and not far-distant success. They had but to be unanimous to ensure success.

Mr. Webb was desirous of directing the attention of the meeting, not merely to their own position, but to that of the medical students, who, he thought, would be seriously injured if this bill were to become law, and he trusted that they also would come forward to oppose it; for they were certainly those who were most interested to prevent its being enacted, more so even than those who were at present in practice. Sir James Graham had looked through the wrong end of the telescope, when he had this bill drawn up; he thought the general practitioner a pigmy, but there was every reason to believe that he would find he had aroused a sleeping giant. He (Mr. Webb) had been one of the first to offer the bill his opposition, and he felt sure that if the practitioners were united, they would succeed in casting it out. If, however, they did not exert themselves to the utmost to influence the Members of the Parliament, there would not be given much support to their views on the subject.

The resolution was carried unanimously.

Mr. Clayton read the fourth resolution, and

briefly alluded to the services that had been rendered by the Society to the profession generally.

"That the Society of Apothecaries be solicited to co-operate with this Association in furtherance of the objects of the preceding resolution."

Mr. Grant seconded the resolution, and spoke strongly in favour of the projected Association of General Practitioners, independent of the Colleges of Physicians and Surgeons; and further alluded to the difficulties which attended the procuring the Act of 1815, as an additional reason for their exertions on the present occasion.

Mr. Asbury described the lamentable state of this branch of the profession, before the Act of 1815 was obtained, illustrating his remarks by anecdotes; and contended that if the bill were to pass as it is at present, the profession would in a short time be reduced to the same, or a worse, state. The Act of 1815 was not obtained without exceeding difficulty, occasioned principally by the opposition offered by the two Colleges of Physicians and Surgeons.

The resolution was unanimously adopted.

Mr. Freeman proposed the fifth resolution:—

"That a provisional committee of thirty-one members, with power to add to its number, and of which not less than seven shall form a quorum, be elected by this meeting to carry the objects of the foregoing resolution into effect, also, to frame laws for the constitution and government of the Association, to be submitted to a general meeting for its approval."

Mr. Moore seconded the resolution, and observed that he did not see any difficulty to be experienced in attaining their object. The very fact that Sir James Graham had introduced the Bill at the end of the session, and had thus given them a very long time for the full consideration of all its details, shewed that he was honest in his intentions towards the profession; and he hoped that all others concerned with it, would prove equally honest. He thought that if they were united, they would have very little difficulty in obtaining their charter, or in having the examiners of the general practitioners chosen from among their own body.

Mr. Cooper expressed himself (from the body of the room) as willing to carry out the objects of the meeting, and strongly recommended unanimity of purpose and design. The association, instead of being restricted to the practitioners of Marylebone and Westminster, should include all the associations throughout the kingdoms. Mr. Cooper then read an extract from a journal published in Dublin, in which the editor, speaking of English general practitioners, characterized them in the following language:—"The articles in the *Lancet*, both original and communicated, afford a melancholy proof of the brutal and degraded condition of the lower order of medical tradesmen in England. We are now quite satisfied that the safety of the community demands that such fellows should be placed under efficient control and surveillance, as the temper and spirit they display fully prove that they are an ignorant, uneducated, ungovernable race, utterly unfit to be entrusted with the duty of soberly and honestly treating disease, or to have the lives of people placed at their mercy."*

Mr. Pennington observed that, notwithstanding the tenor of the paragraph which Mr. Cooper had just read, they would be very happy to co-operate with the practitioners in Scotland and Ireland (Cheers).

Mr. Isaac B. Brown moved the next resolution.

"That the provisional committee be empowered to form a union with this association of the different societies of general practitioners, in town and country, instituted for similar objects."

He observed that the effect of this resolution was to enable the committee to form an union with all the other associations throughout the country, and thus, in point of fact, to carry out the proposal of the last speaker. He deemed it most important to obtain the hearty co-operation of the country practitioners in furtherance of their objects, for in every county were to be found men of the highest

* It is much, indeed, to be regretted, that the very low and vulgar tone assumed by an English Medical Journal should lead to so grotesquely injurious a notion of the character of the General Practitioner of this country.—Ed.

respectability acting as general practitioners. They perform the duties of surgeons to the hospitals, which they certainly execute as efficiently as the London hospital surgeons. The country practitioner is in every respect a most efficient member of the profession. He is in constant attendance, not only on the middling classes and the poor, but also on the nobility and gentry, who, when resident in the country, were not able to send for physicians, for many of the country districts could not support one. The poor in the provinces receive the same attention as the highest noble, and it is the skill of the general practitioner which is called into requisition for their service, and his purse that is opened for their relief (cheers). It was these poor who more especially required all their exertions to obtain the best practical education for the general practitioner, for they would be the first to suffer from the mere pretender or half-educated man. In their name then, they were called upon to make every peaceful, calm, and energetic effort. It is most desirable that these gentlemen should use their influence with the nobility and gentry in the country, when freed from the turmoil and worry of parliamentary business, and impress them with a due sense of the importance of the general practitioner, and also of the bearing the bill now before the country would have to their injury. Having acquired wisdom from experience, it will be requisite to guard against any members of the other estates in medicine being joined with them in their present struggles, as their assistance would only prevent their obtaining what they sought. Why is the general practitioner the constant medical attendant of all grades of society? Because his knowledge is such as to ensure the confidence of the public, and his treatment of disease is eminently successful. He (Mr. Brown) trusted that the leading practitioners in the provinces would follow the example set them by the medical men at Southampton, and send up their adhesion to the association, and form themselves into sub-committees to assist in promoting its objects. Who were the principal medical attendants on the vast population of Marylebone and Westminster—not physicians and surgeons, but general practitioners. It was impossible that their importance could be over-estimated. In saying this it would be absurd to imagine that, in extolling the skill and efficiency of the general practitioner, he meant in any way to depreciate the just merits of the other grades—far from it. There is a great deal of work before them, but he felt assured that they would eventually obtain their object, for truth and justice were on their side, and they never ultimately failed in attaining their end. He would wish to impress on the country practitioners that they not only wished for, but that they wanted their co-operation. In seeking for the assistance of the society of apothecaries, the services they have already rendered the profession must not be forgotten. It had been truly said that if it had not been urged on by the society of apothecaries, the college of surgeons would never have taken a step in advance as regards medical education.

Mr. Norton seconded the resolution.

Mr. Asbury enquired what definition the committee attached to the term, "general practitioner."

Mr. Aneell, in reply, stated, that that was a question which required much thought. At present the general practitioner was regarded as a person possessing the double qualification of the diploma of the College of Surgeons, and the licence of the Society of Apothecaries; but it would be a matter of consideration with the committee, with respect to those gentlemen who had not complied altogether with these regulations; a little latitude would be allowed, according to the circumstances of the case.

The resolution was then carried.

Mr. Peregrine moved the next resolution,—

"That upon its formation, one of the first duties of this association shall be to petition the legislature against the re-introduction of Sir James Graham's bill, and to use every legal means to prevent its passing through Parliament."

Mr. Baker seconded the resolution, which was unanimously adopted.

Mr. Daniell of Ramsgate, proposed the next

resolution,—nominating the committee for carrying out the objects of the meeting. He stated, that it was the ardent and anxious wish of the country practitioners to co-operate with the association, in promoting measures, which had for their object, to advance their interests and improve their position. He thought they were placed in a position of some delicacy with regard to the Colleges of Physicians and Surgeons, and the Society of Apothecaries, and that it would be difficult to play their cards properly. It was, however, he believed, their desire, that with the co-operation of the Society of Apothecaries, they should stand as a substantive body. Without the assistance of the society, they would not be in a position to claim the interference of the legislature.

Mr. Peregrine, jun., seconded the resolution, and the following gentlemen were unanimously elected to form the committee:—

Mr. Pennington, Mr. Tupper*, Mr. Probert, Mr. Moore, Mr. Nussey, Mr. Squibb, Mr. Fuller, Mr. Tegart, Mr. Clayton, Mr. Freeman, Mr. Lucas, Mr. Brown, Mr. Norton, Mr. Peregrine, Mr. Hammerton, Mr. Dodd, Mr. Morrah, Mr. Bird, Mr. Baker, Mr. Ancell, Mr. Vickers, Mr. Craddock, Mr. Perry, Mr. Fincham, Mr. Bryant, Mr. Webster, Mr. Drew, Mr. Stocker, Mr. Wakefield, Mr. Julius of Richmond, and Mr. Cooper of Brentford.

A gentleman, in the body of the meeting, observed, that the position and funds of the College of Surgeons were owing solely to the general practitioner, and not to the pure surgeons, although they had now determined to throw the former overboard. If they were to succeed in doing so, he thought the College would be in a worse condition than it was in before. Sir James Graham's intentions he believed to be pure; but he was not equally sure of his advisers.

Dr. A. T. Thomson rose amidst mingled applause and hissing, and said, that he regretted to find the general practitioner pursuing the injudicious course of seeking to separate himself from the other grades of the profession, and to elevate himself by depreciating them. He was proceeding in this strain, when he was interrupted by Mr. Cooper, who called him to order, as it was a meeting of general practitioners, and of them only.

Dr. A. T. Thomaon would not have interfered, but that he thought he was entitled so to do, as a member of the Marylebone Association. He observed, that no one had more at heart the interests of the general practitioner than he had, and he was most anxious to see them adopt a firm, manly, and judicious course.

Mr. Ancell observed, that there was a slight mistake on the part of Dr. Thomson; he was not, nor had he ever been, a member of the Marylebone Association.

The resolution was then carried.

Mr. Ancell announced that a book for subscriptions, and for the enrolment of the names of general practitioners as members of the Association, was open, and that the cards of gentlemen desirous of joining it, would be received after the close of the meeting.

Mr. Nussey moved, and Mr. Lucas seconded, a vote of thanks to the chairman; after which the meeting broke up.

EXTRAORDINARY CASE.

CHESTER, DEC. 9.

Before Mr. Baron Gurney.

Edwin James Port, 49, chymist of Birkenhead, was indicted for manslaughter, in causing the death of Mary Harris.

This case had excited considerable interest, and the court was crowded to excess. The Attorney-General (for the Palatine) and Mr. Yardley appeared for the prosecution, and Mr. Temple and Mr. Egerton for the defence.

The Attorney-General opened the case, and stated that the prisoner resided at Birkenhead, and professed to cure cancer without the application of the knife; he was, however, neither a licensed physician nor surgeon, but that made no

difference in the case. In St. John Long's case, evidence was given of successful treatment in more than 100 cases, and he was told that a similar line of defence would be taken in this. That, however, could not avail, as they must dispassionately judge this case by itself on its own merits; and if they were of opinion that he applied the plaster which caused the death, and that he did so rashly and ignorantly, then they must return a verdict of "guilty of manslaughter," and this would be the case if the first physician in the world were to be subjected to a similar charge. The learned gentleman then called

Mary Phillips, who stated that she was the daughter of the deceased, Mary Harris. On the 10th of October witness went to Birkenhead with her mother, who was afflicted with cancer in the right breast. The prisoner was consulted on the 11th, and he applied a plaster to the part affected. Witness returned home on that day, and went again to Birkenhead on the 20th, when she found her mother very ill, but was compelled to return home on the same day. Witness did not see her alive again. The body was sent to Aston, near Wem, for interment. After burial the body was two days in the ground before it was disinterred.

Cross-Examined.—Her mother was affected with cancer for two years, and had been attended during that time by two doctors, but she did not get better under their hands. She was very ill when she went to Birkenhead.

Jane Gwyn deposed, that she lived in Ivy Street, Birkenhead. The deceased came to lodge at witness's house. Prisoner came to attend the deceased on the 11th of October. The deceased went to Wallasey that night, and came back next morning. On the Monday the deceased became sick. She vomited, and complained of pain in the stomach. She spat a good deal; she told me that she had done so before. On the Tuesday, and the remainder of the week, she complained of being cold in her hands and feet, and of her teeth being loose. I don't know what became of the plasters. I made a poultice on either Monday or Tuesday, and every day after. I did not see the prisoner apply anything else. On the Friday in that week I saw him apply a plaster to the right breast; it was about the breadth of the palm of the hand. The deceased was very unwell up to Sunday evening, when the pain left her. The prisoner took the plaster on the Sunday; the appearance of the breast was the same as before. She died between 3 and 4 o'clock in the afternoon on Thursday, the 24th. No more plasters were applied after the Sunday. The deceased continued getting weaker until she died. She did not at times know what she was about on the day she died. I never saw the plasters after they were taken off. The body opened at Birkenhead was that of the deceased.

Cross-examined.—The skin was entire on the breast. There was no wound.

Dr. Zachariah Barnes Vaughan.—I am a physician and surgeon, residing at Birkenhead. I made a *post mortem* examination of the body of the deceased at Birkenhead. On opening the body, it was fresh in appearance; the lungs had the air cells enlarged; the stomach was greatly inflamed, and the inflammation extended to the small intestines; the lower gut was inflamed. The kidneys were both inflamed. On opening the left kidney, there was a circular mark of inflammation. The liver was highly vascular. The gullet was intensely inflamed. The teeth were loose. The brain, trachea, larynx, and spleen, were healthy. On the right breast there was a slough, the size of a breakfast cup, which extended an inch into the breast. I connect the internal inflammation with the sloughing of the breast, by the subsequent finding of arsenic, and which would account for the inflammation. I am of opinion that these produced the mortal sickness of which the deceased died. There was a hard substance in the breast. I am inclined to think that it was not a cancerous affection. I do not think it would ever have produced death. It is not prudent to apply corrosive substances to such an ailment: to do so would be rash and indiscreet in the extreme.

Cross-examined.—I attribute all the inflammatory appearances to the application of some corro-

sive substance. The appearance of the lungs might be attributed to asthma. Inflammation of the kidneys is a usual result of the application of arsenic; it also results from many other causes. All the inflammatory appearances in the body might be produced from other causes, had the arsenic not been found. I have not seen such intense soreness of throat from cold. I have never known looseness of teeth follow the application of arsenic. The sloughing could not have taken place after death. The treatment of cancer is one of the most difficult subjects to the profession. There are great doubts as to the best mode of treatment. There was an eminent person named Hill, formerly a resident in this city, who has written on cancer. He has recommended the application of arsenic, or other corrosive matter, in cases of cancer. Cooper's *Surgical Dictionary* is an authority in the profession. The different modes of treating cancer are specified in it. Arsenic is one of the substances used in open cancer, but it requires the greatest caution. In the earliest cases, cancers are not open. (A passage was read in which arsenic, amongst other remedies, such as conium, preparations of iron, iodine, and hydriodate of potass may be used in the early cases of cancer.) I know that all the other substances except arsenic are mentioned in the early stages. Opium, externally applied, is rapidly absorbed by the human body. Arsenic is not absorbed very rapidly. Within the last 15 years attempts have been made to cure cancer by destroying the parts in which it is imbedded, particularly in the French hospitals. It will, if successful, come out like a knot, and obviate the necessity of cutting off the breast. I have not always been successful in my treatment of diseases. Medicines I have prescribed may have been injurious. The application of a remedy is safe in proportion to the number of cases in which it has succeeded. Medicine once deemed quackeries are now used in the profession.

Re-examined.—The white oxide of arsenic is frequently used, in cases of cancer, by many eminent men. Arsenic is dangerous in proportion to the quickness with which it is absorbed.

Mr. Jehn Foulkes.—I am a surgeon residing at Birkenhead. I assisted in the *post mortem* examination. I conveyed to Dr. Brett, of Liverpool, the stomach, the rectum, the liver, the breast, the spleen, &c. The breast had been separated by Dr. Walmsley, of Wem, at the first inquest. I am of opinion that the inflammatory symptom was produced by an irritant poison, and that arsenic had been applied by plaster.

Cross-examined.—I should have been of opinion, from the appearance alone, that they had been produced by arsenic, but I would not have sworn it. I have been in practice at Birkenhead about two years. The prisoner was then in extensive practice there.

Dr. Richard Hargrave Brett.—I received the portions of the body of the deceased. I made an analysis. I detected arsenic in the breast, and minute quantities only in the tissue of the stomach, the liver, and the spleen. I did not detect any in the fluid contents of the stomach or the intestines. I infer arsenic had been received into the system by absorption through the breast. Death was caused by that absorption. I cannot give an opinion as to whether the arsenic was administered rashly and indiscreetly.

Cross-examined.—The quantity detected internally would be decidedly less than a quarter of a grain. Marsh's test did not succeed. It is not so delicate a test as the one I used. Marsh's test is more relied on than those which preceded it, because it is considered as more delicate. Orfila was of opinion that there is arsenic in the human bones. I do not know that he has altered his opinion. The substances I analysed were brought in a white jar, and the contents of the stomach in a glass bottle. Arsenic is used in making glass, I broke the glass tube in which the fluid was in making the experiments, I detected arsenic by that test. I detected it in the stomach, the liver, and the spleen, without breaking up the glass. No chymist would be justified in judging of arsenic in these cases without using the third test—the nitrate of silver. In cases of absorption,

* Since deceased.

inflammation and pain may go on for months without producing death.

This being the case for the prosecution, Mr. Temple contended, that the indictment was in no way sustained by the evidence adduced. The objections he had to make were twofold; the cause of death was not rightly alleged, or, if rightly alleged, was not proved. The sore was not made out in evidence as an adequate cause of any fatal result. In the cause of "Sandy," tried at Chester in 1841, as he found in Greave's edition of *Russell*, the cause of death was correctly described, as it stated that the white arsenic was swallowed, by means of which swallowing the party died. So, in this case, it should have been alleged, that death was caused by the absorption, and not solely by the sore, and sickness. He next contended that no sore had been proved. The witness Gwyn proved there was no sore, therefore the indictment must fail.

Dr. Vaughan, recalled.—There was no ulcer, but merely a slough. The skin was entire. In common parlance, a slough is a sore.

Mr. Egerton followed Mr. Temple, and said that the only evidence of a slough even was that of Dr. Vaughan, who only found it on the *post mortem* examination. The skin was unbroken; whereas, a sore and ulcer meant that the skin had been broken. The mortal sore and sickness ought to have been proved to have existed during life, and to have caused death. The cause of death ought to have been differently alleged, or been sustained by the evidence.

The learned Baron said, that one of the objections involved a nice point, but the other was quite clear. One cause alleged was, that the prisoner produced mortal sickness by the application of inflammatory and dangerous substances; that was, he thought, quite sufficient; therefore, he should not stop the case.

Mr. Temple asked the Court to reserve the point.

Baron Gurney.—No; I do not see any necessity to do that.

Dr. Brett recalled.—I could not judge of the quantity of arsenic found in the stomach alone; that found in the stomach, liver, and spleen, was less than a quarter of a grain; there was, perhaps, 3-10ths of a grain in the breast.

Mrs. Phillips and Mrs. Gwyn were recalled, and concurred in stating that the deceased had for some time suffered from asthma.

Mr. Temple then addressed the jury, and said he thought that it was throwing upon them a most dangerous task to call upon them to find the prisoner guilty of a felony on such evidence as this, and thus to peril not only his liberty but his character. He adopted the propositions of the Attorney-General as to the points upon which the jury would have to decide. It was a plain matter of fact, whether or not the prisoner applied the arsenic; and he contended that on that point the evidence was defective. All that was proved was that the prisoner applied a plaster, and they were called upon to infer that that was an arsenical preparation, or some other irritant poison. The woman died, she was buried, she was disinterred; and, after the lapse of some time, an analysis took place, and the portions found were most minute, and almost infinitesimal. The learned counsel contended at considerable length that the evidence as to rash and improper treatment altogether failed, and that the medical testimony, offered for the prosecution as to the cause of death, was inconclusive and speculative. He dwelt on the facts that the relatives of the deceased made no complaint of the treatment of Mr. Port, nor did they charge negligence, and that an inquest had been held in Shropshire, where the jury found that she died of cancer. He contended that the prisoner's treatment was sanctioned by high medical authorities, and because the remedy had failed in one instance, they were not to brand any man with gross and culpable negligence, and find him guilty of felony. He concluded by a powerful appeal, showing the want of safety to the medical profession generally if this prosecution were sustained, as in any or all cases of failure the parties might be charged with manslaughter, and said that he should show that Mr. Port's treatment had been successful and

satisfactory for a very long period, and amongst a large circle of patients.

The learned gentleman then proceeded to call 12 witnesses in succession, who severally swore that they had been afflicted with cancers and tumours, which had been subjected to the treatment of regularly received medical practitioners without any beneficial effect, but that the prisoner had cured them, with only two instances of anything approaching to the effects produced on the deceased; namely, sickness, and the minor symptoms observable in her case.

After a reply of some length from the Attorney-General,

The learned Baron, in summing up, said, that if the prisoner had in the practice of surgery, without sufficient skill and knowledge, and without due care and attention, caused the death of the deceased, he was guilty of manslaughter. The evidence showed that he applied only two plasters, and subsequently poultices. The latter were undoubtedly innocent; and consequently the irritant substances were in the plasters; of what they were compounded they knew not. They could only judge of them by their effects, and the *post-mortem* examination. The inquest in Salop was illegal, and the coroner who held it was grossly ignorant of his duty, for inquests must be held where the cause of death occurred. He then commented at length on the medical and scientific evidence. The quantity of arsenic was exceedingly small. It was not that found that caused the death, but that absorbed into the system. Did the evidence convince them that the prisoner had, without due knowledge and caution, applied an irritant poison to the deceased's breast? 12 persons had been called whom the prisoner had successfully treated, but in those cases the effects had, in only two cases, been similar to the symptoms before death in the deceased. In these two cases there had been vomiting. If they were of opinion there had not been due knowledge and caution, then they must find the prisoner guilty.

The jury, after a short consultation, retired, and after an absence of about 40 minutes returned a verdict of *Not Guilty*, which was received with a simultaneous burst of applause. One respectably attired person, who was rendered conspicuous by the loud clapping of his hands, was taken into custody by order of the judge.

A Tabular View of the Seat of Tubercle in One Hundred and Eighty Cases of Tubercle of the Lungs in Children, with Remarks on Pulmonary Phthisis.
By P. HENNIS GREEN, M. B., Senior Scholar of Trinity College, Dublin, &c.

WE learn with a very sincere regret that the present is the author's last contribution to a science he is so well fitted to enrich and illustrate. This result has arisen from the unfortunate differences between Dr. Green and the Central Council of the Provincial Medical Association, with reference to the *Provincial Medical Journal*, which Dr. G. commenced at his own risk, and dedicated, at considerable personal loss, to the service of that large society. We have every respect for the gentlemen composing that influential Council, but we cannot but entertain the opinion, nor entertaining, forbear to express it, that in deciding that Dr. Green had not a fair moral claim to reimbursement for his heavy losses in establishing the journal which they virtually made their own (without his concurrence) they committed a grievous error of judgment. We are very sure that a reconsideration of the whole matter would lead to a very different conclusion, and would do the Association much honour. To know Dr. Hennis Green is to esteem him; and we are persuaded, from our own experience, that no ill-tempered word has ever been vented against him, by a worthy man, enjoying the pleasure his acquaintance. So influential an Association will not, we fervently hope, allow, from such a man, a claim, strong in moral honesty, to lie unanswered, or refuse to recall a step which has disgusted from the profession a man so well endowed to ornament it. The present *brochure* is a reprint from the *Transactions of the Royal Medico-Chirurgical Society*, and as we have already

given an abstract of its contents in our notices of the Society's meetings, it will suffice now to say that, while worthy of the author's good name, its appearance in the *Transactions*, does honour to the discernment of the Committee of the Medico-Chirurgical Society.

GOSSIP AND NEWS OF THE WEEK.

GALVANISM FOR UTERINE HÆMORRHAGE.—(From a Correspondent).—Dr. Radford, of Manchester (who has long been known as an able obstetric practitioner), gave a lecture last night (Tuesday the 10th), on the subject of Galvanism as applied to Uterine Hæmorrhage, at the Manchester and Salford Lying-in Hospital, to which the medical practitioners of the neighbourhood were invited. The audience consisted of between thirty and forty of the most respectable members of the medical profession. Dr. Radford communicated his views in a very masterly style, during which, he declared himself in opposition to the opinions of Burns, Hamilton, &c., on the point of immediate and rapid delivery in cases of hæmorrhage; and entered into a long account to prove his position, endeavouring to maintain, that rapid delivery only added to the state of exhaustion, and citing a long array of cases by way of illustration.—Dr. Radford has the full merit of introducing the subject of Galvanism, and the cases he gave of its application were very successful; and, it is hoped, since he has so liberally announced his views, that it will be tested, fairly and without prejudice, by the profession at large. As the lecture will be published forthwith in full, it would be unfair to do more than announce the subject. The known probity and high-standing of Dr. Radford, guarantee the subject as one of important consideration, and worthy the attention of the profession.—At the close of the lecture, Mr. Windsor was called to the Chair, when Mr. Nursaw proposed a vote of thanks to Dr. Radford. Dr. Clay seconded the motion, observing, that Dr. Radford was entitled to the highest praise for the candid and gentlemanly manner in which he ever communicated his thoughts and practice to the profession. The vote was carried by acclamation.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, Dec. 6th, 1844: G. F. D. Evans, E. Hutchinson, J. A. Walmsley, T. H. Watt, W. H. Meadows, R. Thornton, H. Douglas.

APOTHECARIES' HALL.—Gentlemen admitted 5th Dec. 1844: Robert Quigly Wallace, Henry Douglas, John Gerveys Grylls, Robert William Sannemann, George Gardiner, Robert Scott.

FATAL ACCIDENT.—Dublin, Dec. 8.—About four o'clock, p.m., on Friday, Surgeon Stephens, while riding home from the Phoenix Park, was thrown from his horse on Ellis Quay, and received a severe wound on the head, from the effects of which he died during the night.

NOTICE.—Our table is covered with a mass of communications, which we shall not fail duly to notice. Much important matter, standing in type, is unavoidably postponed to our next Number. In this contingency stand the Reports of Medical Meetings at Dorchester, Taunton, Exeter, and of the Students of Guy's Hospital.

FELLOWSHIP OF THE COLLEGE OF SURGEONS.—We regret to say that no list, that can claim credit for correctness, can yet be published of the gentlemen who have passed their examinations for this new grade. The fate of several of the candidates is yet under consideration; and the notices of names that have been published are entirely inaccurate.

FATAL INTERNAL UTERINE HÆMORRHAGE.—Mr. Thompson describes a case, where, from some unknown cause, the placenta, at near the end of the ninth month of pregnancy, became detached, and fatal intra-uterine hæmorrhage ensued.

ERRATA.—(PINEL'S LECTURE, Dec. 7th.)—The first paragraph should be: Everything, therefore, leads us to believe, that the convolutions are the special organs of the sensations and memory; the brain must obey the stimulus they supply to it, &c.—In last paragraph but one, read for wood-piercing "lice," wood-piercing "bee."

SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 108.)

POWDER OF BRESLER: four drachms of powdered root of wormwood, eight drachms of powdered sugar, mixed together. Mode of exhibition—a coffee-spoonful four times a-day, in the treatment of epilepsy.

POWDER, WITH CALOMEL (Polish Formula): one drachm of calomel, ten drachms of sugar, mixed together. Mode of exhibition—ten or twelve grains at a dose, as a contra-stimulant.

POWDER OF THE CARBONATE OF LIME, COMPOUND (Edinburgh Pharmacopœia): two ounces of prepared and powdered carbonate of lime, an ounce and a-half of powdered cinnamon, two drachms of powdered nutmeg. Mode of exhibition—half a drachm to a drachm, in the treatment of diarrhoea and chronic dysentery.

POWDER, WITH THE CARBONATE OF MAGNESIA (Frank): forty eight grains of the carbonate of magnesia, ten grains of powdered rhubarb, twelve grains of powdered cinnamon, mixed together. Mode of exhibition—thirty to forty grains at a dose, in acidity of the stomach.

POWDER, WITH THE CARBONATES OF MAGNESIA AND SODA (Nicolai): twenty-four grains of powdered liquorice, twelve grains of powdered carbonate of magnesia, five grains of subcarbonate of soda, five grains of powdered ginger, mixed together. Mode of exhibition—as the preceding, in cardialgia.

POWDER, CAUSTIC (Plenck): one drachm of powdered red oxide of mercury, one drachm of powdered calcined alum, four drachms of powdered savine, carefully mixed together. Mode of exhibition—externally, in small quantities, to repress the fungous flesh of venereal ulcers, &c.

POWDER, CLARK'S: half a grain or a grain of calomel. Used in frictions, in the mouth, and repeated three or four times a day.

POWDER, CLARK'S: four grains of calomel, twelve grains of Armenian bole, mixed together. Mode of exhibition—for four frictions during the day. The gums and internal surface of the lips are rubbed with it.

POWDER, AGAINST IRRITATION OF THE TEETH: equal parts of the subcarbonate of lime or magnesia, sugar, and aluminous earth, mixed together on a slab. Mode of exhibition—in gentle frictions on the teeth with a soft brush.

POWDER, AGAINST AMENORRHEA (Fouquier): thirty grains of aperient saffron of Mars, twenty-four grains of dry extract of bark, twelve grains of powdered cinnamon, mixed together. Mode of exhibition—at first in three doses, then in two, and lastly in one dose, during the day, taken before a meal.

POWDER, AGAINST HOOPING-COUGH (Kahleis): four grains of powdered belladonna-root, ten grains of Dover's powder, ninety-six grains of sublimed sulphur, four drachms of sugar, mixed together. Mode of exhibition—a packet containing sixteen or eighteen grains every hour.

POWDER, AGAINST HOOPING-COUGH (Sandras): one drachm of powdered belladonna-root, five drachms of sugar, or powdered liquorice, mixed together. Mode of exhibition—six grains evening and morning, in children under a year old, twelve grains for those between two and three years of age, twenty-four grains for older children, and forty-eight for adults.

POWDER, AGAINST CROUP (George Weber): one drachm of calomel, six drachms of calcined magnesia, twelve drachms of sugar, mixed together. Mode of exhibition—eight to ten grains at a dose, given at intervals of half an hour. Fifteen or sixteen such doses are sometimes necessary.

POWDER, AGAINST THICKENING OF THE CORNEA (Graeffe): half a drachm of powdered red precipitate, half a drachm of white agaric, one ounce of sugar, carefully mixed together. This powder is to be used in insufflations.

POWDER, AGAINST IMPETIGO (Biett): one ounce of sublimed or precipitated sulphur, half an ounce of subcarbonate of potass, mixed together. Mode of exhibition—fifty to sixty grains every morning, fasting, in a cupful of decoction of dulcamara, in the treatment of chronic impetigo.

POWDER, AGAINST PRURITUS OF THE VULVA (Hufeland's Journal): a mixture of equal parts of starch and porphyrised calamine, with which the diseased parts are dressed.

POWDER, AGAINST SMALL-POX: a drachm of sugar, a drachm of calomel, and a drachm of jalap, mixed together. Mode of exhibition—three or four packets of three grains each, in the course of the day, during the period of incubation of variola.

POWDER OF CORNACHINE, OR TRIBUS, OR EARL WARWICK'S POWDER: a drachm of powdered scammony, a drachm of powdered bi-tartrate of potash, and a drachm of washed antimonial diaphoretic, mixed together very carefully.

POWDER, COMPOUND CHALK (London Pharmacopœia): two ounces of prepared and powdered chalk, one ounce of cinnamon powder, an ounce and a half of tormentil powder, two drachms of powdered long pepper. Mode of exhibition—one to two drachms daily, in the treatment of diarrhoea and chronic dysentery. * * A few grains of opium may be added, from one to two-fifths of a grain to the drachm of powder.

POWDER, CHALK, WITH RHUBARB (Nicolai): forty-eight grains of compound chalk powder, thirty grains of rhubarb, mixed together. Mode of exhibition—thirty to forty grains in the evening, in the treatment of pyrosis and cardialgia.

POWDER, DENTIFRICE: two drachms of powdered charcoal, four drachms of powdered bark, one drachm of sugar, mixed together.

POWDER, DENTIFRICE: eight ounces of porphyrised os sepia, eight ounces of powdered Florentine iris, six ounces of porphyrised cream of tartar, two ounces of powdered cloves, one ounce of lake carmine, mixed together. * * The first powder, although the less agreeable, should be preferred to the second, which contains an acid substance (the cream of tartar), which finally injures the enamel of the teeth.

POWDER, DECOLORIZING DENTIFRICE (Magendie): four drachms of chloruret of lime, two ounces of porphyrised red coral, carefully mixed together. Mode of exhibition—a soft brush is slightly moistened, and then dipped in either of these powders, and rubbed gently over yellow teeth. * * This last formula is quite as injurious as the second.—Tr.

POWDER, DIURETIC: six grains of powdered squills, one grain of powdered opium, twenty grains of powdered cinnamon, mixed together. Mode of exhibition—twelve to fifteen grains in the course of the day, in the treatment of dropsy.

POWDER, DOVER'S (Codex): a powder composed of the sulphate and nitrate of potash, of each one part, and one part of dried and powdered extract of opium, and one part of powdered ipecacuanha, and one part of powdered liquorice. Mode of exhibition—five or six grains, as a sedative.

POWDER, EXPECTORANT (Hotel Dieu): twelve grains of powdered squills, twenty-four grains of powdered ipecacuanha, mixed together. Mode of exhibition—eight to ten grains every three hours, in the treatment of chronic pulmonary catarrh, towards the close of pneumonia, &c.

POWDER, FEBRIFUGUE: of all powders called febrifuge, the most certain is the sulphate of quinine. It must be recollected, however, that white pepper, arsenious acid, the sulphate and hydrocyanate of iron, &c, have been recommended as the antidotes of certain intermittent and especially remittent fevers.

POWDER, FERRUGINOUS (Gazette of Verona): two drachms of crystallized sulphate of iron, three drachms of white sugar, mixed together, and divided into twelve equal packets, marked No. 1.

POWDER, FERRUGINOUS (Gazette of Verona): two drachms of bi-carbonate of soda, three drachms of white sugar, mixed together, and divided into equal packets, marked No. 2. Mode of exhibition—a packet of each number is to be dissolved in a little water, the liquids mixed together, and drank quickly, while effervescing. This factitious ferruginous water contains the carbonate of the protoxide of iron, the sulphate, and a little carbonate of soda.

POWDER OF FONTANEILLES: two grains of porphyrised white arsenic, sixteen grains of porphyrised sweet mercury, two grains of powdered crude opium, seventy-two grains of powdered gum arabic, seventy-two grains of powdered sugar, mixed together. Mode of exhibition—one or two drachms at a time, in obstinate intermittent fevers.

POWDER OF FORDYCE: ten grains of tartrate of potass and soda, six grains of powdered rhubarb, mixed together. Mode of exhibition—in a single dose every morning, for children affected with tabes.

POWDER OF THE BROTHERS MAHON, AGAINST TINEA: according to M. Figuier, a Pharmacist at Montpellier, these powders appear to be composed of carbonate, phosphate, and sulphate of potash; carbonate and phosphate of lime, carbonate and phosphate of magnesia, chloruret of potassium, phosphate of iron, alumina, oxide of iron and manganese, silica, carbon, and water.

POWDER, FUMIGATORY: three ounces of powdered oil-banum, three ounces of powdered mastic, three ounces of powdered amber, two ounces of powdered calamine, storax, one ounce of powdered benzoin, one ounce of powdered labdanum, mixed together. Mode of exhibition—the necessary quantity thrown upon burning coals, the vapour being directed on the parts affected with rheumatic pains.

POWDER, FUMIGATORY, FETID: a mixture of eight drachms of scraped hartshorn, and two drachms of assa fetida, thrown upon live coals, the vapour mixed with the air, being breathed by hysterical patients.

POWDER, FUMIGATORY, MERCURIAL: one ounce of calomel, four ounces of powdered sugar, four ounces of powdered benzoin, mixed together. Mode of exhibition—one to two drachms, used in fumigation, and directed against obstinate ulceration of the throat.

POWDER OF GODERNAUX: according to Braconnet, this powder is nothing else than the proto-chloruret of mercury, obtained by precipitation. Alyon says, it is the grey oxide of antimony, and Chevreux and Planche have ascertained, that it is composed of a small quantity of calomel, and metallic mercury.

POWDER, GUMMOSO-MERCURIAL (Monton): one drachm of porphyrised calomel, four drachms of powdered gum arabic, mixed together. Used to dust external syphilitic affections.

POWDER, HÆMOSTATIC (Bonafoux): four drachms of powdered colophane, one drachm of powdered gum arabic, one drachm of powdered wood-charcoal, mixed together. Used to dust wounds and bloody surfaces.

POWDER, HUFELAND'S: twelve drachms of powdered gum arabic and sugar, three drachms of powdered nuxvomica, mixed together. Mode of exhibition—twenty to thirty grains two or three times a-day, in the treatment of diarrhoea and dysentery.

POWDER, JAMES': equal parts of sulphuret of antimony and hartshorn, calcined in an iron crucible, and porphyrised. Mode of exhibition—six to ten grains in a little water, in bolus or pill, several times a-day, as an excitant and diaphoretic.

POWDER, MILK (Le Grip. Phar.): milk, containing two drachms of subcarbonate of soda to the quart, and evaporated to dryness. Rarely used.

POWDER OF LEAYSON, OR GAZEUS COLLYRIUM: two ounces of slaked lime, one drachm of powdered wood-charcoal, four drachms of powdered sal ammoniac, one drachm of powdered cloves, one drachm of powdered cinnamon, two drachms of powdered Armenian bole. All these substances are to be introduced into a flask stoppered with emery, in the order in which they are written. The mixture, which disengages ammoniacal gas, is used in recent ophthalmia, and in cases of syncope.

PERICARDITIS.—Dr. Hughes says, mercury, together with the vigorous employment of local bleeding and counter-irritation, may be considered as the great remedy in pericarditis.

INTRA-UTERINE TUMOUR.—Dr. Ogier Ward narrates a case of intra-uterine tumour, to which he was called when the woman was apparently dying from exhaustion, and intense diarrhoea. She survived the attack a few weeks, and when the body was examined, there were only slight vestiges remaining of the left ovary; the os uteri was quite scirrhus, but not ulcerated nor tuberculated. The uterine cavity was filled with a white steatomatous matter, containing a lock of hair. There was no appearance of a cyst, nor any fluid round it, and the uterine wall varied from 1-4th to 1-8th of an inch in thickness. The mass was as large as a child's head of a year old. The rectum adhered to the uterus, but there were no marks of peritoneal inflammation, nor any adhesion of the uterus to the abdominal parietes at the place where it had been punctured. The history of the case was somewhat obscure.

Metropolitan Mortality for the Week ending Saturday, December 7th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	998	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	191	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	85	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses. Diseases of the Lungs, and of the other Organs of Respiration	159	152	157
Diseases of the Heart, and Blood-vessels	336	312	286
Diseases of the Stomach, Liver, and other Organs of Digestion	42	23	21
Diseases of the Kidneys, &c... Childbirth, Diseases of the Uterus, &c.	54	66	69
Rheumatism, Diseases of the Bones, Joints, &c.	16	6	5
Diseases of the Skin, Cellular Tissues, &c.	7	11	1
Old Age	6	6	6
Violence, Privation, Cold, and intemperance!	68	74	71
	24	26	26

[Advertisement.]

TO THE GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY,

IN the present aspect of Medical affairs, it is a matter of paramount necessity, that your numerical strength, and professional importance should be forthwith ascertained. You are, therefore, earnestly invited to enrol yourselves Members of a National Association, the nucleus of which was formed on Saturday, the 7th of December, instant, at the Hanover Square Rooms, having for its object the Incorporation by Charter, sanctioned by an Act of Parliament, of the General Practitioners in Medicine, Surgery, and Midwifery—and the general protection of the interests of that department of the Profession.

District Metropolitan Associations of General Practitioners are requested through their Secretaries to unite themselves with this Association, and individual General Practitioners in actual practice as such, can have their names enrolled on personal application at the Committee Rooms of the Association.

Country General Practitioners are recommended to communicate without delay with each other, and to forward their names for enrolment in lists of not less than twelve from each locality, to either of the Honorary Secretaries.

In furtherance of the objects above stated, lists for donations have been opened by the Joint Treasurers to the Association, Edward Tegart, Esq., Pall Mall, and John Dodd, Esq., Portman Street, Portman Square, to whom all future donations are requested to be sent.

Donations already received:—

	£	s.	d.
R. R. Pennington, Esq.	-	-	100 0 0
John Nussey, Esq.	-	-	10 10 0
Edw. Moore, Esq.	-	-	5 5 0
Edw. Tegart, Esq.	-	-	5 5 0
James York, Esq.	-	-	5 5 0
George Webster, Esq.	-	-	5 5 0
John Dodd, Esq.	-	-	5 5 0
W. R. Vickers, Esq.	-	-	5 5 0
H. P. Fuller, Esq.	-	-	5 5 0
Thos. Hamerton, Esq.	-	-	5 5 0
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T. Jarvis, Esq.	-	-	5 5 0
G. J. Squibb, Esq.	-	-	5 5 0
J. Freeman, Esq.	-	-	5 5 0
In smaller sums	-	-	27 4 0

By order of the Committee.

JAMES BIRD, Esq., 16, Orchard Street, Portman Sq.,
HENRY ANCELT, Esq., 3, Norfolk Crescent, Hyde Park.
Honorary Secretaries.

Committee Rooms,
Hanover Square Rooms,

Dec. 12, 1841.

P.S.—Gentlemen legally practicing the Profession GENERALLY under Diploma or License, or who were engaged in practice prior to the year 1815, can enrol themselves Members of this Association, which is intended to consist of General Practitioners in Medicine, Surgery, and Midwifery only.

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IMPORTANT TRIAL OF A SURGEON FOR MANSLAUGHTER.

(From our own Correspondent.)

At the Derby winter Assizes, on Thursday last, (the 12th inst.) William Thomas Gallimore, aged 40, of Chesterfield, was charged upon the coroner's warrant, with killing and slaying Anne Warwick. The evidence in this case proves, perhaps, one of the most revolting cases that has ever come before a court of justice.

The counsel for the prosecution, in stating the particulars to the jury, characterized this as one of the most extraordinary cases on record. The facts connected with it were few, but conclusive, as regards the prisoner, who is a person of respectable connexions, and has for some time been practising as a surgeon at Chesterfield in this county. The learned counsel had no desire to aggravate the case against the prisoner, and, therefore, contented himself with simply stating the case and the facts, concluding by saying, that the question for the jury to consider was, whether the prisoner at the bar was guilty, or not guilty, of gross ignorance, or criminal inattention.

The following witnesses were then called:—

Walter Warwick, husband of the deceased, deposed that he resides at Holymoorside, in the parish of Brampton, about three miles from Chesterfield. Deceased, Anne Warwick, was my wife; she was 26 years of age, and was pregnant. On the 6th of September she became very unwell, and took to her bed. In the afternoon of that day, I went to Chesterfield for the prisoner, and he returned with me. According to his directions, I went to Chesterfield for more medicine, and at that time (9 o'clock at night), I perceived that he had had drink, and was rather talkative. On my return home again, my wife was worse, and I sent for the prisoner at 12 o'clock. He arrived about 20 minutes after 2 in the morning. Some women were with my wife. On his arrival, the prisoner went up stairs, and returned in about half an hour. He then went up stairs again, and remained with my wife until she died, at 6 o'clock. After her death, the prisoner shewed me something, which he called the child, and an oval shape, which he called a false conception. About 10 minutes before my wife died, the prisoner ordered me to fetch another doctor, saying, she was in a dying state. I went out to despatch a mounted messenger to Chesterfield; but before he got ready, she was dead. The prisoner drank some rum or brandy at my house, but not much. He was rather talkative; but not so affected with liquor as to render him incapable of discharging his duty. My wife had had three children before; the birth of one of which the prisoner attended.

Cross-examined by Mr. Flower.—It was a rough rainy night. My wife had been in a delicate state of health for some time. She had suffered from flooding, as I understand your meaning, for about five weeks previously. I think the prisoner gave her a little medicine the first time.

Re-examined by Mr. Adams.—I mean by flood-

ing, that my wife had been unwell with menses continually.

Hannah Coupe examined.—I am a married woman, and have had nine children. I was present with the deceased during her illness. The first time the prisoner came, he said there was no forcing anything then, and he would send her a little medicine to still her and send her to sleep. Shortly afterwards he went away. The second time he came was early in the morning: before he came that time, deceased had been delivered of a child: the after-birth was produced with the child. When he came into the room I showed him this. Deceased then appeared quite easy, and the prisoner let her rest for half an hour, at the expiration of which time he made an examination of deceased, and said the after-birth was quite fast all round, and that he had to pull it away by bits. I thought him a long time; at length he brought something from deceased. I told him it was not the after-birth; and asked him what it was? He called it a mole. He used great force. Deceased lived an hour or an hour and a half after this. He said there was another child, and that it must come away from her. Deceased appeared to suffer much pain whilst he operated upon her. He appeared very weak and trembled much over his job. On the following morning I showed what had come from the deceased to Mr. Botham, surgeon. During the time Gallimore was operating, I told him I thought he was not doing right: he replied that he was doing as well as if all the doctors in Chesterfield were there, according to his strength. He appeared very hot: about an hour before deceased died I wished him to have another doctor to assist him: he said there was no need for one. Shortly before she died I told him he had better send for Mr. Botham or Mr. Jones: he did not say anything just then, but he sent for a doctor when she was dying.

Cross-examined by Mr. Flower.—When he came the first time he ordered cold applications to the lower part of her body, and ordered her to be laid on her left side. No flooding was going on then. He said there was nothing to go forward with; by that I understood him to mean nature required no assistance.

Martha Heppenball corroborated the last witness's testimony.

Mr. Botham, a Surgeon who has practised in Chesterfield upwards of twenty years, and during that time has attended many labours, deposed that on the morning of Sunday, the 8th of September, he went to Warwick's house. Two substances were shown to him by Mrs. Coupe,—there was a child with the after-birth attached to it, surrounded by the membranes which surround the child and the after-birth when in the womb; the other substance was the uterus or womb, which he cut open and found empty. Examined the neck and mouth of the womb, which were very much bruised: several small parts were gone. On the same day, in company with other medical men, Mr. Botham made a *post-mortem* examination of the body of deceased, and found no womb there: he compared the womb, shown to him by Mrs. Coupe, with the body of the deceased, and they corresponded ac-

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curately. The bottom part of deceased's body was swollen and dark coloured: the vagina was extensively torn: he introduced his hand through the external parts of generation, and then passed his fingers through the tear of the vagina, and his fingers then came in contact with the folds of the bowels. The appearances were sufficient to account for death: death must be the inevitable consequence of such injuries, which could not have been done without the use of great force and violence. The deceased was gone between five and six months with child. The womb, itself, is a strong thick substance, firmly attached to the body, so that great violence would be necessary to withdraw it from the body. A medical man, having competent skill, and exercising due caution, would have considered it to be his first duty after the birth, to examine the child; after such an inspection, a medical man, having the requisite degree of skill and caution, could not be mistaken as to the presence of the after-birth. The womb being entirely empty, a medical man, having the requisite skill and caution, could not commit the mistake of imagining that there was an extra child; such a medical man, having, as I have stated, due skill and caution, could not mistake the womb for the after-birth.

By the Judge.—After a man had inserted his hand, he ought to know whether it was the after-birth or the womb, and a surgeon of competent skill and caution would not be satisfied with an external examination, but would make an internal one with his finger.

Mr. Botham underwent a long cross-examination by Mr. Flower, who completely failed to shake his testimony, or to elicit that a *prolapsed uteri* would render it likely that the prisoner should mistake as to the necessity for the operation; in that case the witness considered that the likelihood of mistake would be less, when proper skill and caution were exerted. A rupture of the ligaments was impossible, under the circumstances of the birth. If an inversion of the uterus had occurred, it would render the mistake still less probable.

Mr. J. Walker, also a surgeon of extensive practice, corroborated the evidence of Mr. Botham. This was the case for the prosecution.

Mr. Flower then addressed the jury on behalf of the prisoner, stating that they might assume that Mr. Gallimore had been a successful practitioner hitherto, inasmuch as no attempt had been made to show the contrary. He (Mr. Flower) would prove by the evidence of numerous witnesses whom the prisoner had attended, that he was not only a kind and attentive man, but competent to fulfil the duties of his profession. Without wishing to impugn the testimony of the medical gentlemen, he suggested to the Jury that great differences of opinion frequently prevailed among medical men on the most important cases, and it was not therefore unfair to assume that there might be some error of judgment even on the part of the gentlemen who had given—conscientiously he was sure—evidence upon that occasion. It should be borne in mind, too, that those gentlemen did not see the patient until death had ensued, and therefore it was impossible to say what might be the symptoms

which occurred, to cause this lamentable mistake—for a mistake the prisoner acknowledged he had committed. The only person who could speak to that fact was the prisoner, who was debarred from giving evidence in favour of himself. The treatment the prisoner prescribed on being first called in was clearly correct: and it showed that he understood his business; but an attempt had been made to prove—he did not mean to affirm that any zeal had been shown on the part of the prosecution—but an attempt seemed certainly to have been made to prove that Mr. Gallimore was not sober; that, however, had failed, for Warwick himself said that he took very little indeed at his house, and Mrs. Coupe did not notice anything remarkable about him. The learned Counsel proceeded to notice various points in the evidence, contending that all that could be justly charged against the prisoner was, the having committed a mistake under circumstances of very great difficulty, and to that he would have been willing to plead guilty.

Several married women were called to bear witness of the skill and attention which the prisoner had shown during his attendance at their confinements, and one and all stated that they would have no objection to employ him again. A nurse was called who stated that she had been present at 50 cases that Mr. Gallimore had attended, and that he had not lost one.

In summing up the evidence, his lordship (Mr. Justice Pattison) remarked, that they must take it that the prisoner had an extensive practice as a man-midwife, and had exercised competent skill, care, kindness, and attention. It was quite clear, therefore, that this was not a case of a person who understood nothing of his business. It was also clear, that if a person, having a competent skill and knowledge, makes an accidental mistake in the treatment of a patient, through which she dies, he was not clearly guilty of manslaughter; it would be a fearful thing if he were, because, in that case, medical men would be afraid to practice, lest they rendered themselves liable to the consequences of such an accident; but, on the other hand, if there was evidence to prove misconduct, arising from gross ignorance, or from criminal inattention, then, undoubtedly, the person so acting was guilty of manslaughter, in case of death ensuing. His lordship here referred to a case somewhat approaching this, tried before Lord Ellenborough, and then said, there did not appear to have been any want of attention on the part of Gallimore, and he could not help remarking, that they had no means of ascertaining whether any, and if any, what were the unusual appearances, or symptoms, which caused him to pursue the treatment he did. According to the evidence, he seemed to have got confused. Looking at all the facts of the case, it would be for the jury to say, whether or not it was a mistake, or whether it was an instance arising from the gross ignorance, or the most criminal neglect.

After a short deliberation, the jury returned a verdict of Guilty.

The learned Judge, in passing sentence, said the prisoner had been found guilty of a charge of manslaughter, in having conducted himself as a man-midwife in a manner which showed the greatest ignorance, or inattention, on his part. It was, therefore, the duty of his lordship to pass upon the prisoner such a sentence as the law required. It was quite clear, that where men chose to attend to cases of women in child-birth, they ought to be possessed of competent skill; and it appeared that the prisoner was possessed of such skill, he having been in practice for a length of time. How it happened that, upon the particular occasion in question, he had not done his duty, the Court was left in great doubt. The offence of manslaughter was punishable very severely when it approached close to murder, and was occasionally visited with very slight punishment when attended with extenuating circumstances.

The counsel for the prosecution here interrupted his lordship, saying he was instructed, on the part of the prosecutor, to recommend the prisoner to the merciful consideration of the Court, on account of his excellent character.

The learned judge was very glad to listen to that recommendation. He could not but think that

there was something which led to this fatal occurrence that had not come to light. Under all the circumstances, he did not feel that he was bound to inflict so severe a punishment as he might have done, had it been proved that there was a criminal intention on the part of the prisoner. The sentence of the Court upon him was, that he be imprisoned for 6 calendar months.

CLINICAL LECTURES ON SURGERY,
Delivered at the Royal Westminster Ophthalmic
Hospital, Charing Cross,
By CHARLES GARDNER GUTHRIE, Esq., Junior.
December 18th, 1844.

LECTURE XI.

On the Operation for Cataract by Depression or Displacement.

I should not omit to state, that extraction of a cataract through the sclerotic coat has been recommended and attempted at different times. It has always been on the whole a very unsuccessful operation, and I shall not waste your time or mine by noticing it further. It ought never to be done as an operation, although cases have occurred, in which the lens has been forced out through a wound made by accident in the sclerotic, and the sufferers received some sight after the wound had healed.

Celsus is the first of either the Greek or Roman authors whose works have come down to us, containing a description of the operation for cataract by depression, and it is remarkable that whilst he speaks of it as one well known, he gives directions that may be considered valuable even at the present moment. He says, "After the needle has been introduced, it is to be inclined towards the cataract, which is to be depressed below the pupil. If it remains in that situation, the cure is accomplished, but if it rises up, it is to be cut in pieces, that it may the more readily be disposed of."

There is reason to believe that this operation was practised in India by the Hindoos, at a period anterior to the time of Celsus, and a description of their method of operating has been given by Dr. Scott, and by one of the assistant surgeons on the Bengal establishment; the latter of which is the most precise, although it differs from the other as far as regards the use of charcoal, which is not mentioned. This gentleman says: "A few days ago, while visiting at the house of a friend near Calcutta, I found a native old woman about to submit to the operation in the right eye, at the hands of a native, who had before performed it on the left eye of the same patient, with every success that could be desired. The instruments which he employed were very similar to those employed by Dr. Scott; and consisted of a lancet, of nearly the common shape, and a copper or brass probe, or needle, having the extremity of a triangular shape, for the length of about three-eighths of an inch. The point of this instrument is made very blunt, as also the corners, and the triangular part is tapered and rounded off to a narrow neck, which joins it to the handle-part of the instrument about three-fourths of an inch from the point. The operator commenced by covering the blade of his lancet with a thread, which he wrapt around it, to within about one-eighth of an inch of the point, to prevent its penetrating further than he wished into the eye; and in the same manner he wrapt a thread round the fine neck of the brass probe, about three-fourths of an inch from its extremity. The precise extent of the instrument that was covered by the thread the operator seemed to regard as a matter of much importance, adjusting the thread, according to a measure marked by two cross lines on the inside of his left little finger. This part of the business he went through with many gesticulations, which he no doubt considered as highly necessary to ensure success to his operation.

"The patient was now seated upon the ground, on which the operator also placed himself directly opposite to her. I remarked to him, that as he was to operate on the right eye, a position behind

the patient would be more favourable; but he observed that it was the same to him, as he could perform equally well with the left, as with the right hand. He then caused the woman, whose eye a fillet had been gently tied, to take hold of his shoulder, or girdle, with both her hands; I stood behind her and secured her head, by placing the occiput between my knees, and holding my right hand upon her forehead. The operator then opened the eyelids, which he secured with the fore and middle fingers of the right hand, without the assistance of any other speculum, and easily succeeded in keeping the eye open. The patient was next directed to look upwards and inwards to the nose, and upon her doing so, the operator, with a lancet in his left hand, thrust the instrument into the eye as far as the thread would permit it to go. The incision was made at about the distance of a line beyond the side of the cornea, towards the external angle of the eye, and about one-eighth of an inch below the horizontal line passing through the middle of the pupil; and as it appeared to me, was performed rather with a steady than a very delicate hand. Immediately on perforating the sclerotic, the lancet was withdrawn, and the eyelids shut; when I remarked that not a drop of blood, or humour, or scarcely any tears followed the incision. In the course of a few seconds, the eye was again opened, and the operator proceeded to use the brass probe, already described. So very slight was the wound which the lancet had inflicted on the eye, that he was at first at a loss to discover it, and pressed the probe on a small vein, which he mistook for it, until I observed that the opening was lower down; accordingly the operator continued pressing the probe along the ball gently until he found the wound, into which he introduced it, with a cautious boring motion of the instrument. When it had fairly entered the eye, he turned the thick end of it downwards to the cheek, and by this means elevated the point in a slanting direction, until he saw that it touched and raised the junction of the cornea and sclerotic, at the upper and inner corner of the eye. The triangular swelling of the probe was thus placed along the upper and back parts of the lens in its capsule; a small dossil of cloth was now introduced betwixt the handle-end of the probe and cheek, on which the probe rested, and by this means the point was prevented from pressing on the cornea or sclerotic. The eyelids were again shut, and the probe left in this manner in the eye; and I remarked again, that neither blood, humour, nor any tears followed this part of the operation. A lighted charcoal (a ball of gool on a common chillum) was now brought to the operator; who, opening the eyelids, applied it pretty close to the eye, for a few seconds. On removing the chillum, the operator took the probe in his left hand, and drawing it out a very little, elevated the handle, and began to press the triangular point upon the upper and back part of the lens and capsule, in order to depress them. At this part of the operation, the lens and capsule were brought to bear upon the inner side of the iris so closely, that not only the pupil, but almost the whole extent of the iris, became perfectly white; but from the light in which the patient was placed, I could not distinguish whether or not this appearance was produced by the dilatation of the pupil. The steadiness of the operator's hand and countenance made it also impossible for me to conjecture what degree of force he used to detach the lens; but, in his first attempt, he failed in accomplishing this, by the pressure which he judged it proper to employ. On finding he had not succeeded in depressing the lens, he again introduced the dossil of cloth betwixt the cheek and the handle of the probe, shutting the eyelids, and allowing the instrument to remain a few seconds suspended in the eye, as before. He then brought the charcoal again within a little of the eye, which he had opened, when I remarked that the pupil had contracted to a very small point. He now made a second attempt to depress the lens, in the same manner as before, and with the same want of success: again all things were put in the same order, and, after a few seconds, the hot charcoal was re-applied, and a third attempt

was made at depression. In this the operator succeeded; and slowly and steadily pushed down the lens to the very bottom of the eye. For a few seconds he kept the probe resting upon it. After it was fairly depressed, he questioned the patient, whether she had recovered the use of her eye, which, I may observe, had been completely lost. She replied she had; and not only saw him and the other people about her, but on his holding up his fingers, she told how many and what they were, and also discriminated and named several objects that were held up at different distances, and this she did as easily and accurately as any person could do, and seemingly without pain, although the lens, and most probably the capsule too, had been torn away, and the instrument still remained in the middle of the eye.

"The operator now gradually raised the probe, until he got it as nearly as possible into the position in which it had first entered the eye, and then gently withdrew it in the same direction in which he had introduced it. The eye was then moistened with a wet cloth; and both operator and patient said it would be quite well in a few days. I left the woman walking about in a verandah."

The method of performing the operation recommended by the Arabians, by Avicenna and Rhazes, accords with that of Celsus. Albucasis, indeed, proposed to introduce into the eye a hollow needle, in the shape of a canula; and, by sucking the extremity, forcibly extract the cataract.

Rocho Mathioli, surgeon to Charles Ferdinand, Archbishop of Austria, advised the introduction of a gold wire, enclosed in a canula, to seize the cataract, and by gently moving it, to extract it on the point of the wire. Albinus conceived this could be best accomplished by an instrument resembling a small forceps. Freytag recommended its extraction with a needle bent like a hook; but it does not appear that any of these methods were successfully practised, even if they were ever actually attempted. In the year 1651, it was demonstrated that the crystalline lens was the seat of the disease; and we find, that, after that period, the different attempts which were made for its removal from the axis of vision, were by depressing it below the edge of the pupil. The immediate situation of the lens, or the part in or to which it was to be removed, have undergone some alterations, more especially by Scarpa, Beer, Willberg, and the German practitioners, and of late by Messrs. Bowen, Mackenzie, King, Egerton, Scott, and Morgan in England.

The operation for cataract by displacement is performed in two ways, by depression and by reclinatio, which may be done either through the sclerotic coat or the cornea.

On the Operations of Depression and Reclination done through the Sclerotic Coat.

In the operation of depression called Beer's, the spear-pointed needle formerly used, is made smaller and rounder at the neck. On the sides of the handle corresponding to the flat surfaces of the needle, a small piece of ivory should be inlaid, to mark them and prevent error. It is introduced with the flat surfaces upwards and downwards, half a line below the horizontal diameter of the eye, that there may be less danger of injuring the long ciliary artery and the ciliary nerves. It is directed backwards to prevent its doing mischief, if it should pass too forcibly into the eye, as it ought merely to penetrate the vitreous humour, and avoid the lens: whilst, at the same time, it prevents the point of the instrument being turned or broken, which will often happen from a sudden motion of a fold of the conjunctiva, when the point is allowed to fall on the eyeball in a straight or an oblique direction forwards. The object is to pass the needle through the coats of the eye, viz., the conjunctiva, the sclerotica, the choroidea, the insensible retina, the hyaloid membrane, and a little way on into the vitreous humour, so that the neck of the instrument may turn in the slight opening made in these parts without materially separating their edges. It is passed into the sclerotica a line from the cornea, that the roots of the ciliary processes may not be injured; and it should not exceed the distance of a line and a half, and never two lines, or the sensible retina will be implicated;

the medullary or sensible portion of this membrane not extending so far forwards as its insensible or membranous portion.

The instrument is now to change its position; instead of passing behind the lens, it is to be directed before it, and the flat surface placed against its anterior face. To effect this, it is obvious two parts are exposed to injury, the ciliary processes and the lens itself. When the double motion has been given to the needle, it is previously to pressing it on, parallel to the iris, and when its point is between the edge of the lens, covered by its capsule, and the anterior circular edge of the ciliary processes. The point of the needle in its progress, so as to be seen behind the pupil, must either raise or penetrate a portion of the processes, or pass through the edge of the lens. Of the two injuries, the piercing of the lens is by far the more important, not as to the injury done to the part, for that is of no consequence, but as it impedes, and in many cases effectually prevents the completion of the operation, by precluding the possibility of finally depressing the cataract. To enable the operator to depress and leave the lens in any given situation, it is necessary that it should have little connection with the needle by which it is depressed, or it will, in consequence of this connection, follow the needle when it is elevated, and resume nearly its original situation. The same thing occurs, only in a more remarkable manner, in the operation for cutting up the cataract. If the needle, in passing the front of the lens, has been entered too far back, it passes through the edge of the cataract, and, to use a homely expression, pierces it like a fowl on a spit. When the edge is turned towards the lens to cut it in halves, and force is used for that purpose, the cataract recedes from the pressure of the shaft of the instrument; but the edge does not cut, and the operator soon perceives that the lens follows the motion of the instrument, that it is actually spitted upon it, that he can do nothing with it, and must withdraw the needle for the purpose of re-introducing it, clear of the lens. In some instances, if the very edge of the lens only be pierced, it will yield to a turning motion of the needle, but this is not to be depended upon; the knife must be withdrawn and reintroduced, when the lens, separated from its attachments, will be found to roll or turn round it, can be depressed but with difficulty, and seldom or never cut up, if that be the operation attempted. I consider it then a point of great importance, and fully established in *this method of operating*, that the lens is on no account to be pierced, and that this object (the integrity of the lens) is to be obtained, *if necessary*, at the expense of the ciliary processes.

That the ciliary processes are parts of great importance in a healthy state of the eye, cannot be doubted, from an examination of their structure and distribution; but that a principal part of their utility terminates with the removal of the lens, is, I think, almost equally well demonstrated in many cases of operation, especially by division, where they must have sustained considerable injury, and yet the vision of the patient has been and remained as good, as in any other case of cataract after operation. I have seen this very often; I have done it repeatedly, and, therefore, affirm it as a fact; but it is not a lesion of the functions of the ciliary processes that is, we are told, principally to be dreaded from wounding them, but instant hæmorrhage into the chambers of the eye, obscuring the view of the parts through the pupil, preventing the completion of the operation, or rendering it necessary to finish it, as it were, in the dark, and incurring the risk of a great and destructive inflammation. If this were actually a fact, I am not sure which of the two injuries would be the worse; but I have no hesitation in saying that these dangers are imaginary, not real, that the ciliary processes may almost always be cut or divided without fear of their bleeding; they are cut repeatedly without this or any bad effects whatsoever, either at the moment, or at any subsequent time. The ciliary processes are certainly the most vascular parts of the eye; but the vessels are proportionately small, and bleed but little on being injured, if they are perfectly healthy.

If they are in a state of derangement, and especially if they have suffered from inflammation, or are varicose, there can be no doubt that they will then throw out blood in sufficient quantity to be troublesome, but seldom to produce the very serious effects enumerated. I have strong reason for believing that the hæmorrhage is very rarely productive of mischief, not even if the operator has negligently cut the long ciliary artery, or the vessels are varicose. The testimony of all authors who have written on the subject, is satisfactory as to the fact, but by no means of the frequency of its occurrence, and the best proof we have to the contrary is, that when little attention was paid to prevent these processes being injured, bleeding into the chambers was not more frequently observed than at present. The state of the ciliary processes, in health, may aptly be compared to the iris; and no one will dispute, that, in very many instances, the iris may be divided, or even a piece cut out, without any bleeding ensuing; whilst, in others, it can hardly be punctured without considerable hæmorrhage taking place. That the former is the healthy state of the iris is, I apprehend, not likely to be controverted. I wish then to be understood, as not recommending the ciliary processes to be divided, but that the needle should, in the different methods of operating, be introduced as nearly as possible between the anterior edge and the capsule of the lens, without injuring either, but that care must be taken in this method of operating to preserve the integrity of the lens, even at the expense of the ciliary processes.

The third stage of the operation commences by placing the flat surface of the needle on the upper edge of the lens, injuring the ciliary processes running towards this part as little as possible. The flat surface of the needle being placed on the upper edge of the cataract, a question naturally arises, how far, or how low, is it to be depressed, in a perpendicular direction, or a little inclined outwards? Beer says, only until the handle of the instrument is brought into the horizontal position, that the lower edge of the lens may not press upon the retina; but then the upper edge is only half a line below the lower edge of the pupil, and, by pressing against the iris, will excite inflammation, and ultimately terminate in the closure of the pupil. Two great evils are then impending, like Scylla and Charybdis, one of which it is not easy to avoid; and, perhaps, they are only to be avoided in lenticular cataract, by the fortuitous circumstance of the lens being small. If the lower edge of the lens should descend perpendicularly, and the pressure is continued after it has passed below the lower edge of the pupil, it will be pressed between the retina and choroidea, either of which may be torn or bruised; and if amaurosis does not immediately follow, vision is soon impaired or destroyed, and the eye diminished in size, from the low inflammation which takes place on these membranes. If it be not sufficiently depressed, but allowed to touch the posterior part of the iris, it will irritate that membrane as well as the ciliary processes, and equally cause the loss of the organ through low inflammation and amaurosis, even if it does not immediately produce a closure of the pupil, and wasting of the eye.

From a due consideration of these two circumstances, with the almost impossibility of avoiding them both, I have no hesitation in condemning this method of operating, as one which ought not to be practised in any case of hard cataract, although it has the sanction of Beer, for such as are of small dimensions.

Scarpa says, "With respect to the hard consistent cataract, it should be observed, that the word depression, used in the schools of surgery to express the manner in which this operation is executed, readily produces in the mind of the student an erroneous idea, that this merely consists in pressing the opaque crystalline with the needle, from above downwards, until it descends below the pupil. If this were the case, as there is not a sufficient space for firmly lodging the crystalline lens between the corpus ciliare and the iris, it would constantly follow, that, immediately after the operation, the cataract would rise up again, either entirely or partially, opposite the pupil."

But the word depression, in this case, has a much more extensive signification than that which is commonly given to it. It includes two motions which the surgeon makes with the needle; one of which presses down the opaque crystalline, the other buries it in the vitreous humour, by carrying it from before backwards, out of the axis of vision. By this precaution only is the opaque lens prevented from rising again, and in this sense only ought the term depression of the cataract to be explained and understood."

The needle Scarpa recommends, is a very fine one, moderately curved at the point. "The curved extremity of this needle is flat upon its convex surface, sharp at the edges, and has a concavity, consisting of two oblique planes, forming a slightly elevated line in the middle, which is prolonged as far as the extreme point of the instrument, similar to the curved needle for stitching wounds. The handle is marked in the direction corresponding to the convexity of the curved point."

For the operation, the pupil having been previously dilated by the helladonna, "the surgeon should place his patient on a low seat, at the side of a window which has a northern aspect, so that the light coming from it may only fall upon the eye, which is to be operated on, laterally. The other eye being covered, although affected with cataract, the surgeon ought to place himself directly opposite the patient, upon a seat of such a height, that, when he is prepared to operate, his mouth should be on a level with the patient's eye. And, in order to give his hand a greater degree of steadiness in the several movements which the steadiness of the cataract requires, the elbow should be supported upon the knee of the same side, which, for this purpose, he should raise sufficiently by resting his foot upon a stool, or, if necessary, also by placing a small hard pillow upon his knee. An able assistant, situated behind the patient, with one hand fixed under the chin, should support the patient's head against his breast, and with the other, placed on his forehead, gently raise the upper eyelid by means of Pellier's elevator, carefully observing to gather the eyelid against the arch of the orbit, without pressing upon the globe of the eye."

"Supposing then the eye, to be operated on, is the left, the surgeon, taking the curved needle in his right hand, as he would a writing pen, with the convexity of the hook forwards, the point backwards, and the handle in a direction parallel to the patient's left temple; should rest his fingers upon the temple, and boldly perforate the eyeball in its external angle, at rather more than a line from the union of the cornea and sclerotica, a little below the transverse diameter of the pupil, gradually moving the extremity of the handle of the needle from behind forwards from the patient's temple, and consequently giving the whole instrument a second motion, until its bent point has entirely penetrated the eyeball, which is effected with the greatest readiness and ease. The operator should then conduct the convexity of the needle upon the summit of the opaque crystalline, and by pressing upon it from above downwards, cause it to descend a little, carefully passing the point, at the same time, between the corpus ciliare and the capsule of the crystalline lens, until it be visible before the pupil, between the anterior convexity of the capsule of the lens and the iris. Having done this, he should cautiously push the hook, with its point turned backwards, towards the internal angle of the eye, passing it horizontally between the posterior surface of the iris and the anterior convexity of the capsule, until the point of the needle has arrived as near the margin of the crystalline and capsule as possible, which is next the internal angle of the eye, and consequently beyond the centre of the opaque lens. The operator then inclining the handle of the instrument more towards himself, should press the curved point of it deeply into the anterior convexity of the capsule and substance of the opaque crystalline, and by moving it in the arc of a circle, should lacerate the anterior convexity of the capsule extensively, remove the cataract from the axis of vision, and lodge it deeply in the vitreous humour, leaving the pupil perfectly round, black, and

free from all obstacle to vision. The needle being retained in this position for a short time, if no portion of opaque membrane appear behind the pupil, which would require the point of the instrument to be turned towards it, in order to remove such obstacle (for, with respect to the crystalline, depressed in the manner now described, it never rises again), the surgeon should give the instrument a small degree of rotatory motion, in order to disentangle it easily from the depressed cataract, and should withdraw it from the eye in a direction opposite to that in which it had been introduced, that is, gently inclining and turning the handle towards the patient's left temple."

Such are the words of Scarpa. It appears to me, in analysing this operation, that the needle should be introduced from a line and a half to two lines from the cornea, that it may the more readily pass into the vitreous humour behind, without touching the lens, until the point of the needle, with the convexity turned forwards, has been placed upon the summit of the opaque crystalline. To do this, the point of the needle must be elevated, passed over the edge of the lens, raising up the anterior edge of the ciliary processes before it, and passing in front of the capsule, through the opening thus made by laceration. Some nicety is requisite in doing this; and although the lens should be slightly depressed before the needle passes between the "corpus ciliare and the capsule of the crystalline," still I am of opinion that the corpus ciliare will in general be injured to a certain extent, which I mention although of little consequence, because this operation is supposed to be done without it. At this point an error of importance may be committed. If the operator should slightly depress the lens, to be enabled to pass the needle over the edge of it, and then through the capsule (which may be done), without injuring the corpus ciliare, he may perhaps not pierce the capsule, but finish the operation leaving it unbroken if still transparent, and from the disturbance it has suffered, to form a secondary membranous cataract. This inconvenience will be avoided by attending to the appearance of the convex part of the needle. When perfectly uncovered, or really in front of the capsule, it shines through the aqueous humour and cornea as it would through water, whilst, if covered with the capsule, the brilliancy of the steel is diminished, in a manner that cannot be mistaken, when it has once been perceived; the instrument will also be confined in its motions in pushing it forwards into the anterior chamber, and the tissue-like appearance of the capsule may be observed with facility. When a doubt even exists on this point, the operator ought to turn the needle so as to bring the point forwards, and by rotating it a little, he will directly see whether it is covered by capsule or not. Having satisfied himself that the needle is free, the point is to be turned backwards, and carried on horizontally between the iris and the anterior hemisphere of the capsule towards the internal angle of the eye, when it is to be passed into the capsule and lens, and both depressed into the vitreous humour. The capsule being torn in the first instance, to allow the needle to be placed in front, is again pierced on the lens in the act of depressing it; the double puncture and the subsequent laceration must then destroy a considerable portion of it, and almost entirely prevent the occurrence of secondary membranous cataract. The last step of the operation is termed that of depression, but it is not a pressing of the lens downwards, so as to place it on its edge, that is intended to be expressed by the words "moving it in the arc of a circle," but, having firmly fixed the needle near the internal edge of the cataract, that it be carried from before backwards, downwards, and outwards, so as to lodge it deep in the vitreous humour, in the space between the insertions of the rectus externus muscles, the anterior surface of the cataract looking upward, the posterior one downwards. In this manner the lower ciliary processes are uninjured, and the tearing up of the retina and choroidea is avoided. The needle should be retained for a short time, to allow the vitreous humour to close in over the lens, which, on the other hand, settles in its new

situation; and when the needle has been loosened by a gentle rotatory motion, and raised to a level with the pupil, any opaque membrane which may appear should be destroyed by moving the needle backwards and forwards until the pupil assumes the black colour of velvet. If the lens should follow the needle, it is generally in consequence of some attachment of its capsule at its lower edge to the iris, or zona ciliaris, which must be separated, and the cataract again depressed as before; and if, after repeated trials, the operator should be foiled, he has the satisfaction of knowing that the lens is at such a distance from the iris as will not give rise to inflammation, and that he will have an opportunity in a few days of making another attempt, without endangering the eye. If, in the act of removing the lens, the pupil becomes of an oblong form, and this increases as the depression proceeds, "it is a certain sign that the capsule of the crystalline is adherent to some part of the posterior surface of the iris, and more precisely at the part where the pupil is elongated." This attachment is to be broken through by the point of the needle, when the pupil will become circular, and the lens remain depressed. If the lens follow the motions of the needle, and nearly recover its natural situation, the instrument must be withdrawn and re-introduced further back, when the lens may more readily be separated and depressed.

An operation similar to this has received the name of reclinatio from Willberg, Beer, and the oculists of the German school, to distinguish it from simple depression, and prevent error by a mistake in the term employed. The needle is to be introduced precisely in the same manner as in other cases of depression, until it reaches the fore part of the cataract; when, instead of depressing the handle of it so as to place the point on the edge of the lens, the point is to be carried exactly in the front of the capsule, towards its upper edge; when, by pressing on it, and by bringing forward the handle in a diagonal line, obliquely upwards and forwards, so that the point of the instrument may press the cataract backwards, downwards, and outwards, it may be placed in the space between the under and outer straight muscles. The anterior face of the cataract looking upwards, the posterior downwards, the upper edge backwards, the lower edge forwards, having been pressed through the posterior capsule, and placed as it were on a layer of the vitreous humour, the external membrane of which separates it from the retina. In a dilated state of the pupil, it is barely out of sight, and in some cases not actually so, although it does not interfere with the axis of vision.

The disadvantages and the accidents attending these two operations, being those of depression generally, may be of course considered together; the advantages of each are, in Scarpa's opinion, that greater facility is afforded in rupturing the capsule and depressing the lens by a curved than by a straight needle; in reclinatio, that the operation is more simple, therefore more easily accomplished by a beginner, with a straight needle. Reclinatio is not, however, more certain in its result than Scarpa's depression. And I have as little reliance on reclinatio through the cornea, recommended by Willberg, as through the sclerotica, and do not advise you to perform either.

The late Dr. Bowen, in a work actually printed and published in Paris in October 1823, although sold with London on the title-page, proposes that the needle should be entered at the distance of three lines and a half from the cornea, the pupil having been previously dilated, and thinks that by this process the lens is more readily and safely depressed, and the capsule more effectually removed. He terms it *hyalouysis*, from *hualos*, glass (the vitreous humour being so termed from its resemblance to glass), *nusso*, I pierce; and considers that it is equally applicable to soft as to hard cataracts.

"The patient being seated, so that the superior part of the head does not reach higher than the superior part of the sternum of the operator, he takes his needle, previously besmeared with oil, as a pencil or writing pen, placing the weight of his hand on the cheek of the patient, who is to be directed to turn the eye towards the nose. Scarpa's

needle, with its convex surface forward, corresponding with the iris, is boldly introduced into the globe of the eye through the sclerotica, three lines or three and a half from the transparent cornea, and a line below the transverse diameter of the pupil, into the vitreous humour, posterior to the lens and its capsule. The point of the needle is then brought forwards, by inclining the hand to the temple, and penetrates the posterior capsule."

"Should the lens be soft or fluid, the needle passes through its centre on its passage to the anterior chamber: if solid, the instrument is to pass between it and the ciliary processes; it is then to be carried through the anterior capsule and pupil (which latter has been previously dilated with belladonna) into the anterior chamber, without risk or danger of wounding either ciliary ligaments, iris, or ciliary processes. The object the operator has in view, is the laceration and removal of a large portion of the anterior capsule; that is to say, of greater extent and diameter than the pupil in its naturally dilated state; this is effected by three or four circular movements of the point of the needle, which should invariably be done. If the capsule be transparent, the inexperienced operator will scarcely be sensible of effecting any good, or change, by this circular movement of the needle.

"The correspondence in transparency and colour of the capsule to the aqueous humour is so similar, and the former so delicate, that no resistance of the needle is sensible to the fingers, when, in reality, the point is breaking down and removing from the axis of vision the membrane, so frequently the cause of secondary cataract.

"When the capsule is opaque, the effects of the needle are, of course, evident; the transparent, or opaque portions should be conducted backwards and downwards with the lens, and buried in the vitreous humour, below the margin of the iris, and as much as possible removed from the front of the pupil. On retiring, or withdrawing, your instrument, a circular movement is similarly made with the point, for the purpose of removing every portion of the posterior capsule, which is also liable to opacity; so that a communication is completely established between the aqueous and vitreous humours. The anterior capsule, lens, and posterior capsule are now removed, so that the utter and total impossibility of secondary membranous cataract forming must be evident.

"Such is the operation for a solid cataract, enveloped by its capsule; but the lens we usually meet with, at least seven in ten cases, is either fluid, semi-solid, or curdy. When the instrument, therefore, penetrates the anterior capsule, and the operator commences his delicate circular movement, the aqueous humour becomes clouded and discoloured, caused by the passage of the parts of the diseased lens into the anterior chamber, where its absorption is more rapid than in the vitreous humour.

"The views of the operator are the same; instead of quickly finishing the operation, the solid particles of the lens should be removed, by several movements of the needle, as much as possible from the axis of vision, either by depressing them into the vitreous humour, or bringing them into the anterior chamber."

The principal peculiarity in this operation, is that of entering the needle as far back as three lines from the cornea, and thus wounding the sensible retina, which certainly does not seem as sensitive of injury as has been supposed, whilst a greater facility is given in placing the lens in any given situation. J. F.

A young American, who is travelling in Europe, gravely announces, in a letter, that Professor Van Grusselbaeh, of Stockholm, has brought to a state of perfection the art of producing a torpor in the system by the application of cold, of degrees of intensity proceeding from less to greater, so as to cause the human body to become perfectly torpid, in which state it may remain for 160 or 1000 years, and then be awakened to a new existence.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c.

(Continued from page 201.)

THE subject of inflammation, especially as connected with the formation of pus, has been critically, and very ably, reviewed by Mr. J. W. Earle. He believes that "pus is not a secretion, but a simple effusion or exudation, and not so much a straining of the juices from the blood, as the blood itself, minus its colouring matter." (1) He conceives that this colouring matter is "merely mechanically wiped off," and for the following reasons:—

1st.—The manner in which the (blood) globules turn upon their axes in the small vessels and channels, 'ces globules se balancent, et presentent toutes leurs faces en roulant dans les vaisseaux,' which offers every point of their surface to the contact of the tissue.

2nd.—The nature of the substance through which they have to pass, in which there are no distinct pores, which might facilitate the transmission of these bodies, although it may be permeated by a fluid.

3rd.—The certainty of there being no chemical change, previously to the effusion of the globules, together with the fibrine and serum; and the improbability of the commencement of any such action at that particular period.

4th.—The total absence of all possible proof that the loss of colour is actually the result of chemical action.

5th.—The impossibility of detecting any change in the globules beyond the loss of colour.

6th.—The certainty of there being no change in the state of the capillaries during any part of the process.

7th.—The consideration of the circumstances which negative the idea of pus being the product of any part of the secretory function.

8th.—The effusion of the different ingredients of the blood, in the order of their fluidity. And, lastly, the certainty that their effusion is simply the result of pressure. (2)

Andral, after having alluded to the experiments of Gendrin, in terms which show that he is not unfavourably disposed towards the inferences which this author has drawn, observes further: "that pus may be formed in a solid, or even a solidified fluid, such as coagulated blood, even in those cases where no trace of irritation, of congestion, or of alteration of texture, can be discovered either by the examination of symptoms during life, or of the different organs on dissection." (3)

Dr. George Burrows, in his Pathological Observations on the Blood, says: "the change of the blood into a fluid resembling pus, I have also witnessed under the following circumstances:—I had severed the two lower limbs from the body of a full-grown foetus, and immersed them in water. When the peculiar decomposition of the animal tissues, which takes place in water, had gone on to a certain stage, upon compressing the limb, there exuded from the divided femoral vessels, a fluid exactly resembling pus." (4)

Mr. Gulliver, after variously repeating Gendrin's experiments, without obtaining the results of the French physiologist, yet says, in reference to the opinion that pus globules are only altered blood corpuscles, "I see no reason to dissent from the above conclusion." (5)

Dr. Hodgkin and Mr. Lister, after patient and laborious microscopical investigation, were convinced that pus never has its origin in altered blood corpuscles, and that the latter particles

and those of pus are "totally distinct from each other." (6)

Dr. Martin Barry has more lately affirmed that he has actually seen the corpuscles of blood transformed into pus-globules. (7) Unfortunately for Dr. Barry, his accuracy as an experimenter is more exceptionable than his zeal; and his inferences upon the subject in question have been sufficiently disproved by Mr. Wharton Jones, who tell us that "the fluid examined by Dr. B. was evidently no other than a mixture of pus and blood, and he has mistaken the changes which the red corpuscles of blood undergo, in consequence of the reagency of pus, for transformation of the blood-corpuscle into a pus-globule." (8)

Henle entertained a different view concerning the nature and origin of pus-globules. He believed them to consist simply of epithelium cells discharged, in consequence of local determination of blood, before becoming developed into definite tissue. This theory he has lately modified, conjecturing that the globules of pus are discharged from the epithelium cells, in which they are enclosed until some circumstance occurs to favour their escape.

A very rational and probable theory upon the subject of the formation of pus-globules is that lately advanced by Gerber, who believes them to be formed from cytoblasts, or exudation corpuscles, which, not advancing to the full development of cells, retrograde and become pus-corpuscles; these, when mingled with serum, with oil globules, and albuminous granules, compose true or landable pus. (9)

This is somewhat a modification of the theory of Vogel, who says that, in the formation of pus, granules first appear; a few of them are then aggregated into a nucleus, around which a semi-transparent vesicle is slowly developed, when the whole gradually acquires the character and consistence of the genuine pus-globule.

Vogel's observations derive an additional probability from the statement of Autenreith, that, "if some of the watery moisture which exudes from the surface of an inflamed part, after the pus has been removed, is collected between two plates of talc, and allowed to lie in the wound, globules are seen to form gradually in it, to enlarge, and become opaque." (10)

According to Brugmans, also, if a suppurating surface be washed clean, pus is shortly seen to be secreted as a clear fluid, which soon become opaque. (11)

The subject of the formation and constitution of pus has been more lately investigated, on a rather extensive experimental scale, by Mr. Addison, of Malvern. "The conclusions to which these experiments lead, are, that pus-corpuscles of all kinds are altered, colourless, blood-corpuscles; and that all limpid, colourless, abnormal discharges are effusions of the liquor sanguinis, containing more or less of the fibrine and corpuscles, in varying proportions. No new elementary particles are formed by any inflammatory or diseased action." (12) And he further remarks: "we have strong ground for concluding that the colourless blood and pus-corpuscles of man are formed from the central portion of the red corpuscles: this central portion becoming developed, and increasing gradually in life, by absorbing and assimilating the colouring matter." (13) The only original feature, in this last paragraph, is that which relates to the absorption and assimilation of the

(6.) Lectures on Mucous Membranes, p. 26; and Appendix to Hodgkin's Translation of Edwards on 'the Influence of Physical Agents on Life,' p. 441.

(7.) Carpenter's Physiology, p. 494.

(8.) Observations on some Points in the Anatomy, Physiology, and Pathology of the Blood, 1842, p. 8.

(9.) Gerber's Anatomy, trans. by Gulliver, p. 90.

(10.) Physiol., vol. 2, p. 119.

(11.) Diss. de Pyogenia, p. 114. Schroeder Van der Kolk, Obs. Anat. Pathol. p. 21.

(12.) Transactions of the Provincial Medical and Surgical Association, vol. 11, p. 253.

(13.) Op. Cit., p. 256.

(1.) Lond. Med. Gaz., 1834-5, vol. 2, p. 142.

(2.) Lond. Med. Gaz., 1834-5, vol. 2, p. 188-9.

(3.) Pathological Anatomy, translated by West and Townsend, vol. 1, p. 503.

(4.) Croonian Lectures, Lond. Med. Gazette, 1834-5, vol. 2, p. 654.

(5.) See Lancet, 1838-9, vol. 2, p. 939.

colouring matter of the blood-corpuscule, by the central portion of that corpuscule. The supposition, however, is perfectly gratuitous; it is totally incapable of proof, and has not a single analogical fact in its favour. The preceding part of the sentence is only a repetition of what M. Bonnet, without either argument or illustration, said five years before, viz.: "we know that blood, to be turned into pus, requires merely to be deprived of its colouring matter." (14)

The latest authority, to whom I have to refer upon the subject of the nature and formation of pus, is Dr. Williams. In an elaborate and elegant paper on the pathology of cells, (15) he observes: "In diameter, the pus-corpuscles exceed, by about three times, those of the red particles of the blood. By most physiologists, this fact is construed into an evidence of the mechanical difficulty which must oppose the escape of the corpuscles, as such, ready formed, from the interior of the capillary vessel: and since, by the recent improvements in the art of minute injection, anatomists, having made themselves acquainted with the measurement and characters of nearly all the capillaries of the body, have now the means in their possession of ascertaining the relation between the volume of the red particles and pus-corpuscles, and the diameter of the capillary channel; and, therefore, of determining and settling the question that it is impossible for a full-grown pus-corpuscule to circulate through a capillary vessel,—and, consequently, that it could not have thus originated in the liquor sanguinis whilst yet contained within the vessels. . . . The rapid advances, which the *cell theory* of nutrition and secretion has recently made, have rendered quite untenable the idea that elaborated pus can pre-exist in the blood. The ascertained evidence, with respect to the production of pathological fluids, is yet too limited to allow any generalizations; but it may be confidently stated, that the ultimate pus-corpuscule finds no corresponding element or analogue in any normal tissue or fluid in the body. In the developed state, therefore, it is unquestionably heterologous from, and alien to, all the healthy and ordinary ultimate constituents of structure. Its departure in physical characters from the cells normal and proper to the part, on which the pus-corpuscule is found, may be due to the operation of one of two causes: either the corpuscule, *ab origine*, must be produced, constructed in its earliest germ, on faulty principles, and from a matrix of morbid quality; or its first production must be in strict accordance with the natural cell-forming process of the part, but that, *subsequently*, under the agency of some unhealthy influence, the development of the particle is completed on a perverted, although determinate, plan."

Without impugning the general accuracy of Dr. Williams' statements and conclusions, it may, nevertheless, be observed, *en passant*, that the fact of the pus-corpuscles not finding an analogue or corresponding element in any of the normal tissues or fluids of the body, is no proof whatever that such pus-corpuscule may not be generated in that body—as well in its circulating fluid, as in any of its cavities, or on any breach of its surface. Being incapable of organization, it is to be regarded, comparatively with the normal solids and fluids of the body, as an heterologue formation, indebted for its existence to a modification or deprivation of the vital processes concerned in reproduction and nutrition. (16) Neither is the greater diameter of the pus-corpuscule, in comparison with that of the capillary channels, any argument against the possibility of the formation of pus in the blood; (17) for, often, in inflammation, as shewn by Mr. Gulliver, the capillary tracks enlarge sufficiently to allow the passage of the pus-corpuscles; and when this fails to occur, either these corpuscles become deprived of their

envelopes (probably by the vital action of the blood), (18) and the latter, together with the granules, are rendered capable of circulating through the natural capillary channels; or the pus collects in masses in the lungs, liver, &c., where it may become consolidated and be permanently detained, or it may excite inflammation and suppuration in the contiguous tissues, promoting its own discharge at the expense of the structure with which it has been in contact.

I have now given, in as far as I have been able to do so, a detailed and faithful account of the different theories which, from time to time, have been advanced to explain the origin and mode of formation of pus. I have not compared these theories, one with another, lest, in the contrast, I might have praised and dispraised without seeming discrimination. I have reflected upon them, however, with much care and attention, and with every impartiality; I have scrupulously repeated most of the important experiments previously detailed; to these I have added many more (I believe them to be original) intimately bearing upon the subject; and I have endeavoured to confirm or correct them by the opportunities of pathological observation (and these opportunities have not been few) which have occurred to me during the last six years.

(To be continued.)

ON THE INFLUENCE OF THE SUDDEN TRAUMATIC OR TOXICAL LESION OF THE SPINAL MARROW ON THE KIDNEYS AND BLADDER.

By E. H. DESPORTES, M.D., M.A.M., &c.

[Communicated by the Author.]

Continued from page 206.

Before closing this Memoir, there is another phenomenon to which I wish to draw the attention of practitioners, and which may, in some respects, be included among the number of those common to the whole system, in cases of a sudden traumatic or toxical lesion of the spinal marrow; but it must, at the same time, be considered as united, by the affected organ, to the disturbance caused in the kidneys. I mean—ischuria vesicalis.

Numerous authors have endeavoured to explain this phenomenon. It has been said that retention of urine—the immediate and constant result of lesions of the medulla spinalis—was produced by paralysis of the bladder; whereas, incontinence was caused by that of the sphincter. But it was asserted that, however probable it may be, that the former is owing to the bladder being incapable of contracting, it is not the same in the latter; for this takes place by *regorgement*, and is the result of the difficulty with which this organ, irritated and inflamed, allows itself to be distended (Dr. Ségalas). It has also been affirmed, that it is not produced by inflammation, but by a prolonged distension of the parietes of the bladder, which almost always ends in paralysis of this organ. This opinion can have but little weight, on reflecting that, during the first two or three days, in paraplegia, produced by a sudden and serious lesion of the spinal marrow, only two, three, or at most four, ounces of urine are secreted *per diem*, a quantity far from being sufficient to distend the bladder; and this is rendered still more improbable, by the care with which the medical attendant, as soon as he perceives that micturition no longer takes place, empties the bladder of its contents by means of the catheter.

But, to what cause must we attribute the retention of the small quantity of urine, secreted during the first two or three days after the accident, as well as that which persists at a later period, when the urine has increased in quantity, contains more mucus, and acquires, from its sojourn in the bladder, alkaline properties? To clear up all doubts, it is enough to remember, that a twofold influence is exercised by all sudden lesions, whether internal or traumatic, of the spinal marrow, followed by paraplegia: the one, general, instantaneous, and

common to all parts of the body;—the other, local, and peculiar to each organ, and each part.

1°. The influence exercised on the whole system, by a lesion of the spinal marrow, at the moment it is produced, manifests itself, as I have already observed, by a general, spasmodic, and violent disturbance in the functions of the organs of sight and hearing; of deglutition, which is rendered impossible; of the voice, which is abolished; of the respiration, which is difficult; of the parts situated in the epigastric region, which are the seat of a painful constriction, &c.; at the same time, the sphincter of the bladder contracts, and retention is produced, first, of the urine contained in the bladder at the moment of the accident, and, consequently, secreted *before*, and which is generally evacuated by means of the catheter; and, next, of the small quantity of urine which reaches the bladder during the three or four following days.

2°. The *ischuria vesicalis*, caused by the spasmodic constriction of the neck of the bladder, and probably from the clonic spasm of the muscular fibres of the body of the organ itself, which deprives them of the possibility of contracting simultaneously, so as to expel the urine, undergoes, in the space of three or four days, considerable modification, especially when the lesion of the medulla produces paraplegia. The clonic spasm of the neck, and muscular fibres of the body, of the bladder, decreases, and is replaced gradually by a paralysis of the same parts. At this stage of the disease, retention is caused by the abolition of the contractile power of the bladder, the sphincter of which is relaxed, so as to leave the neck wide open, and the urine consequently dribbles out, or escapes by *regorgement*.—Again, a phenomenon, very analogous, takes place in a neighbouring organ—the rectum; for, to constipation produced by the clonic spasm of the sphincter and the muscular coat of the rectum, succeeds, after a lapse of time more or less considerable, a cessation of the spasm, and paralysis, which is made manifest by involuntary stools.

It may, therefore, be concluded, in lesions of the medulla, complicated with paraplegia, that there is:—1°. *Ischuria vesicalis*, produced by two very different causes:—first, a spasm, and, next, paralysis—acting successively. —2°. *Incontinence of urine*, caused by the paralysis, and without its being necessary to invent a local inflammation. Finally, here, as in other cases, the truth is made manifest by a more rigid examination of the various phenomena, and by a careful diagnosis founded on clinical observation.

PROGRESS OF FRENCH SCIENCE FROM OUR OWN CORRESPONDENT.

Paris, Dec. 12th, 1844.

On Pseudarthrosis.—Two cases have lately occurred in the wards of Professors Velpeau and Blandin, at the Charité and Hotel Dieu; in the former, the two fragments were separated by the triceps brachialis, which not only prevented consolidation, but, likewise, after resection, coaptation was impossible, until the muscle was divided. In a case, communicated to the *Société Anatomique*, of fracture of the clavicle, the two fragments were about an inch apart, the space being occupied by the sub-clavius muscle, and they became united by a circle of bone, in the centre of which was the muscle, itself ossified. Boyer (*Traité de Mals. Chir.*) states that he always found, in pseudarthrosis of the femur and humerus, a fibrous or ligamentous substance, extending from one fragment to the other, and that, in all probability, this, with very slight modifications, always takes place; such, however, is not the case; for, in Professor Velpeau's case, each extremity of the fracture was received in a kind of cavity, in which it moved freely. The bones which are principally affected with this disease, are, the maxilla inferior, the clavicle, humerus, ulna, radius, femur, patella, tibia, and fibula. *Causes*: are general and local. 1°. *General Causes*: vegetable diet, continued for too long a period; repeated venesections; bad constitution; according

(14.) Lond. Med. Gaz., 1837-8, vol. 1, p. 413.

(15.) Guy's Hospital Reports, Second Series, October 1843, p. 438-9.

(16.) The same may be said of the different varieties of cancer, hydatids, &c.

(17.) These observations are intended to show that pus is *occasionally* formed in the blood, not that it is *invariably* produced in that fluid.

(18.) Or it may be, by the chemical action of the soda and salts of the blood.

to Boyer, sex exercises a degree of influence, but subsequent observation has not confirmed this assertion. Pregnancy is also a cause in some cases; one of the most curious is that related by Alanson (Obs. and Inquiries, vol. iv., case 37); scorbutus, especially that species called by Professor Cloquet *local scorbutus*; rachitis; syphilis; cancer; dangerous fevers; fragilitas ossium, &c. 2^o *Local Causes*: they are: (a) The non-coaptation of the fragments, owing to their extreme obliquity,—to muscular contraction,—to the loss of substance,—to the interposition of a muscle, or a foreign body,—to an effusion of blood;—(b) Mobility of the fragments, produced by the direction of the fracture, indocility of the patient, or necessity of transporting the person from one spot to another, as observed by Larrey in Syria;—(c) The complete isolation of one of the fragments from the other, as when the fracture is intra-capsular;—(d) Penetration of air into the fracture, by a wound; the cure takes place slower when the latter is made with a sharp instrument, than when it is the result of a contused wound, or of one of the ends of the broken bone;—(e) Caries, necrosis, hydatids;—(f) Finally, other causes may destroy the callus after its formation, such as: scorbutus, fevers, excessive diarrhoea, phlegmon, erysipelas, a seton passed through the callus, when it is badly formed, &c.—*Varieties*: Professor Breschet (*Dict. de Med. Verbo Pseudarthrosis*) divides this affection into four classes:—1^o. Accidental pseudarthrosis, by a lesion of continuity in the shaft of the bone, produced by non-consolidation of fractures, with mobility of the fragments, coming on after birth.—2^o. Accidental pseudarthrosis caused by dislocations during intra-uterine life.—3^o. Pseudarthrosis, produced before birth, in the contiguity of the bones, and resulting from the non-formation of the articulations, or of the heads of the bones.—4^o. Pseudarthrosis occurring before birth, by a defect in the continuity of the bones, resulting from the non-consolidation of the epiphyses.—*Treatment*: The different methods proposed, are: friction; compression, and immobility; blisters; seton; caustics; rugination; resection.—*Friction* was known to the ancients, for Celsus expresses himself thus: *Si quando verò ossa non conferbuerunt, quia sæpè motasunt, sæpè soluta, in aperto deinde curatio est; possunt enim coire. Si vetustas occupavit, membrum extendendum est, ut aliquid lædatur: ossa inter se manu demovenda, ut concurrando exasperentur, et ut si quid pingue est, eradatur, totumque id quasi recens fiat; magnâ tamen curâ habitâ, ne nervi musculive lædantur.* (Lib. VIII. cap. I. sect. IX.) Boyer does not approve of this plan, for either the callus has commenced to be formed, or a false articulation has already taken place; in the latter case, it is not sufficient, and, in the former, it is useless, if not injurious, as consolidation may be obtained by rest and an appropriate apparatus. Cases, however, have been recorded, which prove that this opinion is erroneous; thus, White cured a patient by making him walk about, after enclosing the limb in a leather case; Champion, by permitting the patient to move about on crutches; Jacquier, of Ervy, promptly cured a fracture of the tibia, by ordering the patient to walk; and Professor Velpeau has had recourse to the same plan, with advantage, at the Charité. But it is not necessary that an apparatus be worn, to enable the patient to move about, for Larrey presented to the Academy of Surgery an old soldier, who, from a fracture of the femur, was affected with a false articulation, situated in the centre of the bone; the limb was shortened, the fragments very mobile, and yet the patient, by the help of a high-heeled shoe and a stick, could walk about with ease: Sue (*Reflex. sur quelques malad. des os*) relates a similar case.—*Compression and immobility*: This method has been employed with success by Dupuytren, Baillif, Larrey, McDowell, Professors Berard senior, A. Berard, and Velpeau. The last-named surgeon has, since 1836, repeatedly made use of the dextrine bandage recommended by Dr. Thierry, and with such advantage, that he is convinced that most false articulations might be cured without having recourse to an operation, and quotes several cases in support of this opinion; the following being the most convincing:—Mme. B. was affected with pseudarthrosis of the

humerus, consecutive to fracture. During two years and a half, various means were employed, but fruitlessly. Professor Velpeau, being consulted, applied a dextrine bandage on the arm, keeping the part motionless by means of a bandage passed around the thorax, and, two months after, to the surprise and joy of the patient, on removing the apparatus, consolidation was found to be complete. This plan, may, therefore, be employed, whenever the disorder is not kept up by diminished excitation, some general cause, or a degenerescence of the bone.—*Blisters*: recommended by R. Walker, in atonic cases, and those in which a membranous substance has formed itself between the fragments; Professor Velpeau says, that, instead of small blisters, a temporary one, sufficient to surround the limb, is preferable.—*Seton*: employed with success by Rigal de Gaillac, Mott, and Brown, in fractures of the leg; by Horner, Physic, Percy, Dohldorf, Stanfield, Pl. Portal, and McDowell, in fracture of the humerus; by Delpech and Ducachet, in that of the fore-arm; by Weinhold, and Pl. Portal, in those of the femur; by McDowell and Physic in that of the maxilla inferior. On the other hand, it failed with Citandini, in fractures of the ulna; also with Lombard, Earle, Ansiaux, and McDowell, in those of the humerus; while it partially succeeded with Sir B. Brodie and Mr. Wardrop, in fractures of the femur, and with Beclard, of Strasburgh, in those of the humerus. Professor Velpeau states, that it is a very uncertain operation, and that resection, when friction and an appropriate bandage have failed, ought to be preferred. Boyer says, that it often fails, because it acts only on a limited portion of the ends of the fragments; it was to obviate this, that M. Sommé, surgeon to the Antwerp Hospital, proposed introducing a bit of wire, and bringing it out at the same spot, causing the loop to surround the bone, and, by pulling it gently, to make it pass over the whole surface of the fracture. This method succeeded in a non-consolidated fracture of the femur; the callus, however, remained somewhat more developed than natural.—*Caustic, rugination*. The different caustics employed are: actual cautery (Kirkbride); caustic potass (Earle, Hewson); deuto-chloruretum antimonii (Lehman); irritating injections (Hulse); and Mayor (*Nouveau Systeme de déligation Chirurgicale*) relates the following case:—A man, æt. 28, was affected with an oblique fracture of the femur, of which the consolidation could not be obtained by means of the usual apparatus, by friction, nor by keeping the fragments in contact by a tourniquet; the canula of a large trocar was then placed between the fragments, and, eight hours after, an instrument, heated to 212° F., was passed into it, and made to act on the edges of the broken bone; it was then removed, and an apparatus applied, and, two months after, the cure was complete.—M. Barthelemy proposes introducing a canula, and rasping the extremities of the fracture; while M. Hartshorne states, that the application of caustic on the skin is sufficient. These various methods, according to Professor Velpeau, are not so advantageous as the seton.—*Resection*. This operation has been performed by numerous surgeons, and with very different results. Boyer states, that it is a very serious operation, and ought never to be undertaken without mature reflection, and ascertaining whether the non-consolidation is owing to local or general causes. Professor Velpeau, after confirming the preceding opinion, adds, that it may be employed advantageously, when the cause depends on hydatids (as in Dupuytren's case), caries, necrosis, obliquity of the fracture, or the interposition of a muscle between the fragments; and that no operation ought to be performed on those situated at the superior extremities of the humerus and femur, not only on account of the difficulty and danger, but, likewise, because the disease does not give rise to such serious accidents, as when it is placed in the central portion of the bones. Finally, Professors J. Cloquet and H. Berard thus state their opinions on the modes of treatment just enumerated (*Dict. de Med. Verbo Fractures*). "In general, resection, seton, and cauterization ought not to be employed, except when immobility, blistering and frictions, have failed: resection is preferable,

when the disease is caused by a local cause, as necrosis, caries, &c., or when, from the presence of osseous vegetations, the part is deformed; seton, when there are a great many splinters, because it not only creates adhesive inflammation, but likewise facilitates the escape of the particles of bone; it is, also, preferable in all other cases, as it is less dangerous, and as resection may, if necessary, be had recourse to afterwards; cauterisation is useful in cases of non-consolidated compound fractures, when the wound is of a dull white aspect and needs to be stimulated." Cases: 1^o A young man, of a robust constitution, was received in one of Professor Velpeau's wards at the Charité, on account of a pseudarthrosis, produced by a very oblique fracture of the lower part of the right humerus; the mobility of the fragments was so great, that the patient could swing his arm round like a windmill; no noise heard on rubbing the extremities of the fracture against each other, a fact which might lead to the conclusion that some substance was placed between them. Several remedies having been ineffectually employed,—among the number the seton,—and the patient being desirous of being freed from his infirmity, Professor Velpeau decided upon performing resection, in the following manner. An incision, of about three inches in length, was made behind the fracture, and the fragments laid bare. The inferior part being more mobile and more superficial, it was isolated and resected; the superior extended downwards as low as the humero-cubital articulation, and in the proximity of the artery, which rendered its isolation extremely difficult, and it needed all the skill and attention of the distinguished operator to effect it. The resection ended, coaptation was found to be impossible from the presence of the triceps muscle, which was, therefore, raised on the finger and divided with the bistoury; a pledget of lint was next placed between the lips of the wound, and an apparatus applied. Ten days have now elapsed since the operation, and the patient is going on well; the only thing he complains of, is, that he is hungry.—2^o A carter, æt. 24, robust and of good constitution, eighteen months ago, broke his left arm, from a fall; the fracture was situated at the inferior portion of the humerus; an apparatus (from all that could be learnt, of a very imperfect nature) was applied, and he was kept in bed for three months, at the end of which time, the fracture being still non-consolidated, he was permitted to get up and go about his ordinary avocations, a bandage being applied and tightened when it grew loose. Fifteen months passed away, the limb gradually wasting, so that, on his entering the Hotel Dieu, its circumference was one third less than in its normal state; the bone likewise has diminished, so as to be no larger than that of a child. The direction of the fracture is very oblique; the mobility considerable; on the least motion, a noise, similar to that caused by the friction of two surfaces covered with a fibrous or cartilaginous substance, was heard, and the inferior fragment projected forwards, so as to be immediately under the skin. After mature reflection as to the best mode of operating, Professor Blandin performed the following, which may be considered as a new mode of employing the subcutaneous section. The patient being placed in a convenient position, a fold of the skin was made on the outside of the arm, and a bistoury was introduced as deep as the bone, and, on its removal, a blunt pointed bistoury was pushed with care between the fragments, the left index finger being placed on the brachial artery so as to protect it from being wounded. The fibrous layer having been divided, the surfaces were irritated in order to excite the requisite degree of inflammation; a bit of diachylon plaister was put on the wound, and a bandage applied from the head to the shoulder; splints were then placed on, and the limb was fixed to the trunk, the fore-arm being bent. Things did not go on so quietly, here, as in the preceding case; all the day of the operation, and the succeeding night, the arm was painful, and this state increased so much, that, two days after, it became necessary to remove the apparatus. This done, the part was found to be the seat of an erysipelatous redness: the wound had ulcerated, and allowed a sanguino-

lent pus to escape, which increased very much on pressure. After emptying the abscess, an ordinary apparatus was applied, but it was soon removed, the pus having accumulated again; the opening was therefore enlarged, and a counter-opening made on the inner side of the arm, to permit the fluid to flow freely out.—Ought not the non-consolidation of the fracture, and the consecutive accidents, to be attributed to some hidden cause, rather than to the inattention of the practitioner who put on the first apparatus, or to the sub-cutaneous operation?

On the action of Sulphas Quinini, in hypertrophy of the spleen; Dr. H. Gourand, professor *Agrégé* at the Faculty of Medicine, Paris, in a letter addressed to Professor Piorry, and inserted in the last number of the *Journal des Connaissances Médico-Chirurgicales*, after admitting the exactitude of the fact announced by the latter—that the spleen, when hypertrophied, diminished considerably after the administration of the following draught: R. Sulph. quinini. ℥j. acid. sulph. q.s. solve et adde, aquæ distill. ʒj. M. Ft. haustus;—states that this immediate decrease of the matity is not owing to the administration of the sulphate of quinine, since the same result took place when he gave a draught without that salt, or distilled water alone, lemonade, wine and water, or the ordinary tisane. He, therefore, concluded, that the ingestion of a very small quantity of liquid, into the stomach, gives rise in that organ to a development of gas in sufficient quantity to produce a diminution of the matity on percussion, and that it is to this cause that the sonority is to be attributed, not to the diminution of the spleen.—In reply, Professor Piorry performed the following experiments. Two patients, then in one of his wards at the Pitié, were affected with hypertrophy of the spleen; they were made to lie on the right side, and the size of the diseased organ was accurately ascertained by percussion; after some time, though the dimensions continued the same, the matity was less; this is easily accounted for, on reflecting that the gases, contained in the digestive organs, tend to occupy the parts situated superiorly. The same quantity of sulphuric acid, employed in order to render the sulphate of quinine soluble, was administered; by auscultation, the *glou-glou* sound, produced by the descent of the liquid, was heard, but it was not accompanied by that indicating the disengagement of gases. Every fifty seconds, the spleen was examined, and was found unchanged a quarter of an hour after, a fact verified by eight persons present. One of the patients then took ℥j. of the sulphate of quinine in the usual way; and, in less than forty seconds, the spleen began to decrease; two minutes after, its dimensions were three-quarters of an inch less, and considerably more so in five minutes. The next day, the dose having been repeated, the spleen was found to be of its normal size. To the second patient, the quinine was prescribed; but, three days after, the spleen being undiminished, on enquiry, it was ascertained that it had never been taken; being administered immediately, the result was as prompt as in the previous case.

Curious Phenomenon. Case communicated by Dr. Richelot, to the *Société Médico-Pratique de Paris*.—Miss —, æt. 16, tall and well made, presented all the characteristic symptoms of chlorosis, and, at the same time, a phenomenon which as yet has never been mentioned. This young lady, who had, previous to her illness, light brown hair, remarked, to her great grief, that, ever since, she had begun to grow grey, and that this increased more and more. On examination, a great quantity of her hair was found to be white, for about one and a half to two inches, assuming afterwards its natural hue, which gave to her head a curious pie-bald colour. Preparations of iron were administered, and, as the general health improved, the local symptom disappeared, proving that, in chlorosis, not only the tissues become paler, but that likewise the hair may be deprived of its pigmentum.

Parisian Medical Society: Sitting of the 5th Dec. Dr. Macanley in the chair.—The minutes of the last meeting having been read, Dr. Oliffe proceeded to read a paper entitled “Some Reflections on a Case of *Lupus Eredens*.” After some preliminary

observations, in the course of which he took occasion to notice the negligence which prevailed among the profession in the study of diseases of the skin, he stated that his chief object in bringing the present case under the notice of the society, was to call the attention of its members to iodine and its compounds—in particular, the iodide of potassium, in large doses—in the treatment of cutaneous affections, and of *lupus* among others. This disease, which generally fixes its ravages on the face, may appear in any part of the body. The patient, whose case he was about to relate, was a female countrywoman, ætat. 21, of a lymphatic constitution; unmarried; labouring for two years and a half under an affection of the skin, for which she had undergone various treatments, but without avail. The malady had continued its progress, and its intensity had recently increased. Within the preceding six months, the patient's health had become impaired; she had lost her appetite, passed sleepless nights, and towards dusk, daily, she was feverish and agitated. She consulted Dr. O. at the commencement of last August, and, on examination, he found an ulceration, of hideous appearance, occupying the inner surface of the left thigh, presenting several tubercles, covered with livid-coloured scabs, and interspersed with a number of black spots. The scabs being removed with a spatula, several deep excavations were discovered, with destruction of the skin and subjacent cellular tissue, to a very considerable extent. There were, also, several fistulous openings, and a probe, introduced into the sinuses, penetrated to a great depth. The muscular fibres were visible in two or three portions of this vast loss of substance, and several small gangrenous particles, easily detached from the skin, were seen; discharge very fetid; towards the upper part of the sore, there was a cluster of hard tubercles, some of them acuminated, showing a disposition to extend superficially in this part, whilst inferiorly (where the cellular tissue had been destroyed, and the muscular fibres were visible) the disease seemed to invade the deep seated parts; it was here, also, that the sinuses were deepest. The probe was introduced with the greatest caution, as the neighbourhood of the vessels, and the corroding nature of the sore, led Dr. O. to fear the occurrence of hæmorrhage. There were no lancinating pains, but the patient complained of a burning sensation; no heat of the skin adjacent to the parts affected. “On touching the superior parts, and feeling the hard, aggregated, tubercles; on observing, also, the softened, degenerated appearance of the suppurated portion, my first idea,” said Dr. O., “was, that I had to deal with a cancer of the skin, but the absence of the lancinating pains, the number of the tubercles, and other circumstances, soon undeceived me.”

The differential diagnosis of cutaneous cancer, syphilitic tubercle of the cellular tissue (*tumeur gommeuse*, of Ricord), æthyma, aene, and *lupus*, was then laid down minutely by the author, who gave at length his reasons for designating the affection by the term of *Lupus Eredens*. His diagnosis was founded, not only on the distinctive characters generally furnished by the appearance, the mode of development, the symptoms, &c., of the above-mentioned diseases, but also, in this particular case, by the history of the invasion of the affection, the complete absence of all syphilitic taint, either in the patient herself, or in her family, the collateral circumstances, &c. Having treated at length on the pathology of *lupus*, the treatment generally adopted was next adverted to, and a long list of empirical remedies was mentioned. Dr. Oliffe then dwelt particularly on the treatment pursued by the physicians of the Hospital St. Louis, and related several cases which he had seen successfully treated by Bielt, Drs. Cazenave, Gibert, and Lugol, and stated that, when he attended the last named practitioner's visits, some years ago, the doses of iodide of potassium generally prescribed were very small—about grs. vj. or grs. viij. in the twenty-four hours; of late, however, this substance has been given in considerable quantities, and the only inconveniences, which sometimes arise from its exhibition, are slight papular eruptions on the forehead, and transient epigastric

pains. Dr. Ricord, the annual president of the Parisian Medical Society, prescribes the iodid. potass. in tertiary syphilis, in doses of ʒij. in the twenty-four hours.

To return to the patient. During the two years and a half that she had been labouring under the affection, she had consulted a great many medical men, and had submitted to a variety of treatments; she had taken tisanes, *ad infinitum*, of flor. samb. nigr.; of sapon. off.; of flor. tilia Europ.; of solan. duleam., &c.; these had been administered in large quantities: she was taking the latter (decoet. solan. duleam.), when Dr. O. saw her. The topical applications had consisted of frictions with the unguent. hydrarg. fort., poultices, &c. To these remedies, and to several others, the malady had proved refractory; it had continued its ravages, and had, in August last, invaded two-thirds of the inner surface of the thigh.

“Having administered” continued Dr. O. “a brisk purgative, and allowed the patient to repose for a day, I prescribed iodid. potas. gr. x., divid. in dos. No. iij. quarum j. ex cyath. decoet. solan. duleam. ter in die sumend. The sores to be washed with an aqueous solution of iodine (not an official, though an excellent preparation); it was likewise injected into the sinuses, and compresses, steeped in it, were kept constantly applied on the diseased surface. Frictions were made, once a day, on the surrounding indurated parts, with the unguent. iodid. plumb. The iodide of potassium was continued in doses of grs. x. in the twenty-four hours, for about a week, during which period there was a manifest amelioration; the quantity was then rapidly increased, and the patient tolerated, without difficulty, ʒij. in the twenty-four hours. Five weeks after the commencement of the treatment, the tubercles had disappeared, the sinuses were filled up, all discharge had ceased, and the cure was, in fact, effected. When first I saw the patient, she was unable to walk, or even to put her left leg on the ground; in two months, she was able to walk in her garden, and she affirms that she has never enjoyed better health than at the present time.”

The secretary, Dr. Claney, in support of Dr. Oliffe's views, instanced several cases of cutaneous disease, which he had treated successfully, in tropical climates, with the iodid. potassii. In one (a case of *Elephantiasis Græcorum*), the exhibition of this remedy had been very efficacious.—M. MacIise made some interesting observations on the *modus operandi* of iodide of potassium, and a question, raised by Mr. Topham, as to whether its peculiar effects were to be attributed to the iodine alone, or to the combined action of the elements which enter into the various forms in which it is administered, produced a long and animated discussion, in which Drs. Claney, Campbell, and Oliffe, Messrs. MacIise and Topham, joined. In the course of the debate, the peculiar effects of the different ioduretted preparations were adduced as arguments against those who attributed the curative powers to iodine alone. *Ex. gr.*: in tertiary syphilis, the iodides of mercury are found to be of no use, while the iodid. potassii is all-powerful; whilst, in secondary venereal affections, the iodide of potassium is never found to be useful, whereas the *proto-iodid. hydrargyr.* generally effects a speedy cure.

A paper “On Iritis,” by Dr. Claney, was announced for the next Sitting, and the Society adjourned at 10 o'clock.

Academy of Sciences. Sitting of the 9th December—Baron Ch. Dupin in the chair.—Received: “First Report of the Commissioners for Inquiring into the State of large Towns and populous Districts,” vols. 1 and 2, offered by James Randal Martin, Esq., one of the Commissioners.

Election to the place in the Section of Natural History, vacant since the Death of Geoffroy St. Hilaire.—The candidates were: MM. Duvernoy, Valenciennes, Dujardin, D'Orbigny, Bibron (*ex æquo*), Guérin, Meneville, and Gervais. Number of votes, 53; majority, 27; M. Valenciennes obtained 33; M. Duvernoy, 17; M. Dujardin, 3; M. Valenciennes was, therefore, proclaimed member; his election will be submitted to his Majesty's approval.

On Lactic Acid: Memoir read by M. Pelouze, M.A.S.—This acid is very common in the animal economy: it is met with in milk, in its acescent state; in gastric juice (demonstrated by the researches of MM. Bernard and Barreswill); in the white of the egg (M. Gobley); and in numerous other substances; is colourless; soluble in water and alcohol; of an acid, disagreeable taste; formula, $C^6 H^5 O^6 = C^6 H^5 O^5 HO$.—The action of heat is remarkable; at $266^\circ F.$ (which may, however, be raised without inconvenience) a colourless liquid passes over, which is composed of water, containing minute proportions of lactic acid, and it continues to do so as long as any water remains in the acid: at $482^\circ F.$, there is a residue of a yellow tint, solid, easily fusible, very bitter, almost insoluble in water, very soluble in alcohol and ether; but no gases are disengaged. This substance is anhydrous lactic acid (formula, $C^6 H^5 O^5$), and may, by long boiling in water, or by being exposed to a moist atmosphere, be converted into ordinary lactic acid; this change is instantaneous, when it is added to a solution of a soluble base. With ammonia, anhydrous lactic acid forms a peculiar compound, the odour of ammonia being easily detected; formula $C^6 H^5 O^6 H^3 Az.$ Above 482° , a gas escapes, which is the oxide of carbon, with a small proportion (4 or 5 per cent.) of carbonic acid; this last, however, increasing gradually in quantity as the distillation goes on, so that, at the end, it forms about one-half. Other substances, likewise, pass into the receiver:—1^o. A beautiful crystallized compound, which, as M. Guerardt proposed, may be called, *lactide*: formula $C^6 H^4 O^4$; with ammonia it is liquified; the gas is absorbed with development of caloric, and the substance obtained (*lactimide*) is composed of 1 eq. of ammonia, and 1 of lactide.—2^o. A new compound, called by the author *lactone*, because it is to *lactic acid* what *acetone* is to *acetic acid*: it is hydrated: formula, $C^{10} H^8 O^4 HO$; may be obtained anhydrous, by leaving it in contact with chloruret of lime for several days. It is a colourless or slightly yellow liquid, becoming dark by exposure to air; of a hot and pungent taste; aromatic smell; lighter than, and soluble in, water; burns with a bright blue flame; boils at $198^\circ F.$; formula: $C^{10} H^8 O^4 = 2 \text{ eq. lactic acid, less 2 eq. carbonic acid, and 2 eq. water } (C^{12} H^{10} O^{10} = C^{10} H^8 O^4 + 2CO^2 + 2HO)$; or 2 eq. lactide, less 2 eq. carbonic acid ($C^{12} H^8 O^8 = C^{10} H^8 O^4 + 2CO^2$). Finally, there remains, after distillation, a charcoal, with difficulty incinerated, and of which the weight is about 1-20th of the acid employed.—*Lactates of iron, magnesia, and zinc*, contain 3 eq. water of crystallization; are nearly insoluble in water, probably isomorphous;—*lactate of lime* contains 6 eq. water of crystallization; nearly insoluble in water; soluble in alcohol; solution decomposed by ether, and a white crystalline precipitate obtained;—*lactate of ammonia*, deliquescent, non-crystallizable;—*lactate of copper* is a beautiful blue salt; crystallizes in rectangular prisms; contains 2 eq. of water of crystallization, which it loses when heated to $248^\circ F.$ At other times, it crystallizes in large prisms, of a dark-green colour, which may be converted into a blue, by solution in water: formula, $Cu O, C^6 H^5 O^5 2HO$.

On the Carbon (Charbon) generated in the Lungs, during Manhood and Old Age: by Nathalis Guillot, M.D.—From his researches, the author concludes:—1^o. That during manhood, and chiefly in old age, carbon is generated, and accumulated in the respiratory organs, in a divided state, in various quantities in different professions.—2^o. That the carbon, thus deposited in the tissues, does not come from the exterior.—3^o. That wherever a sufficient quantity is collected, so as to form a mass of half a line in diameter, the air-cells, arteries, and veins are obliterated, and the lungs are converted into a substance of a black colour, which may occupy more than one-half of these organs.—4^o. That respiration and circulation do not take place in the parts in which the carbon is deposited, and inflammation does not there develop itself.—5^o. That the successive accumulation of the carbon, beyond a certain extent, produces fatal consequences, by the obliteration of the lungs.—6^o. That the presence of this substance, in

the lungs, renders inflammation and sanguineous congestion fatal, which, otherwise, would not have been so; and causes asphyxia to be so rapid in old age.—7^o. That these molecules of carbon appear to have considerable influence on the phenomena which are produced in and around the tubercles. When these are formed in the lungs, and carbon is deposited around them in abundance, they do not undergo those successive changes, peculiar to phthisis, when this disease goes through its various phases.—8^o. That tubercles, when calcareous, contain no fat, and do not increase; no new vessel is developed around them, and if, perchance, they existed before this substance was deposited, they are obliterated.—9^o. That the production of carbon in the lungs—independent of the kind of profession—produced by old age, is deserving of attention, not only in a physiological, but likewise in a pathological, point of view, since it may aggravate the pulmonary diseases of old persons, and, by surrounding the tubercles, thus prevent their development.

M. Melsens presented a long Memoir, in which he confirms, by chemical analysis, the opinion of Dr. Nathalis Guillot.

On Two New Metals: discovered in the *tantalite* of Bavaria and North America, by Mr. H. Rose. The acid, obtained from the *tantalite* of Bavaria, is composed of two acids: the one very like the *tantalie acid* procured from the *tantalite* of Finland; the other, the oxide of a metal (Niobium), or *niobic acid*, offers, also, some resemblance with *tantalie acid*; the principal difference being, that the perchloruret of *tantale*, prepared by means of charcoal, *tantalie acid* and chlorine, is yellow, very fusible and volatile: the perchloruret of niobium, prepared in the same manner, is colourless, not fusible, and not very volatile. Niobium is, when isolated, under the form of a black powder; washed with water, to remove the hydrochlorate of ammonia, the liquid passes off limpid, as long as the salt is present, and becomes turbid so soon as no more is found: this turbidness may be prevented by the addition of a few drops of alcohol. The second metal, which the author has not yet studied sufficiently, he calls *pelopium*.

On the Acidity of Gastric Juice: by M. Melsens.—The researches of the author prove, that a free acid exists in the gastric juice,—a fact announced by M. Blondel, in his Thesis, where he states positively that this fluid dissolves carbonate of lime, with effervescence; and by Professor Dumas, who remarked, that artificial digestion took place with difficulty, when the gastric juice was mixed with chalk; and that the addition of a small quantity of hydrochloric acid caused it to take place immediately.—One ounce of gastric juice was mixed with 7.007 grs. of white marble, which, being examined two days after, was found to weigh only 6.937, loss 0.070.—3xxvijss. gastric juice was mixed with 20 bits of Iceland spar, weighing 3.462 grs.; after 24 hours, it was found to weigh only 3.354 grs., loss 0.108 grs.—3xxvij of a dirty gastric juice, full of bits of bread, dissolved 0.071 grs. of spar in 12 hours.—3xxvij, collected after an alimentation with boiled beef, dissolved 0.166 grs. of spar.—3ij of a chymous paste, taken from the stomach of a dog fed on grease and bits of gristle, dissolved 0.057 grs. of spar.

Analysis of Gastric Juice: by MM. Bernard (de Villefranche) and Barreswill. From their researches, the authors conclude:—that the acidity of gastric juice is not caused by the biphosphate of lime, but from the presence of a free acid;—that this free acid is lactic acid, combined with a small quantity of phosphoric acid.

Theory of the Modifications produced in the Eye, according to the distance of the Object looked at: by J. D. Forbes, F.R.S., &c. The author considers the cause of the change of focus to be situated in the crystalline lens, and that it is produced by the pressure, exercised on the eye, by the contraction of the muscles of that organ, which is communicated to the lens, causing it to become round, and, consequently, increasing its refractive power.

On Life, Sleep, and Death.—M. Raphael de Zotof, of St. Petersburg, Constiller de College, presented a memoir on this subject, in which he indicates a method to prevent burying a person prematurely. As soon as all hopes are lost the

corpse must be placed in a glass coffin; the cover being fixed on by a substance through which the air can penetrate, an opening must be made at each extremity, so as to permit galvanism to be employed, and it is only some time after doing this, that the body ought to be buried.

Academy of Medicine.—Sitting of the 16th Dec.—Dr. Ferrus in the Chair. Drs. Longet and Manee write, stating their intention of placing themselves on the list of candidates for the vacant place in the section of physiology.

The president informed the Academy, that the Annual Meeting, on the 17th, would take place at 1 P.M.; but, at the request of several members, the hour was changed to 2 P.M. The Academy then formed itself into *Comité Secret*, to hear the continuation of the reports on the prizes.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

(From our Correspondent, Dr. MUSPRATT.)

Liebig's First Lecture.—Professor Liebig delivered his first lecture for this winter, on Thursday, the 28th of November. It was upon sulphuret of cyanogen and the products of its decomposition.

When sulphocyanide of potassium is treated with chlorine gas, a deep yellow precipitate is produced, which contains all the sulphur and cyanogen of the salt employed, while chloride of potassium remains in the solution.

$K Cy S_2 + Cl$, giving $Cy S_2$, and $K Cl$.

If this yellow body be distilled, bisulphuret of carbon and sulphur are disengaged; but, when it is exposed to a very strong heat, a grey powder is obtained, containing none of the latter element.

4 atoms of sulpho- $\left\{ \begin{array}{l} C_6 N_4 = Cy_3 N \text{ Mellon.} \\ C_2 S_4 \text{ Bisulph. of carbon.} \\ S_8 \text{ yielding } S_4 \text{ Sulphur.} \end{array} \right.$

This substance, which I have named *mellon*, is a compound radicle, analogous to cyanogen in its functions. I undertook, last summer, an investigation of mellon (vide June number of the "Annalen"), in order to convince some chemists of its existence.

To obtain a combination of this body, I employed equal weights of prussiate of potash and sulphur, and heated the mixture, until it became fluid. At this stage—

We have $\left\{ \begin{array}{l} S_4 Cy_2 + K_2 \\ 4 (S_2 Cy + Fe.) \end{array} \right.$

And, as the temperature augments, sulphuret of carbon is eliminated, but no free sulphur:

$4 (S_2 Cy + Fe.) = C_8 N_4 S_8 Fe_4$ sulphoc. of iron.
Minus $C_2 S_4$ sulphu. of carbon

Give .. $C_6 N_4 S_4 Fe_4$

The $C_6 N_4$ is combined with potassium, which has not been introduced in displaying the decomposition.

By dissolving the mass in water, and evaporating, a yellowish substance, not perfectly pure, is obtained. The foreign matter appears to be a singular compound of sulphur and potassium, but I have not further investigated it. I added acetic acid to the mixture, allowed the solution to crystallize, and edulcorated the crystals with water, until they ceased to give a red colouring with a salt of peroxide of iron. If, after repeated crystallisation, the mellonide of potassium is coloured, it must be re-dissolved; treated with a little more of the acid, boiled with animal charcoal, and filtered; by which means the tinge is removed, and, upon refrigeration, the salt is obtained in fine colourless needles.

Mellonide of potassium, when heated, is resolved into cyanogen, nitrogen, and cyanide of potassium.

$C_6 N_4 + K$ giving $2 Cy + N$ and $K Cy$.

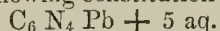
This salt can also be prepared by adding the residue, obtained in the distillation of sulphocyanogen, to fused sulphocyanide of potassium; sulphur and sulphuret of carbon are evolved, while a brownish glacial mass remains, which, when dissolved in boiling water, and allowed to cool deposits the mellonide of potassium.

the most advantageous method for its preparation is to fuse together:

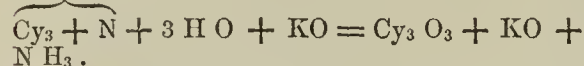
47 parts prussiate of potash,
17 parts carbonate of potash, and
22 parts sulphur.

The excess of potassium, presented in the alkaline carbonate, allows the formation of sulphuret of iron, and sulphocyanide of potassium, which do not eviscerate any of the mellonide.

Gmelin obtained a mellonide of lead, to which he gives the following constitution:



Four of the atoms of water are expelled, at a temperature of 248° Fahr. Mellon itself is never perfectly pure, and in this respect resembles the sesquicyanide of iron; the purest I have obtained, is by heating cautiously the basic mellonide of mercury. When procured from this source, it is of a bright yellow colour, and, if boiled with potash, yields cyanurate of potash and ammonia. Mellon.

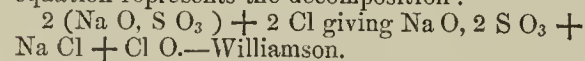


By investigating the action of potash, &c. upon mellon, in different proportions, various new and interesting compounds must emerge, which, if studied, will throw a further light upon the numerous metamorphoses that the sulphur compounds of cyanogen are capable of undergoing.

Two new methods for obtaining hypochlorous acid*:—1st Method: Pass a stream of chlorine gas into milk of lime, until the whole of the carbonic acid is liberated; then distil the liquid over an open fire, and pure hypochlorous acid will be obtained in the recipient.

Ca O, C O₂, + 2 Cl giving Cl O + Ca Cl.—Williamson.

2nd Method: Pass a brisk stream of chlorine gas into sulphate of soda; the absorption of the gas at the commencement is very rapid, and the liquid does not assume a yellow colour until the whole of the salt is decomposed. In this process, bisulphate of soda, chloride of sodium, and hypochlorous acid, are formed, the last of which is obtained by distillation. The following equation represents the decomposition:



Giessen, 29th November, 1844.

By SIGISMUND SUTRO, M.D.

Cure of Pseudarthrosis, by the Introduction of Lime and Phosphoric Acid into the System.—Callus, like bones affected with mollities, is often in want of the necessary solid constituent, viz., phosphate of lime; thus, the proper agglutination of divided bones would be promoted, if the wanting materials could be supplied through the digestive organs. This is illustrated by the two following cases.—1^o. Spontaneous fracture of the femur: false articulation formed 10 months after.—A female, of relaxed habit, 35 years of age, who had borne seven children, and had not menstruated for the last three months, was received into the hospital on the 31st of June, 1841, complaining of lancinating pains in the situation of the right femur, which had persisted for the last six months, and which extended from the trochanter major down to the knee-joint; these pains were increased on pressure, and were much more severe during the night. The painful spot was neither hot nor swollen. A warm-bath was ordered; linim. ammoniato-campbor. employed externally, and Dover's powder prescribed, with a milk-diet. The patient enjoyed some sleep in consequence, and the pains diminished a little, but returned on every movement of the limb. Colchicum and antimonial wine were given at the same time, and the patient so far recovered, by the 2nd of July, that she could get up and take exercise without inconvenience. On the 13th July, while standing near

her bed, she was seized with a violent fit of coughing, when she suddenly exclaimed that she had broken her right thigh, and, on examination, a transverse fracture was discovered close under the trochanter major. The patient was immediately placed in a horizontal position, the thigh placed on an inclined plane, and a nourishing diet allowed her. By the end of the third week, the formation of callus was very distinct, and, at the end of the second month, it had been deposited in considerable abundance; but, after the bandages were removed, the ends of the bone were found to be ununited, and to have formed a false joint. For eight months, all possible remedies were tried in vain (except the seton, and sawing off the ends of the bone, and then rubbing them together), when the idea occurred to the author, that the inorganic constituents of the bone might be wanting, and he accordingly ordered her to take: 1 ounce of lime-water, and 15 drops of phosphoric acid, four times in the day, (commencing from the 17th of May). Within three weeks, the fracture was completely consolidated, and, on the 3rd of July, the patient left the hospital, perfectly cured, with the exception of the bone being much enlarged at the point of union (a week after, she had again commenced to menstruate). Towards the end of 1843, the patient was again brought into the hospital, on account of an attack of pneumonia, when the author found that the abnormal size of the bone had almost entirely disappeared.—2^o. Fracture of the left leg; the fractured spot still moveable, six weeks after.—A strong, healthy man, 45 years of age, was brought into the hospital, on the 13th of July, 1843, on account of a fracture of the tibia and fibula of the left leg, accompanied with contusion of the soft parts. After the lapse of six weeks, in spite of all necessary care and attendance, no formation of callus could be perceived; therefore, the same medicine was ordered as in the above case, with a nourishing diet, and the leg was placed, without a bandage, between two pillows, and kept perfectly motionless. After eight days, the formation of callus was perceived, and, in a fortnight more, the patient began to walk with crutches. On the 22nd of September, he left the hospital, perfectly cured, the remedies having been discontinued, two days previously.—The author has since employed the same treatment in several patients, for the purpose of promoting the consolidation of fractures, and he promises to give the details of the cases at some future period.—Dr. Thielman; in Medic. Zeetung Russlands.

The above interesting cases clearly shew, that phosphoric acid and lime, administered internally, are not excreted by the kidneys, nor evacuated by the alimentary passage, but are attracted by, and imparted to, the bones. I should, therefore, propose the use of this remedy in such diseases of the bones as are based on original debility, as rachitis in all its variations, passive enlargement, &c. The remedy might likewise be useful in the so-called "dolores osteocopi," subsequent to the injudicious use of mercury, and ought certainly to be tried, no certain cure having yet been discovered for these intolerable pains. But, perhaps, I ought first to explain the cause of these peculiar and excruciating pains? I answer: that the mercury, tending to liquify, as it were, all the organs into which it is diffused, and to cause a mutual repulsion between the minute organic particles, a greater bulk, or passive swelling (if I may be allowed thus to express myself) of these parts, and particularly of the bones, takes place. If, during the use of mercury, the patient does not expose himself to taking cold or to other injurious influences, the tumefaction will gradually diminish, and the organs will return to their original size, so soon as the anti-consolidating tendency of the mercury has ceased to act. Should, however, any serious disturbance or interruption to this action be induced in a patient, while under the influence of mercury, the relaxed parts are partially and irregularly contracted, and thus made to retain their abnormal shape, even after the original or exciting cause has ceased. The soft parts, as the muscles, the nerves, the veins, and arteries, which, in like manner, were

originally enlarged by the action of the mercury, resume after a time their former size, and thus the disproportionate and abnormal bulk of some parts of the osseous system causes pressure upon the nerves of the soft parts, and the above-mentioned "dolores osteocopi" as a consequence; these pains are, also, increased by the warmth of the bed, which favours general expansion. It appears, then (if my view be considered as correct), that the direct cause of these dreadful pains is to be sought for in the expanded and loosened state of the osseous substance. Phosphoric acid and lime, when administered together, are shewn to be attracted towards the osseous system, and, as a consequence of the common laws of organic metamorphosis, they must promote a transformation within the bones, and an increase of their consistence. It may happen that the remedy, proposed, will not answer the expectation which, theoretically, I am induced to form of it; but aware, as our Profession must be, of the inefficiency of the various modes of treatment hitherto adopted against this distressing malady, I hope to be pardoned for having intruded my suggestion through the valuable space of this Journal.—Note of Dr. Sutro.

Emplastrum Oxyroceum.—This plaister is frequently employed by country-people, in luxations, swellings, rheumatic complaints, &c. According to the original recipe, it is supposed to have consisted of seven per cent. of saffron, with galbanum, gum ammoniac, myrrh, frankincense, mastich, turpentine, pitch, colophonia, and wax. Many attempts have been made of late to simplify the plaister, but several of its good qualities were, in consequence, lost. The author states, that, by the following prescription, a good plaister may be obtained, which will admit of being spread with facility. It must be moderately stirred in the vessel, till it becomes cool, in order to cause the appearance of the proper red colour.

R Colophon. lb. j.

Cer. flav. lb. ss.

Axung. porc. ʒiiss.

Terebinth. commun. ʒiiss.

Galbani depurati.

Gum. ammon. depur. aa. ʒiss.

Bol. armen. pulv.

Lign. santal. rubr. subtiliss. pulv.

Croci opt. pulv. aa. ʒss.

Colophonio cum cera et axungia liquato, adde in terebinthina solutum galbanum et ammoniacum, postremo crocum cum bolo et ligno santali.—Jahn in Buchner's Repertorium.

Professor Buchner remarks, that he entertains no doubt of the efficacy of the above plaister, but he cannot see the utility of the addition of the bole and saunders-wood, for the sole purpose of dyeing the composition, without their exerting the least influence on its remedial action.

Emplastrum Lithargyri Compositum.—The efficacy of this plaister has been greatly aided by the plan of dissolving the galbanum and ammoniacum in alcohol, and then adding the evaporated solution, with the turpentine, to the other ingredients. The resins being more readily soluble in strong alcohol, the author justly condemns the prescription of Soubeiran, according to which weak alcohol is to be employed.—Jahn: ibidem.

Form of Adhesive Plaister, peculiarly suitable for Bandaging Issues, &c.

R Resin. burgund. ʒvj.

Cer. alb. puriss. ʒiv.

Terebinth. commun. ʒij.

Sevi ovill. ʒj.

Liquata et colata agitantur, ut albescant, et in magdaleones formentur. Sign. emplastr. adhesiv. ad cantheria.

On Formic Spirit.—The juice obtained from the ant shows an acid reaction, on distillation with water or with spirit, the residue being very acid after the first distillation. The author recommends, therefore, to pour an additional 2 lbs. of spir. vin. rectificat. on the residue left from the distillation of 2 lbs. of ants, in 4 lbs. of spir. vin. rectif., and 4 lbs. of water, and which should have yielded about 4 lbs. of formic spirit; then, to renew the distillation, for the second time, so as to obtain from 2 lbs. of ants about 8 lb. of formic acid. The second product is quite as strong as

* These processes for obtaining the hypochlorous acid are excellent, and much to be preferred to the method discovered by Balard, in 1834, which was treating the suboxide of mercury with chlorine—2 Hg O + 2 Cl yielding (Hg Cl, Hg O) and Cl O.—M.

that prepared according to the pharmacopœia; nay, the spirit, yielded on the last distillation, seems to display a stronger ethereal odour, than that yielded by the first. It may be here observed, that an artificial formic acid, formed from the action of cream of tartar, binocide of manganese, sulphuric acid, and rectified alcohol, must not be substituted for the officinal formic spirit, because it is destitute of the ethereal formic oil, which forms so essential a constituent of the real formic spirit.

Ferrum oxydatum nigrum may be prepared, according to J. Preuss, by digesting freshly precipitated hydrated oxide of iron, with metallic iron and water. Certainly, a black protoxide of iron is thus obtained, which is readily and completely dissolved in muriatic acid, and, therefore, seems an advisable preparation. But it is materially different from *æthiops martialis*, by possessing the disadvantageous property of gradually decomposing the water it contains, and of thus being transformed into a red or per-oxide of iron, even though it be kept in closed vessels.—*Jahn of Meiningen: ibidem.*

On the Presence of Gravel in the Uriniferous Tubes of Infants: by Julius Schlossberger, M.D., late Assistant Physician to the Catharinen Hospital, of Stuttgart, (from *Roser & Wunderlich's Archiv.*)—The mode of formation, and different varieties, of urinary calculi, in the various parts of the urinary system, viz.: in the pelvis of the kidney, in the ureters, the bladder, and the urethra, have already been most accurately studied and described; but, on the formation of stone or gravel within the secretory parts of the renal gland, within the tubuli uriniferi themselves, we scarcely find even a superficial notice in works on pathological anatomy; and still this phenomenon is so frequent, with newly-born infants, at least, that Dr. Engel, of Vienna, summarily pronounces it as a normal condition. But, should even this condition prove to be the physiological one, it would not be the less worthy of investigation, than if it were pathological. The author, then, cursorily glances over the literature bearing on this subject, and shows how little mention is made of the above question. He then proceeds as follows: "On making a longitudinal section of the kidney of the infant, you will find, on both cut surfaces, the urinary tubuli, passing from the papillæ up to the extremity of the cortical substance, beautifully injected with a yellow powder; by pressing on the canals, the powder passes with a quantity of dark fluid into the renal pelvis, which, also, is, itself, sometimes filled with a similar powder. Microscopic examination rarely shows this deposit to be possessed of any crystalline shape. It is, generally, as an amorphous powder, consisting of oblong particles, greatly resembling some forms of urate of ammonia, as described by Fr. Simon. Chemical analysis shows, that it always contains uric acid, and urinary colouring matter, a beautiful red colour and effervescence being produced, when it is heated with nitric acid. If treated with cold nitric acid, the powder sometimes becomes greenish, as is the case with the colouring matter of bile." Rokitsanski has, likewise, found granules of uric acid in the renal substance. Here, follow the statistical results of the *post-mortem* examinations made by the author, in the Catharinen Hospital. He, himself, made 49 *post-mortem* examinations of newly-born infants (in 1841 and 1842), and received the accounts of 6 other cases. Among these 55 cases, 18 showed the above-mentioned renal injection. The causes of their deaths were: in eight, marasmus, or atrophy: that is to say, a total derangement of the alimentary functions, with so peculiarly rapid an emaciation, that this was considered as the chief morbid symptom; five died in consequence of tetanus; the others succumbed under different diseases. The author then gives a minute description of the state of the urinary organs in general, and of the kidneys in particular, in these cases of injected uric acid. He then criticises the explanations of this phenomenon, hitherto afforded. Charcelay considered it as a constant sign of *nephritis albuminosa*, whilst the author, in the above cases, did not discover any inflammatory phenomena in the kidneys. Billard favoured to connect this state with jaundice.

The author certainly found a yellow colour of the skin frequently to coincide with urinary gravel, but, at the same time, the former often occurs without the latter, and the latter without the former; thus, both may be independent of each other. The author, here, cautions us against the abuse generally made of the term *icterus*, which comprises, or may be dependant on, the most different morbid states and affections, though it only denotes one symptom, viz.: a yellow colour of the skin. He finds his own explanation of the above interesting phenomenon, on two principal points: 1. The *relative or absolute excess of uric acid, urinary colouring matter, and urates*. This excess occurs in a normal state in several animals (serpents, birds); he then refers to the frequency of urinary calculi in the fetus (according to Billard, Wilson, &c.), and states, as a matter of regret, that, notwithstanding Lecanu's work, an exact analysis of the urine of newly-born infants is still wanting. The uric diathesis of infants is probably connected with the great intestinal derangements manifested in many diseases at this age; for, even in adults, disturbances of the alimentary canal, the liver, &c. favour the production of an excess of uric acid. 2. It is ascertained by physiological and pathological facts, that the temperature of the infant at the breast is very apt to be suddenly depressed. Magendie declared this low state of temperature, in old persons, to be the chief cause of the formation of urinary calculi, inasmuch as the urine is then unable to hold the same quantity of uric acid in solution; how much more, then, must this be the case in infants, whose diseases so frequently manifest a marked depression of animal heat. The author adduces proofs of lowered temperature in *œdema neonatorum*, *atrophia* and *icterus neonatorum*, according to his own experience, as well as that of Billard, Trousseau, &c.; and he then asks the question: why urinary gravel is so often deposited in the tubuli uriniferi of infants at the breast? The sudden cooling of the temperature operates, perhaps, as an astringent on the papillæ, by which means the uric acid (which abounds in their urine) is precipitated as a lateritious sediment. Perhaps spasms or obstruction of the papillæ sometimes take place through inflammatory action. No cause can be assigned in the size of the uriniferous tubes themselves, for they are comparatively larger in the newly-born infant, than in the adult.

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

INTESTINAL CONCRETION.—At a meeting of the Sheffield Medical Society, Mr. Reedal exhibited a portion of the colon, and also a concretion of feculent matter, taken from the body of a man who died after a few days' illness, suffering from symptoms of ileus. Many years ago, he had taken, by mistake, an ounce of carbonate of potash, which made him very ill for some time, and shortly afterwards he perceived a tumour in the left iliac region, which was treated for hernia. On one occasion, having suffered from constipation, he was removed some distance in a cart, by the jolting of which it appeared as if something had been removed, as the bowels were freely opened. On examination after death, the ascending colon was found to be very much distended and thickened, and when opened, presented the appearance of inflammation with ulceration of the mucous lining. In the cæcum was found the concretion, which weighed four ounces and measured six inches in circumference. On a section being made, it was found to be composed of feculent matter, in concentric layers of a light brown colour; externally it was dark, nearly approaching to black.

FUNGUS HÆMATODES.—At a meeting of the Sheffield Medical Society, the president exhibited a preparation of fungus hæmatodes, arising in the antrum, and passing into the mouth. Its growth was very rapid; and the hæmorrhage had been very frequent, and to a great extent, so as to produce very great exhaustion. It was determined to tie the carotid as a preliminary step to the removal of the fungus, but the system was so prostrated that the removal of the diseased growth

was not attempted. The patient died three hours after the artery was tied. The antrum was completely filled by the fungus, which passed outwards, and then turned inwards, filling the palate, and resting on the tongue, impeding deglutition and speech. The floor of the orbit showed the commencement of absorption, and the sella turcica also presented the appearance of disease.

PERFORATION OF THE ILEUM.—Dr. Favell, at a meeting of the Sheffield Medical Society, exhibited a portion of intestine taken from the body of a young lady, aged 18 years, who died a few days previously of severe and extensive peritonitis induced by perforation of the ileum. The patient had been in delicate health for a considerable time, and had suffered from three attacks of low fever within a comparatively short period. She appeared to be gradually recovering from the last attack, when, on the 23d of October, she was suddenly seized with severe abdominal pain, sickness, and other symptoms of peritoneal inflammation, and died, after much suffering, during the night of the 26th. On examining the body after death, the whole of the peritoneal covering of the intestines was found to be intensely injected, and the convolutions adhering by coagulable lymph. The pelvis contained a small quantity of fluid fæces; large patches of deep ulceration were observed in the lining membrane of the ileum and cæcum, and two perforations, each about the size of a split pea, were noticed in the former intestine, about six inches from its junction with the latter. The omentum was in a state of sphacellus.

ANEURISM OF THE ABDOMINAL AORTA.—Dr. Branson, at a meeting of the Sheffield Medical Society, exhibited a specimen of aneurism of the abdominal aorta, taken from an infirm patient, aged thirty-three, a table-blade forger, of intemperate habits, who died suddenly on the 23d of October. The aneurismal tumour originated nearly opposite the point where the celiac artery is given off; the sac was of considerable size, and embraced four of the vertebræ, the bodies of which were deeply excavated. The sac itself was ruptured in two places, and more than a quart of coagulated blood was found between the peritoneum and the muscles; the left kidney was buried in the clot. The man continued at his employment till within five weeks of his death, and complained only of slight symptoms of nephralgia. The case was instructive, as showing how great may be the amount of mischief, and how comparatively trifling the symptoms. The anterior walls of the thorax, of this patient, presented a curious congenital malformation; the sternal extremity of the third rib on the left side was wanting for the space of four inches, and the fourth rib was completely separated from its cartilago; the vacant space was occupied by a strong tendinous expansion.—Through the centre of the sternum also there was an opening, the size of a sixpence. The man had never received any local injury.

FRACTURES OF THE CERVIX SCAPULÆ.—Mr. Hancock, in the *Provincial Medical Journal*, says, while speaking of fractures of the neck of the scapula, that they resemble dislocations into the axilla in general appearance; in the projection of the acromion process; the depression and flattening beneath this process; the loss of power, and elongation of the limb. They differ from dislocation, in the freedom with which the surgeon may move the arm in all directions; the facility of bringing it to the side; the crepitus felt when the parts are restored to their natural situation, and which can best be felt, by placing the finger or thumb upon the coracoid process, whilst the arm is rotated; the facility with which the deformity is overcome by merely pushing the arm upwards and a little outwards; and lastly, the return of the deformity immediately the arm is allowed to hang unsupported. When these signs are present, the case is one of fracture, and not dislocation.

SEPARATION OF THE EPIPHYSIS OF THE HUMERUS.—Mr. Hancock, describing this accident in the *Provincial Medical Journal*, says, the principal diagnostic signs are the tumour at the end of the coracoid process; the subsidence of the swelling or tumour, when the arm is drawn downwards and backwards, and its return when the arm is let go; the mobility of the limb; the head of the bone

not obeying the motions of the shaft when the elbow is rotated: and when the arm is drawn down, the crepitus, or sensation of rubbing, as described by Mr. Allan. Sir Astley Cooper has pointed out the true nature of these accidents, as ascertained from actual dissection, and also the process by which nature effects a reparation of the injury. He says, that upon dissection, in young persons, the head of the bone is found broken off at the tubercle, but remains in the glenoid cavity; that to remedy this mischief a great quantity of ossific matter is thrown out from the periosteum and fractured neck of the broken bone, but very little from the head. A cup of bone is formed upon the fractured neck of the shaft in one of his preparations, which supports the head of the bone, so as to prevent the neck separating from it; a slight union is produced by the cancellated structure, the principal callus being formed by the outer surface, and it increases the bone. In one case which Sir Astley Cooper dissected, the fracture occurred within the capsular ligament; no bony union had occurred, the fragments being joined together by means of a ligamentous substance. With respect to the treatment, he recommends, in a young subject, treating it by binding a splint on the front and back part of the arm with a roller, placing a pad in the axilla, and using a clavicle bandage, the hand, but not the arm, being supported in a sling; and that, in old persons, as the injury is more severe, leeches, evaporating lotions, and quietude, are to precede the application of mechanical means. With these recommendations, Mr. Hancock does not accord. He remarks that the upper end of the humerus is drawn upwards and forwards under the coracoid process, there forming a hard projection; that, by drawing down the arm, the tumour is removed, but that, when the extension is discontinued, it immediately reappears, and enquires how these signs are to be accounted for? He believes that in these accidents the long tendon of the biceps is either ruptured, or that by the fracture of the head of the humerus, it is deprived of the fulcrum which it acquires in passing over that process, and is thus unable to antagonise the capsular muscles. The upper end of the bone is thus drawn upwards and forwards, by the supra-spinatus and subscapularis muscles. If this be the case, it is evident that the back and front splints of Sir Astley Cooper can present very little, if any, resistance, and that other methods must be employed to effect a cure. Mr. Hancock then advises the placing a pad in the axilla, and applying an angular splint along the inner or palmar side of the arm, extending from the axilla to the tips of the fingers; it should have a hinge and thumb-screw to enable the fingers to bend the bone to any angle he pleases; the arm-piece should be the exact length of the patient's arm from his axilla to the elbow, as upon this part of the apparatus depends the power of resistance. In order to be accurate, it should be first adjusted to the patient's sound arm, care being taken that it is neither too long nor too short, for an error either way would be prejudicial. The remainder of the splint, or that for the forearm, should extend to the tip of the fingers, to keep the hand perfectly quiet; this splint should be fixed firmly with a roller commencing at the hand; and the splints next applied to the arm, one in front, one behind, and one on the outside, by straps and buckles or by another roller, after which the hand is to be placed in a sling with the elbow unsupported. According to Sir Astley Cooper, passive motion is to be employed for the young in a month, and for the old, at the expiration of two months or twenty weeks.

FRacture AT THE SURGICAL NECK OF THE HUMERUS.—Mr. Hancock, in the *Provincial Medical Journal*, says, this accident may be mistaken for dislocation into the cavity of the axilla, but an attentive observer will readily ascertain the true nature of the case. The fracture occurs below the insertions of the supra-spinatus, infra-spinatus, teres minor, and subscapularis muscles, and above the insertion of the deltoid, pectoralis major, latissimus dorsi, and teres major muscles; and, accordingly, the separated portions of bone assume certain situations in accordance with the action of those muscles. As the subscapularis and teres minor pretty equally oppose each other, they act with

equal power upon the head of the bone, press and retain it in the glenoid cavity, whilst the supra and infra-spinati, but more especially the latter, roll the head and turn the neck of the bone a little out; on the other hand the teres major, latissimus dorsi, and pectoralis major, remain attached to the lower portion of the humerus, the upper end of which the teres major and latissimus dorsi draw inwards, towards the axilla, and the pectoralis major upwards, forwards and inwards, under the coracoid process of the scapula. The deltoid muscle co-operates with the preceding muscles in turning the end of the shaft towards the end of the axilla. Being inserted lower down, it draws the middle and lower portions of the bone outward, and unless resisted by some of the fractured surfaces of the neck, will also draw the shaft upwards. The biceps, coraco-brachialis, and triceps muscles, also draw the bone up, the last backwards, and the second inwards. These accidents are usually the result of direct violence to the part; falls or blows upon the outer part of the shoulder are capable of producing them, but they rarely occur unless under these circumstances, and, consequently, the manner in which the accident happened will be one guide towards diagnosis. The head, tubercles, and a small portion of the shaft of the bone remain in their natural position, the head being in the glenoid cavity. The upper extremity of the shaft of the bone, on the contrary, is drawn upwards, forwards, and inwards, under the pectoralis major muscle. The limb is shorter than natural, and the patient frequently complains of pain and tingling in his hand and fingers, and occasionally down in the course of the arm; Sir Astley Cooper has pointed out, that in these accidents the patient will sometimes have one or more of his fingers contracted, evidently caused by injury to some of the nerves in the axilla.

SINGULAR CURE FOR THE TOOTH-ACHE.—An instance of temporary cure of tooth-ache by a charm, is recorded by one of the editors of the *American Journal of Dental Surgery*. A countryman called upon him to have a tooth extracted; this operation having been performed, he immediately jumped from the operating chair, his countenance beaming with joy at the relief it had afforded him, pulled from his bosom a handkerchief, and from it took a paper, on which was written, in German, a doggerel couplet, which rendered into English, read as follows:—

Tooth-ache, tooth-ache, go away,
And from this tooth for ever stay.

On inquiry, the patient informed him, that having been attacked about four weeks before with violent tooth-ache, he had applied to a German charm-doctor, residing in his neighbourhood, who gave him this scroll, which he directed him to wear in his bosom, assuring him, if he would do so, that it would cure it; and this, he asserted, it did do for several days; but it having failed to produce the same effect on a recurrence of the pain, he was at last compelled to have recourse to the more certain remedy of extraction.

CROTON OIL IN DROPSY.—Dr. Fife has narrated, in the *Provincial Medical Journal*, several cases of ascites, originating from, or complicated with, organic lesions, in treating which he derived great benefit from the sustained exhibition of croton oil, which, he observes, possesses one very decided advantage over elaterium, that even when its extreme action is manifested, it is not followed by the depression inseparable from the effective action of the latter; but that where the greatest *vis inertia* has prevailed, accompanied by absolute incapacity for exertion, a sensible amelioration in these respects has followed its continued exhibition.

POISONING BY HYDROCYANIC ACID.—Mr. Godfrey has published, in the *Provincial Medical Journal*, a case of poisoning by prussic acid, which involves some points of interest, not from the symptoms presented, but from the time which must have elapsed, after the imbibition of the poison, before death occurred; and also on account of the various acts of volition performed by the suicide, after he had swallowed the acid. It appears that, on the morning when he committed

suicide, one of his daughters accompanied him to his office, where they were seen standing together; he sent her away with a message, and, after taking off his great-coat, proceeded to a room up stairs. After a short interval, he was seen to walk rather quickly out of the house, in the direction of the druggist's shop. He must have swallowed the poison—about half an ounce of prussic acid—when up stairs, for the bottle was found in the fire-place the following morning, the stopper on the table. It is presumed that he took the acid before placing the bottle on the fire, as no glass nor similar utensil was found in the room; he must then have gone to the head of the stairs, a distance of ten average paces, descended the stairs, seventeen in number, and proceeded to the druggist's shop, forty-five paces—realising a total of fifty-five paces and seventeen stairs. He entered the shop in his usual manner, which was slow and steady; the druggist (a personal friend) asked him how he did? He replied, in his usual tone of voice, "I want some more of that prussic acid." The druggist passed round the side and end of his counter to speak to him, and then perceived that he was in the act of placing his hands upon him, as if for support, his eyes being fixed upon him with a stare. The druggist said to him, "You have been taking the prussic acid?" to which no answer was made. He was then placed in a chair, but fell to the ground, and died soon after Mr. Godfrey's arrival.—Although the facts above detailed are highly interesting and important in a medico-legal point of view, inasmuch as the suicide might avail himself of this knowledge to conceal his act, or an ingenious counsel might take advantage of it to confuse the medical witness, and thus obtain the murderer's acquittal, yet it is somewhat imperfect in its details. A knowledge of the amount of anhydrous acid contained, in the preparation taken by the suicide, would add greatly to the value of the facts, as the character of the effect produced might then be more correctly estimated.

SUCCUS CONII.—Dr. Neligan has published in the *Dublin Journal of Medical Science*, a communication on the use of conium in the treatment of certain painful diseases, principally subacute and chronic rheumatic affections, particularly when attended with severe pain, neuralgia, and senile gangrene, and he has rarely found it fail in affording relief. The preparation which he has employed for the last two years, is made as follows: take any quantity of fresh hemlock leaves, express the juice in a tincture press, set it aside for forty-eight hours, pour off the clear supernatant liquor from the fecula and chlorophyll which it has deposited, and lastly add to it a fifth part, by measure, of rectified spirit. This preparation will keep well for two years, and its uniform strength, together with the facility with which the dose may be increased or diminished, give it a decided advantage over either the extract, or the powder of the fruit or leaves. The best time for gathering the leaves is when they are in full flower. Previously to submitting them to expression, the stalks should be picked out, and carefully rejected, the leafy part alone being used. The best extract Dr. Neligan has found to be prepared by submitting the expressed juice, obtained as above, to spontaneous evaporation; but even that, he says, soon loses all traces of conine. Hemlock, in medicinal doses, appears to Dr. Neligan, to act by allaying nervous irritability, and diminishing muscular pain; the frequency and force of the heart's action are also diminished, but it does not produce the least tendency to drowsiness or sleep. When given for some time, or in rapidly increased doses, it causes a disagreeable sensation of dryness in the throat, with a feeling of constriction, and difficulty of swallowing, amounting to actual pain, requiring the medicine to be suspended for a few days, or else given in diminished doses.

TREATMENT OF TYPHUS.—Dr. Davidson, in the *London and Edinburgh Medical Journal*, thus sums up the treatment of typhus fever. He considers that as typhus is a disease which cannot be checked in *limine*, and is often tedious in its progress, causing great emaciation and exhaustion, measures which may vitally lessen the powers of life, such as bleeding, vomiting, and excessive sweating

or purging, ought not to be used without very strong and special reasons. The ordinary measures may be the following: place the patient in a large, well-ventilated apartment, on a mattress, with few bed-clothes; let the head be shaved, and kept cool with an evaporating lotion, give a gentle purgative every second or third day, let the skin be bathed once or twice a day with tepid water, and this may be accompanied with small doses of tartarized antimony, antimonial powder, or ipecacuanha. The drink should be light, cooling, and slightly diuretic; and the diet nutritive, but light, and little liable to ascendency. When there is a tendency to congestion in any organ, a little calomel, or hydrargyrum cum creta, may be combined with the purgative, or calomel with a small quantity of opium may be given every six or eight hours. The application of two or three leeches to the temples or nostrils is often useful in congestion of the brain, and also where there is intense head-ache, which is often the forerunner of delirium. Blisters are also often advantageous in such cases. Derangement of particular functions, or symptoms arising from idiosyncrasy of constitution, sometimes occur, and must be treated accordingly. Mercury in small doses is frequently useful in promoting several of the secretions, and in relieving the congestion of internal organs. Opium is injurious in a large proportion of cases, from its tendency to cause congestion in the head; but where diarrhoea is a symptom, it ought to be administered with a view to check the exhausting evacuations. Wines and other alcoholic liquors, as they contain both stimulant and alimentary elements, are the most to be relied on for supporting the strength, and are the least injurious. The pulse, taken along with the general symptoms of exhaustion, may be held to be the rule for its exhibition, both as to time and quantity. Ammonia, camphor, quinine, and other similar tonics, are not to be depended on in bad cases; and when exhibited together, frequently cause the patient to refuse both. When the disease is complicated with local affections in the head, chest, and abdomen, they must be treated on the same general principles as the idiopathic disease which they represent, with this important modification, that evacuations of all kinds must be employed more sparingly, and with much caution; and that even in these cases, if there be much prostration of strength, and a very weak pulse, wine must be administered, although more moderately than in the simple disease.

SPECULUM UTERI.—Dr. Warden, who has recently introduced prismatic specula, with the view to illuminate, and to reveal to observation, disease in the depths of the open cavities of the body, including the interior of all the hollow viscera of the pelvis with their outlet, has recently recommended, in the pages of the *London and Edinburgh Medical Journal*, a speculum uteri, consisting of an ivory tube, with a corresponding piston or plug, one side or portion of which tube is removeable at pleasure, so that when the piece is taken out while the speculum is in the vagina, an extended lateral view of the passage in every part of its wall may be obtained.

ICHTHYOSIS, INTRA-UTERINA.—Dr. Smellie has published a case of this kind in the *London and Edinburgh Medical Journal*. The child was a male; the labour tedious, but not severe. The body was covered with a thick, smooth, and shining, epidermis, fissured in many parts, more especially about the neck, in the axillae, groins, and popliteal spaces; all over the breasts, abdomen, and towards the lumbar region, there were large fissures, of a red and raw appearance; the arms and legs were somewhat oedematous, and had a pellucid appearance, from the horny nature of the epidermis; the fingers and toes, on which the rudiments of nails were scarcely perceptible, resembled artificial appendages, rather than natural formations; the head was covered with hair, and the scalp was entirely free from fissures. There were some small fissures on the face, about the angles of the mouth, which was so much distended, that the lips could not be brought together; near the external side of each ala nasi there was a horny excrescence in the epidermis, about the size of a hemp-seed, and also about the external canthus of both eyes, which

were entirely concealed; the inner lining membrane of the eyelids protruded in the shape of a bloody tumour. The child lived seven days, and during that time, the epidermis was detached in large pieces, particularly where the fissures were most numerous, and the bloody tumour concealing the eyes gradually disappeared. The sufferings of the child, Dr. Smellie says, must have been very severe.

GUY VERSUS TAYLOR AND OTHERS.

(To the Editor of the 'Medical Times.')

SIR,—The interest which you were pleased to take in the controversy between the Editor of the *Medical Gazette* and myself, and the very flattering notice of my work, which appeared in your pages, encourage me to request the insertion of the following statements, and letters.

I have the honour to be, Sir,

Your obedient servant,

WILLIAM A. GUY.

In the *Medical Gazette* of Nov. 15, there appeared a review of my "Principles of Forensic Medicine," couched in the grossest and most offensive language, and accusing me of wholesale appropriation of the style, matter, arrangement, and conclusions of Mr. Taylor's Manual, in terms hitherto reserved for quacks, and oft convicted plagiarists. The review concluded by summoning me to the Tribunal of the *Gazette*, to answer these charges. I lost no time in preparing my defence, and on the Monday following the publication of the calumny, it was in the hands of the Editor. On Tuesday evening, I received for correction a proof headed "Remarks on Plagiarism," for which, having substituted the more appropriate title, "Dr. Guy's defence," I forwarded the revise early next morning. By this means, I thought I had secured the immediate publication of my reply. In this expectation, however, I was disappointed, and the poison of the review was allowed to work unchecked till the administration of the antidote on the following week. Up to that time I had innocently imagined that a man's reputation was of such importance that the defence of it ought to take precedence of all other matter. After the review had been out a fortnight, my letter appeared in the *Medical Gazette*, of November 29th, and, in a postscript, the Editor stated that he was "very far from having any desire to put Dr. Guy irrevocably in the wrong; on the contrary, we would fain see him place himself in the right. Did his explanation prove satisfactory to Mr. Taylor, and to the profession, we should not be behind-hand in withdrawing the charge of literary plagiarism made in our pages, and of making Dr. Guy the *amende* in behalf of our reviewer." The Editor found it convenient to forget that he had summoned me to his tribunal, and found it equally convenient to throw the burden of the decision on Mr. Taylor and the profession, knowing full well that by far the majority of the profession, who had no leisure or inclination to judge for themselves, would receive the allegations of the review on trust, and forgetting that Mr. Taylor must be a very partial judge in his own cause.

I lost no time in forwarding to the Editor of the *Medical Gazette* the following letter:—

SIR,—The short note which you appended to my letter of last week, shows that you are not altogether disinclined to act justly, if the proper course of conduct had only happened to occur to you. My object in again addressing you, is to state what I conceive to be the course you are bound to adopt. You have sanctioned the publication of a review, which, as far as my recollection serves me, is unparalleled for its injustice. You summon me to your tribunal to answer this charge: I appear there without a moment's hesitation, and I plead not guilty to every count of the indictment. I correct the garbled extracts, show by analogy the weakness of the foundation on which the main part of the charge is made to rest, and the ignorance which had misled the reviewer in the remaining part of the accusation. Having done this, I had a right to expect a verdict

at your hands; and, if my defence was satisfactory, an apology. Instead of adopting this straightforward and manly course, you express no opinion as to my defence, but make your *amende* contingent upon the opinion of the profession which you can have no means of ascertaining, and on that of Mr. Taylor, whose name you see fit to introduce, and who must be allowed to be a very partial and improper judge in this matter. The question is not between Mr. Taylor and the profession, on the one hand, and myself on the other, but between your reviewer and me; or, to speak more correctly, between you, who have sanctioned the publication of that review, and me, whose character it is calculated to injure. I have a right to require, at your hands, an expression of your own deliberate and impartial opinion as to the merits of the question, and if you feel that you have inadvertently sanctioned a gross injustice, a full recantation and apology.

I have the honour to be, Sir,

Your obedient servant,

WILLIAM A. GUY.

Nov. 30th, 1844.

This letter was not published; but in the number for December 6th, a short note appeared, which seems to have referred to my letter, to the effect that "the Editor of the *Medical Gazette* must positively decline becoming umpire betwixt one gentleman and another on any point in dispute between them;" and, in the same number, a letter was published with Mr. Taylor's signature, reiterating, though in milder terms, the charge of the review. The reply to this personal attack was sent to the Editor of the *Medical Gazette* by the first post of the Monday following; but neither the reply itself, nor any acknowledgement of it, appeared in the *Gazette* of December 13, but in their place the anonymous attack, headed "Remarks on Dr. Guy, and his Reviewer." Such is the history of this controversy up to the present time. I have now some reason to expect the insertion of my replies to Mr. Taylor's letter, and to the "remarks" in the forthcoming number of the *Gazette*, but as I may be deceived in this expectation, I take the liberty of requesting a place for them in your columns. Before I come to the letters themselves, I must mention one or two circumstances which tend to throw light on the causes of the attack which has been made upon my reputation. In the face of a threat, that it should be submitted to a very severe ordeal,—I published my third part. Common prudence, therefore, if I were influenced by no better motive, would restrain me from making what I thought an undue use of Mr. Taylor's work, especially after I had voluntarily come forward to express my regret, that some unintentional appropriations from a former work of his had crept into my second part. Under these circumstances, the third part appeared. No time was lost in putting the threat into execution, and there was little difficulty in finding a fitting instrument. The review is generally attributed to one who, unfortunately for him, has not very strictly preserved his incognito. No one, who knows anything of his history, can be surprised at the fierce indignation with which he treats the charge of plagiarism. A man's anger is generally proportioned to the degree in which a crime is repugnant to his own feelings, and every one knows how free the character of the party alluded to is from such a stain. This is the history of the review, to which I may add a significant fact, which I have on the highest authority, that an anonymous notice of the third part of my work was forwarded for publication to the editor of a highly respectable journal, but that he declined inserting it, on the ground that, on referring to the work itself, he did not think the allegations it contained were well-founded.

After what I have stated, your readers will not be surprised at the review, the letter of Mr. Taylor, or the "Remarks." They have the key to the interpretation of them.

Many indifferent persons have expressed their opinion that the original review answered itself, and some may, perhaps, have thought a reply from me unnecessary. I thought otherwise, and have much reason to congratulate myself that I did not allow it to pass unnoticed; for I have

had the satisfaction of seeing the original charge greatly modified in the hands of Mr. Taylor himself, and of convicting an anonymous accuser of deliberate falsehood. I have, moreover, had the amusement of seeing Mr. Taylor wake as from a dream, in innocent unconsciousness of all that had taken place, and coming forward as a party "in some measure interested in the question at issue between Dr. Guy and the reviewer of his 'Principles.'" But this is by no means the only amusement he has afforded me, and I trust that the profession at large appreciate the entertainment which he has provided for them. If the remainder of the comedy prove as amusing as the first three acts, it will be one of the best things of the kind which has been witnessed for years.

But I must no longer detain your readers from the letters which I have promised them. The first is my reply to Mr. Taylor's charge; the second, my rejoinder to the author of the "Remarks on Dr. Guy and his reviewer."

REPLY TO MR. TAYLOR'S LETTER OF DEC. 6.

To the Editor of the Medical Gazette.

SIR.—Mr. Taylor's letter of last week puts an end to all controversy between my reviewer and myself, and renders unnecessary the publication of the last letter which I had the honor of addressing to you. Mr. Taylor fairly takes upon himself, though in a very modified and subdued form, the unmeasured invective of the review, which I never regarded in any other light than as the exaggerated and distorted representation of Mr. Taylor's sentiments. His charge against me is to the effect that "the 'Manual of Medical Jurisprudence' has been much more frequently used by me, without reference or acknowledgement, than is either proper or becoming in one writer following another so closely on the same subject," and in the last paragraph of the letter, this charge is limited to the statement that my 'Chemical Toxicology' is substantially abridged from that lately published in the "Manual," with occasional interpolations from Christison and Beck. This then seems to be the extent to which Mr. Taylor is ready to support the allegations of the review.

I must first express my surprise that Mr. Taylor who, I presume, has not made this charge without reading my book with some attention, should designate my constant and full references to Christison's work as "a few interpolations." Why, my quotations from Christison are three times as numerous and ten times as important as those from the Manual: I not only constantly refer to him for cases, but for more complete and detailed information on all the more important points of Toxicology. Beck is quoted but once.

This extraordinary misrepresentation of Mr. Taylor's must convince any impartial man that he has written under the influence of some feeling very unfavourable to accuracy. He is evidently labouring under some mistake, or he is the dupe of a "foregone conclusion." I have said enough on this subject,

Now, as to the remainder of the charge. My "Chemical Toxicology," it appears, is an abridgement of Mr. Taylor's; I presume that this phrase is synonymous with the more common expression, "Tests for poisons." If so, I have merely to remind Mr. Taylor that for some years past I have been in the habit of exhibiting to my class the tests for poisons, of explaining the necessary precautions, and of pointing out the fallacies which attach to them. With all my proneness to plagiarism, therefore, my knowledge of the subject prevented me from gratifying my favourite propensity to any great extent. If Mr. Taylor had made some important chemical discoveries, or suggested a score or two of new tests, I should of course have appropriated them without a moment's hesitation, but as I found only two unimportant suggestions, I made an open display of my honesty, and quoted them in due form. To keep up appearances, I put one of them to the test of experiment, and was somewhat surprised to find that it did not answer. I was not aware till I read Mr. Taylor's letter, that the accident of priority of publication

conferred the right of appropriating the common and familiar facts of chemistry. I had innocently regarded them as public property, and am not even now quite convinced of the contrary. If Mr. Taylor should succeed in establishing this monopoly, and I in reforming my bad habits, matters will be greatly simplified; one comprehensive reference will suffice.

In truth, Mr. Taylor's work was a great embarrassment to me. I knew that if I did not refer to it I might, by some untoward coincidence, strengthen the premeditated charge of plagiarism: for instance, had I cited the familiar case in which the question of the influence of habit in lessening the effect of opium was raised in a court of law, I should have added force to the felicitous parallel of my reviewer; if, on the contrary, I had made no reference to the Manual, or if I had followed Mr. Taylor's own example, and instead of saying "Mr. Taylor gives this case," or "thinks this or that," I had said, "such and such a case has been recorded," or, "such an opinion has been entertained," I should have been accused of passing over in silence the name of a contemporary. Then, I could only avoid the appearance of copying Mr. Taylor's arrangement, by departing as widely as possible from Christison, whom I had adopted as my model. I must have put the vegetable poisons before the mineral,—or zinc before arsenic,—or I must have mixed all the poisons together,—or invented some unsound arrangement of my own. Again, in treating the individual subjects, I must have departed from the plan of the first two parts, and of my lectures, and have blended together, tests, symptoms, post-mortem appearances, smallest fatal dose, average duration, and treatment, in undistinguishable confusion. By these means, and by these alone, I could have escaped the charge of plagiarism. The alternative was—a confused contrast to the first two parts of my work; or the lash of the reviewer, and the accusation of Mr. Taylor.

It required some courage to prefer the last alternative, but I embraced it without hesitation. By means of a new arrangement of the tests for poisons—the invention of a new form of chemical table—sundry extensive analyses of cases of poisoning—a novel suggestion here and there—and an occasional experiment, I contrived to give an air of originality to the "Principles" to which, in my partiality for my own production, I attach some slight importance.

One word about the letter to the *Lancet*. For reasons which will be easily understood, I did not state all the circumstances which led to that communication. I now supply that deficiency. A mutual friend of Mr. Taylor and myself, whose name it is not necessary to mix up in this controversy, wrote to me to state that Mr. Taylor had pointed out to him several passages, in my *second part*, which had been taken, with little or no alteration, from the first volume of his *Elements of Medical Jurisprudence*. I lost no time in explaining the circumstance, both to the friend in question, and to Mr. Taylor; and I have the best reason to believe that my explanation was satisfactory to both. After this communication with the party most interested, I thought to hear no more of my unintentional appropriations, but I found that the subject was talked about, and hence my letter. It is necessary to state that my friend assured me he had not opened his lips upon the subject.

The letter which I addressed to you, the week before last, renders a longer reply to Mr. Taylor's charge unnecessary. I justify the use I made of the *Manual*, and am willing to abide by the sentence which the Profession may pass upon me. What I have done, I have done deliberately, and with a full conviction that, do what I might, I could only escape censure by consenting to abandon the order and arrangement of which experience had taught me the value.

I have the honour to be,

Sir,

Your obedient servant,

WILLIAM A. GUY.

Dec. 9th, 1844.

REPLY TO THE "REMARKS ON DR. GUY AND HIS REVIEWERS."

To the Editor of the Medical Gazette.

SIR,—The "Remarks on Dr. Guy and his Reviewer" in the last number of your Journal, took the place which I thought I had secured in your pages by the early transmission of my reply to Mr. Taylor's letter. I trust that that reply will appear in your number of next week, and I take the liberty of requesting the insertion of the following additional observations on the "Remarks."

I am placed in a very embarrassing position, between mirth and anger. I do not know whether to be amused by the ridiculous claim to originality set up on behalf of Mr. Taylor, or angry at the disingenuous way in which that claim is supported; and I believe that the profession is in the same predicament.

If Mr. Taylor had made as many discoveries as Sir Humphrey Davy, as many inventions as Wollaston, and proposed as many new tests as Orfila and Christison combined, he could not be a greater man than his critics and commentators make him out to be. If I had stolen from him as many discoveries as all these great men together have made, he could not be more aggrieved than he represents himself to be by my alleged appropriation of his chemical equivalents, simple rules of proportion, and distinct headings. This it is that moves my mirth. My indignation is roused by the intentional misrepresentations of the author of the "Remarks." I may add, that he must be a very unsuspicious person who does not imagine that he sees in those "Remarks" the handiwork of Mr. Taylor himself. The writer, whoever he may be, has Mr. Taylor's authority for one, at least, of his statements; and he knows too much of Mr. Taylor's history, and of mine, not to be readily identified. Be the author of the "Remarks," however, who he may, I accuse him of a series of deliberate misrepresentations, of intentional suppressions of the truth, and of equally intentional suggestions of what he knows to be false.

I make this statement deliberately, and prove it by referring to the parallel which he has drawn up with so much apparent care, but which, in the narrow limits of a page and a half, furnishes a complete compendium of every vice, except that of plagiarism, which can be practised with the pen. The *second* edition of Christison, like the first and third, contains these words:—"The solution of the oxide of arsenic in boiling water, yields minute crystals on cooling, which, when their form is defined, are octahedres."—p. 229.

These words begin a paragraph, and that paragraph follows the one which treats of the solubility of the poison in water. Does the author of the "Remarks" still assert, that this property of arsenious acid is not to be found in Orfila or Christison, but only in the "Manual?" Does he also persist in claiming, as Mr. Taylor's property, the fact that arsenious acid combines with alkalis forming soluble arsenites? He may as well lay claim to the A, B, C.

It is very unkind of the author of the "Remarks" thus to turn Mr. Taylor into ridicule.

So much for the first misrepresentation. The next is an improvement upon it. Under the head "Powder," there is marked in italics, as being taken from the "Manual," the following sentence: "Add liquor potassæ, no change, corr. sub. turned yellow," and, on the opposite side, "corrosive sublimate, volatile like arsenic, but turned yellow by potash."

Now an unsuspicious reader would not hesitate a moment to accept both these passages as true and ungarbled abstracts; no such thing. They are two admirable specimens of the *suppressio veri*. The passages from which they are taken ought to be placed side by side.

Taylor p. 147.

Guy p. 453.

Objections.—Corrosive sublimate is volatile like white arsenic, but it differs from it in all its other properties. It is very soluble in water, insoluble in potash,

"This effect of heat does not prove the powder in question to be arsenious acid, for bichloride of mercury and calomel also sublime unchanged. To another

which turns it of a yellow colour.—While hydrosulphuret of ammonia turns it black.

portion of the powder add liquor potassæ. If the powder be arsenious acid, no change takes place. Corrosive sublimate is changed to a yellow, and calomel to a black colour.

The fraud which has been committed is obvious at a glance. The passage from the "Principles" is part of a process of elimination, that from the "Manual," is the commencement of a series of objections. The very order of the tests is a deception. They do not stand in my work 1, 2, 3, 4, 5, but the effect of heat and caustic potash are used as preliminary tests on the supposition that the nature of a white powder is unknown, and tests 3, 4, 5, are used to confirm the indications afforded by the first two tests. After these illustrations of the scrupulous care and regard to truth of the author of the "Remarks," your readers will not be unprepared for the assertion, nor much surprised at the plain language in which it is couched, that the statement that the properties of the oxide of Cadmium are "copied from the Manual *ipsissimis verbis*," is a deliberate falsehood, admitting neither of palliation nor excuse.*

Taylor, p. 147.

Guy, p. 454.

Cadmium is a metal which is said to form a metallic sublimate like arsenic. The oxide of cadmium may be reduced by a similar process, but the metallic sublimate is wholly different from that of arsenic; it has a tin-like lustre, and is generally fringed with a brown margin of reproduced oxide. There is no odour of garlick during the reduction of oxide of cadmium, and on heating the metallic ring, it is not wholly volatilized like arsenic, but converted to a ring of brown oxide. Oxide of cadmium is of a brown colour,—it cannot be volatilized on platina by the heat of a spirit-lamp; it is quite insoluble in potash, but easily dissolved by nitric acid. If there were no perceptible difference in the sublimate produced by the two bodies, these characters would at once form a clear distinction between them; oxide of cadmium is moreover a very rare substance, it is difficult to meet with it.

Having now shown the dishonesty of my anonymous accuser, I should treat the rest of his production with the contempt it deserves; but that the "authority" with which he uses Mr. Taylor's name, and his unusual familiarity with the relation in which I have stood towards that gentleman, gives it all the importance of a manifesto from Cambridge-place.

It appears that there are in my book stronger instances of plagiarism than the passage on "habit," which recoiled so pleasantly on Mr. Taylor. Why, then, did the reviewer make so unlucky a choice? Why does not the author of the "Remarks" favour us with some of these stronger instances? The *ipsissima verba* must be easy enough to find. Why not have quoted them? Simply because assertion is much easier and more convenient than proof.

* As I am unwilling to give your readers the trouble of referring to the original works I subjoin the passages themselves.

I pass over the alleged "misapprehensions" and "mystifications" about arsenite of copper, and sulphuret of lead, the very original formula, which the writer of the "Remarks" has Mr. Taylor's authority for asserting to have been used by him in his public lectures, at Guy's Hospital, since 1831, and which, it appears, I have taken from him without acknowledgment, and the alleged appropriation of chemical equivalents, as trifles which he may amuse himself with as long as he pleases. If he will persist in claiming these simple facts and every day calculations, he will have enough to do to defend his monopoly, and must make up his mind to the trouble and expense of a *scire facias*. I, for my part, am very angry with the chemists of the last century, for the unwarrantable use they have made of the "Manual," and, I fear, that their bad example is likely to be followed to the end of time.

I begin, indeed, to have some misgivings as to the honesty of our arithmeticians. The rule of three is evidently in danger of being made into a monopoly.

Once more, I would remind the author of the "Remarks," that whatever authority he may have received as to the chemical application of the rule of three, he must have greatly exceeded his powers in thus turning Mr. Taylor into ridicule.

The author of the "Remarks" will, doubtless, be greatly surprised to hear that I do not acknowledge my obligations to Mr. Taylor in the matter of the "distinct chapters, sections, and paragraphs."

He may rest assured that had I preceded him as a writer on Toxicology, and had never seen or heard of him, I should have forestalled him. No one who has read the first two parts of my work can doubt the truth of this assertion; the very turn of my mind, and my mode of collecting and arranging information renders the adoption of minute subdivisions and distinct headings, inevitable. By way of amusement, I have, myself, some intention of claiming the adoption of distinct headings in treating the subject of infanticide.

The writer of the "Remarks" hardly knows how to receive my assertion, "that the order in which the several tests are placed, is one peculiar to myself, and which I have always used in my lectures." It is passing strange that the acuteness which discovered *ipsissima verba* in the description of the crust of cadmium, and the industry which brought together the *dissecta membra* of the parallels, could find no illustration of the truth of this statement. It was not necessary that he should con my book, "paragraph by paragraph, and page by page," in order to find some clue to my meaning. He missed it for the reason that he passed over the test, in the second edition of Christison. It looked him in the face as he was garbling the tests for arsenious acid. Let him turn to p. 413, of the "Principles," he will then be enlightened as to my meaning, and will understand the "occasional transposition of an experiment in the series," and the reason for it.

The last paragraph but one of the "Remarks," places Mr. Taylor in a dilemma, from which, I fear, he will find some difficulty in extricating himself.

Either he himself, or some one entirely in his confidence, and writing under his authority, is the author of the "Remarks." On the first supposition, I have accused him of deliberate misrepresentation: on the last, he has been very unfortunate in his choice of a *confidant*.

In any case, I greatly prefer my position to his, and have reason to congratulate myself that one, at least, of my accusers, stands convicted of a worse crime than that of plagiarism.

I have the honour to be,

Sir,

Your obedient servant,
WILLIAM A. GUY.

In spite of the length of this letter, I must add a word of serious warning to the chemists and toxicologists, the Faradays, Daniells, and Christisons of the day. They are in the daily habit of employing formulæ and tests which have been used by

Mr. Taylor, in his public lectures, since 1831, and which are now introduced into the "Manual;" and I am afraid that they do not sufficiently reflect on the risks to which they are exposing themselves. These formulæ and tests are contraband articles, which they smuggle under heavy penalties. I warn them of their danger, and give them a specimen or two, by way of putting them on their guard.

The rule of three in all its chemical applications—the effect of heat on the arsenite of copper—the fact that arsenious acid combines with alkalis, forming soluble arsenites (alas! poor Dr. Fowler, what a practical plagiarist wert thou!)—the deposit of octahedral crystals from a solution of white arsenic—the effect of liquor potassæ on arsenic and corrosive sublimate—the effect of the hydrosulphuret of ammonia on arsenic—all the chemical equivalents which Mr. Taylor may have thought it necessary to calculate for himself.

These are given as specimens, but the claim is probably co-extensive with chemistry and toxicology itself. Let the list be printed, framed, and glazed, and suspended in the laboratory of every chemist and toxicologist of the day. It can only be used with express permission and acknowledgment. For my part, I expect nothing less than an address, and a service of plate, for the public spirit I display in protesting against this flagrant violation of the liberty of the subject. I congratulate myself that the first two parts of my work appeared before the "Manual," or I should not have escaped severe censure for what I have ventured to say about the duties of the medical witness, for the "seems to me" of Mr. Taylor is evidently the private mark which he affixes to his own property. I thank the Editor of the *Medical Times* for the humorous way in which he has handled a passage that would otherwise have escaped me. But let not Mr. Taylor and his abettors suppose that I wish to avoid the charge brought against me, by turning the pretensions of Mr. Taylor into ridicule. The temptation to laugh at such pretensions was too strong to be resisted, but I can, nevertheless, be serious, when I see occasion for it; and, therefore, with all seriousness and sincerity, I beg to state as briefly as I can, what I claim, what I deny, and what I admit.

I claim for myself a distinct and peculiar arrangement of the tests for poisons; the invention of a new chemical table, which is, so to speak, an epitome of a part of that distinct and peculiar arrangement; the only existing analyses of cases of poisoning by several of the more important poisons; some original suggestions and descriptions founded on experiment, and to be found chiefly in the chapter on Arsenic; and, as one proof that I have thought for myself, a view of a disputed question—the *modus operandi* of poisons—not to be found either in Christison or Taylor. To this statement, I add that the arrangement of the tests, the analyses of cases, the new suggestions and descriptions, and the view of the *modus operandi* of poisons, are those which I have been in the habit of using and explaining in my lectures, so that they were not intended as blinds to cover the plagiarisms of which I am accused.

2.—I emphatically deny that I have made more use of Mr. Taylor's "Manual," than I believe every author is in the habit of making of the works of his predecessors, however short the interval by which they may have preceded his own. I have not intentionally borrowed his words; I have used no effort to conceal the parentage of my matter; I have not without reason, and merely to escape detection, altered the arrangement of the tests for poisons; and I have not failed to quote him, when I believed him to have displayed any kind or degree of originality; in one word, I plead not guilty to the charge of plagiarism in any sense which I have heard attached to that term.

3.—I admit that I have constantly referred to the "Manual," as is apparent from my frequent quotation of cases contained in it; I admit that I have made some use of Mr. Taylor's example in the selection of poisons; that I have been influenced by his work, in omitting the quantitative analyses of the less important substances; and that I have taken some chemical equivalents, and here and there a test, believing them to be public

property wherever they were found, and little dreaming that Mr. Taylor claimed them in any sense as his own. I admit, also, what I have never wished to conceal, my former obligations to Mr. Taylor, which have been more than once publicly expressed, and which nothing but his own recent conduct could have cancelled.

This is the extent of my admissions, and a true statement of the facts of the case. I repeat what I have said more than once: that what I have done I have done deliberately, and in the face of a threat, of which the review, the letter of Mr. Taylor, and the "Remarks" are the fulfilment. I was not deterred from making use of the "Manual," by the knowledge, that I could not use it, however discreetly, without danger, and in this, I believe, I acted a proper, though not what is usually considered a prudent part. I deliberately preferred the accusation of plagiarism to the charge of intentionally passing over in silence the work of a contemporary, and I do not regret my choice. I repeat that I prefer my present position to that in which Mr. Taylor has placed himself by coming forward in his own person to support a most unjust attack by laying claim to a vested interest in chemical equivalents, and the simple calculations and facts of chemistry, by making a most disingenuous and ungenerous use of my voluntary confession of an error, and by boldly asserting that he had the means of knowing to be untrue—that my frequent references to Christison's work, were "occasional interpolations." Nay I go farther, and accuse the writer of the "Remarks"—whoever he be—of wilful and deliberate misrepresentation.

15, Bloomsbury Square,
Dec. 17, 1844.

NOTICES TO CORRESPONDENTS.

M. N.—Partial registrations are of little or no use. As long as a non-qualified man can shuffle from one institution to another, (some giving, some refusing, lists)—we may be considered in complete want of a system of registration. Besides, where is one at present to procure the lists actually published? And in those published, how can we confide in them, since they give no address, and appear never to strike off a dead member. The registration proposed by Sir James Graham would be a great boon to the Profession; it is a subject which of itself calls for a statute, supposing we were even to have no more general reform; it would remove many heart-burnings, much jealousy and distrust, and would practically incorporate all practitioners into one united body. With these views, so opposed to the fears of M. N., we can scarcely accede to his request, of calling our readers' attention to the mischief of general registration.

A Subscriber's question was answered—we think we recollect—in our Notices to Correspondents. If not, his queries have been mislaid.

K.'s letter is inadmissible. Public names should be appended to notes replying to communications with public names. This is still more necessary when attacks are made.

Dr. Johnston (Gildford, Ireland).—For a complete work on Jurisprudence, the last edition of Beck; for a complete summary of its principles, "Guy's Forensic Medicine." The abstract of the "Medical Witness Act" appeared in our pages about eighteen months since. We are not in a position to give an opinion on the operation of the Grand Jury Act, but are inclined to suppose that the Grand Jury exceeded their powers.

A Subscriber, who asks an opinion on a medical case, is advised to submit it to a respectable practitioner. We do not prescribe in our columns.

Dr. Mitchell (known to the Profession as the master of the South Eastern Lying In Hospital, Dublin) writes to us, disputing with Dr. Sutro the palm of originality, in recommending creosote for scalds. In the "Lancet" for 1842, Dr. M. gave a case of scalding, successfully treated by creosote, in the undiluted form. We believe Dr. Sutro acknowledged, in his communication, to having received the suggestion from a German journal, of which he had given a previous notice in our pages.

The surgical cases communicated by Mr. Sayle shall appear in an early number.

A Reader, &c. (Newcastle).—We have yet had no space for notice of Miss Martineau's papers.

Mr. Yeatman has tried, by experiment, the remedy given by a Correspondent for preventing dampness in floors after the storing of salt. He dissolved together two drachms of alum and common salt, in two ounces of water. No decomposition took place, as was proved on evaporation of the solution.

Medicus.—When the indenture is wanting, a declaration should be made before a magistrate by the master. A letter should, however, be sent to the secretary of the society.

L.—The advertisement will appear in the Almanack. The money may be sent in postage stamps.

Mr. Crisp, of Birkhamstead, writes to us, that the Acts of 1815, has ruined the Apothecaries, by keeping them in the rank of shopkeepers, and proceeds thus:—"The Act gives no legal power to prevent any man, not even the rashest and most ignorant quack, from visiting and prescribing for the sick in medical cases, and a druggist can compound the prescribed medicines, as well as compound the prescriptions of all legally authorized M.D.'s, without any examination. Again, any man may practice surgery, midwifery, pharmacy, and chemistry, without being liable to one single penalty of the Act of the 55th Geo. 3rd."—"The trading Company of Union Street are vendors of every quack medicine known, and encourage the sale of them. During the 29 years' monopoly, they have not prosecuted quacks, but Members of the Royal College of Surgeons—poor Ryan, for instance, at Maidstone; and they were 27 years before they prosecuted a druggist, and were defeated in the north before Baron Maule and a special jury."

A Constant Reader.—We shall give our opinion on the question suggested to us, when the matter comes before us in a more practical form, as it shortly may do.

R. D.—"1st. If a medical man has been called in, where a sudden death has occurred (or any kind of death requiring an inquest), has the coroner any authority by which he can prevent the constable from summoning such medical man to attend the inquest?"—Yes.

"2d. Does the coroner, by preventing the attendance of the medical man, preclude his fee?"—Yes.

Several Correspondents have written to us about our Index for Vol. X, which was published in October last. It has been suggested, that the index should not have been charged extra. Now, two courses lay before us: either to include the index as part of the Number, or publish it as an extra sheet. In the former case, much of our customary intelligence must have been excluded, and many gentlemen who do not bind the work, would have had the reading matter they sought, replaced by an index which they did not want. If we had adopted this arrangement, also, considerations of prudence would have enforced a very condensed table of contents. It appeared to us, therefore, better to make the index a separate number; so that no one might have it but those to whom it would be really of use, who would not, we presumed, object to pay for the extra convenience. From the comparatively limited circulation of the index, the price charged for it left us still, to a certain extent, losers. Gentlemen who have written to us on this subject, seem to have formed erroneous opinions on the expenses of a scientific journal so large as the Medical Times, and made up like it, exclusively of original matter. They should recollect that Ryan's Journal, the Lancet, and the Medical Gazette conjoined, gave for years, at an expense of about 2s., neither better, nor more, scientific, information than the Medical Times now gives for 5d. To the request, therefore, of a few Correspondents, that we be more generous, we reply, with the request that they be more just.

Several communications have been received, which will receive due attention. Papers by Dr. Rigby, Dr. Costello, Mr. Braid, Dr. Robert de Lamballe (Surgeon to Louis Philippe), and Mr. Tossill, will appear in our next Number.

A pressure of matter delays again the fulfilment of our promise in reference to the Report of the Poor Law Medical Relief Committee.

A mass of correspondence lies before us, which we must defer noticing till our next number. The hourly increasing claims on our attention, compel us to use freely, if not to abuse, the indulgence of a host of friends.

Dr. Corrigan.—In consequence of the last Lecture of Dr. Corrigan accidentally passing through the press from the reporter, without the previous revision of Dr. Corrigan, a few obvious errors have slipped in, which the reader will at once detect without further mention.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

MEDICAL TIMES ALMANACK,

The Almanack for 1845, will be ready on Tuesday next. Gentlemen wishing to give advertisements the advantage of its large circulation, should remit their orders immediately.

THE MEDICAL TIMES.

SATURDAY, DEC. 21, 1844.

O fortunatos nimium bona si sua norint!

THE Church has been "in danger" some half-dozen times in our "new" generation, and yet, wonderful to say, is in as robust health as ever. The Constitution has been a terrible sufferer in the same way—and is, nevertheless, in as good trim as in its best days: sound both in wind and limb. The Country has also been on the brink of ruin an infinite number of times in our memory, but somehow or other has, with great prudence, never travelled further. At this moment, when Church, Constitution, and Country seem all in a very provoking state of strength and prosperity, there is the comfort of a change to hear, as we weekly do, that the post of honour—"danger"—has at length reached us, and become, in very truth, the special privilege of our own glorious and time-honoured calling. As Panza blessed the man who invented sleep, the debt of each grumbling Doctor is scarcely less deep to the discoverer of the great time-killing fact—that our craft is in "danger," and that the ruin of the whole body of us is "meditated by Government!" "O fortunatos nimium bona si sua norint agri-colas." What an unpriized doom is ours! To be really, truly, in "danger," and not to know it! Like the wanton condoled with on her ruin by her seducer, to be brutally, coarsely ignorant of our susceptibilities to calamity, and seeming to say to our monitor, "It would take more than you think of to ruin us!" Can any thing be more unfortunate than this insensibility to misfortune?—Any thing more wretched, than that miserable wretches will not know their misery? We shall really grow ashamed of our brethren. Their unphilosophical happiness is little less than a death warrant to us.

The Times has well asked, and more than once, what have we done to the Government, to be treated with a taste of "danger?" Where has been our offence—in what can be its policy—that it forces us to occupy that "brink of ruin" that has so wisely been vacated by Church, Constitution, and Country? What have we done, O ruthless Sir James Graham, that you ruin us? In what will our ruin profit you, that you so perseveringly, at the loss of your own popularity, aim at it? Fond of mischief for its own sake, delighting in wrong from the excitement of its being forbidden, would you flesh your sword from mere wantonness in the symmetrical sides of an intact and happy Profession! Pray, Sir James, answer us, or we shall begin to believe thee the monster the clever Times paints, since thou smiledst on hearing that Mr. Walter, its proprietor, was ejected for Nottingham!

The cry of the "Profession in danger," (not our patients,) has certainly the merit of novelty. The Government and country, in a conspiracy to destroy its doctors, offer us a scene in which farce combines with its attraction a touch of the tragical. It looks like a national change of *metier*. The sheep delivering up their dogs to the wolves—the Amazonian phalanx of ancient days winning the deprivations of widowhood by one large murder, fade before the new episode of English history, into a dull and pointless tale. But a word in private. Suppose the peril tremendous, as it is represented: is it our interest to noise it abroad? Should we not die "game?"—like the Roman senators before the conquering Gauls, throw ourselves back in our *fauteuils à la Voltaire*, and meet the barbarous assault of Government with a glorious *sang-froid*? Half the secret of doctors' success, we know, is confidence and faith; to ensure these, would it not be well to have it thought to the last moment, that "danger" may visit parsons, lawyers, statesmen, any person, or persons, but doctors? Why we even doubt whether it is quite right to give a Medical Obituary. The public should not know that doctors die. Still less, therefore, should they think that the whole body can be in "danger?" "Physician heal thyself," is a rebuke that cannot come too rarely. No, no! a thousand times let us be in danger, rather than that once the public should know it.

But to speak soberly on an idea so propitious to burlesque and laughter, was ever notion more preposterous or extravagant propounded, than that an English Government—no matter whether Whig, Radical, or Conservative—could seriously "meditate" an injury, much less "ruin," to nearly thirty thousand gentlemen, who are known and recognized as the most valuable, and, in essential matters, the most useful body of British citizens? Sins of omission against us, are what we can justly charge against every Government this country has yet had; but for those much may be said in palliation. Their existence implied no malice—their non-correction proved no ill feeling. Beset, as all Governments are, with too much administrative and executive labours, the temptations to leave things as they are, where change is not pressed irresistibly on them, is very great; and hence up to the present moment, we have been left to whatever shadow of just management old arrangements may have secured, or our own unassisted labours won for us. Sins of omission against us are, therefore, neither rare nor small; and our hope is, that whatever blame Government deserve for permitting them, our own inaction and rival strifes in no way come in for a share. But offences of commission, or a serious design of endangering, injuring, or ruining us, are what, we are inclined to fancy, no sane man can attribute to any public minister; and our interest—an interest whose greatness it is impossible to exaggerate—is, that the condition of the Medical Profession shall be completely taken in hand by the Government. Individuals *can* do nothing, or will do nothing. Experience proves this beyond a doubt. The last ten years there were more chances for individual exertion in a British Parliament than any subsequent century will offer, yet nothing was done. The Government, however *can* do, and for once they have gone so far as to *resolve* to do. They have no interest to do ill: every interest to do well. Their character, whatever it may be—and (more than that) their success—being identified in doing well, and fairly, they present to the country a mighty responsibility: wrong or failure offers

them as the world's laughing-stock. To do well and greatly so, is to embalm their names in people's memory for ever: history receives them among the number of its Statesmen; and the Profession in all future ages will say: "Such as we are—the best of aids to science, the greatest of uses to man, the brightest of ornaments to an advancing state of society—we owe to these men." We rejoiced, then, heartily, from the beginning, that Sir James Graham had assumed the high responsibility of adjusting this unsettled but momentous question for us, for we always felt that he must either do nothing—which would but leave us as we were—or vastly improve our condition. If he did well, we should of course support him to success; and if he deteriorated our present low social position, if he more tangled our knotted complexities, if he still more confounded our confusion, we should be certain to defeat him, and force him either to relinquish his plans, or adopt a new career.

Now that his scheme is before the country, and that its excellencies and omissions are pretty fairly understood, it appears to us that no course deserving the name of justice or policy can be pursued which does not aim *first* at the most friendly understanding with the Government, (so that no ill-feeling or prejudice may mislead a judgment from which we should desire to extract so much); secondly, at the fullest possible acknowledgment of the worth of those proposals which appear to us of good promise, and thirdly, at the most forcible elucidation possible of the points in which the new bill is faulty. *As any future measure will be perfect in the precise degree in which it treats every worthy member of our body as a GENTLEMAN*, it is of the first importance that Government be made to feel in every possible manner, that we shall so not be treated above our deserts, for that we are, with a few contemptible exceptions, in the best sense of the term—GENTLEMEN.]

STATE OF PROFESSIONAL FEELING.

On the 4th inst., a special general meeting of the members of the Taunton and Somerset branch of the Provincial Medical and Surgical Association, was held in Taunton. The speakers were Dr. Maemullen (the President), Dr. R. Burrige, Dr. Sewell, Dr. Brock, Dr. Coster, Dr. Catlatt, Dr. Selly, Dr. Woodforde, Dr. Stoddart, Dr. Toogood, Mr. Higgins (the Secretary), Mr. Wallis, Mr. Billett, Mr. Stuckley, Mr. Alford, Mr. Frankerd, Mr. Mosse, Mr. I. L. Barnard, Mr. Randolph, Mr. Smith (of Bishop's Lydiard), Mr. Gillett. Among other gentlemen present, were Drs. Kelly, Kinglake, and Peebles. Messrs. S. Hugo, C. H. Cornish, H. G. Foy, C. Welch, A. King, G. Kidgell, A. Langley, W. Pyne, I. Craig, A. Allen, Plowman, Marchant, Harvey, Parkinson, &c. The resolutions were in conformity with those passed at the large general meeting at Derby, pointing out what are now universally recognised as the defects of the Bill, and as clearly supporting the portions likely to introduce improvements. A meeting, expressing its opinions in a very similar manner, has been also held at Dorchester (the borough represented by Sir James Graham). Dr. Jackson occupied the Chair, and there were present, among others, the Right Worshipful the Mayor of Dorchester, John Wallis, Esq.; Mr. Tapp, Mr. Curme, Mr. Edwards, Mr. Panton, Mr. H. Arden, and Mr. Emson, of Dorchester; Dr. Smith, Mr. Trowbridge, Mr. Lithgow, and Mr. Boyd, of Weymouth; Dr. Lees, Mr. Spooner, and Mr. James Lithgow, of Blandford; Mr. J. W. Daniel, and Mr. Joachim Gilbert, of Beaminster; Mr. W. F. Coles, of Cerne; Dr. Williams, of Sherborne; Mr. Rendall, of Maiden Newton; Mr. R. Fookes, of Stalbridge; Mr. W. Sweeting, of Abbotsbury; Mr. Charles Ingram, of Corfe Castle; Mr. Charles Wileox, of Swanage; Mr. Clapcott,

and Mr. Good, of Sturminster; Mr. Gunn, of Bridport; Mr. Reeks, of Piddletown, &c., &c. A masterly analysis by Mr. Spooner of the whole Bill (published in the local papers) was read, and received with much applause. The resolutions were passed unanimously, and were drawn up in excellent taste. A Committee was formed to aid their enforcement, and thanks were kindly voted to ourselves, and the other medical journals.

On the 22d ult., a meeting was held at Malton. The speakers were, Drs. Boston, Wright, Wood, and Rogers; Messrs. Tecsdaie, Bartliff, Memell, Dewsland, Colley, Jones, Atkinson, and Wilcox. The following were three of the resolutions passed.

That this meeting, deeply lamenting the present disorganized and anomalous state of the Medical Profession, hails with pleasure the introduction into Parliament of a Bill by Sir James Graham, for "the better Regulation of Medical Practice throughout the United Kingdom."

"That this meeting highly approves of the provisions of the Bill, for securing the general registration of the members of the profession, and the right of any registered member to practice in any part of the United Kingdom by simply registering there, is regarded as a just measure, yet it is deemed inexpedient to charge another fee for admission into such other College or Register."

That a report of the proceedings be sent to the Medical Times, the Lancet, and Provincial Medical and Surgical Journal.

Other meetings have been held at Cork, where Dr. J. R. Harvey was in the chair, and at Welch-pool where Dr. Johnes of Garthmill presided: the resolutions carried were of a moderate and discriminating kind.

On Thursday the 20th instant, a very important meeting was held at the London Tavern, Bishopsgate Street which was attended by about 150 students belonging to GUY'S HOSPITAL. Mr. Bentley, on taking the chair, said, that many gentlemen were present, better qualified than himself to fill that important post. Their object in meeting was the advancement of science, and the elevation of its professors. He trusted that the proceedings that evening, would give the lie to the false opinion prevalent on the irregularities and thoughtlessness of the students of the present day.

Mr. Oldfield (the Secretary) read letters of approval from Drs. Addison, Babington, Ashwell, and from Messrs. B. Cooper, Key, and Bell.

Mr. Marsh proposed, and Mr. Johnson seconded the first resolution, to the effect that it was the duty of the students to consider the new bill. Mr. Johnson congratulated himself, that the Guy's Hospital Students were the first to stir. The second resolution returning thanks to Sir James Graham for introducing the bill, was proposed by Mr. Gosset, who remarked that at this was essentially a student's meeting. If characterised by want of great experience, he felt that the meeting would be characterised also by want of the narrow prejudices which had marked some of the medical meetings recently held. The bill concerned them intimately, for they were interested in all that concerned the elevation of the profession, and he believed that the bill would have a good effect on the whole body of Medical men including more particularly, the general practitioners. He dilated on the claims Sir James Graham had to the thanks of the meeting and referred to several clauses of the new bill which would prove of the greatest advantage to medical men. He particularly dwelt on the clause which enacted fine or imprisonment to any man affecting, directly or indirectly, that they were legally registered practitioners. His opinion was that the general practitioner ought to be rather represented in the Council of Health than separated from the College of Physicians and Surgeons. (Cheers.)

Mr. Thompson seconded the resolution. He thought that if the bill had been brought forward by any other person than Sir James Graham, it would have received the support of many of its present virulent opponents.

Mr. Ayton rose to propose an amendment. He feared that the bill would have a bad effect on general practitioners. The amendment recognized the good intentions of Sir James Graham, but expressed dissatisfaction with certain unspecified clauses of the bill, as likely to depress the standing of medical men.

The amendment, having been seconded by Mr. French, was carried by a small majority.

Mr. Lloyd proposed the next resolution; and called on gentlemen to adopt the resolution, as he thought that a government responsible to the profession and the public was what they wanted, and which the Council of Health was calculated to give them. They had not this in the Council of the College of Surgeons, who had chosen the mean and paltry position of council of the pures, and not the council of the profession.—Again, the Apothecaries' Company had failed, with the power given to them, of restraining from quackery their own members, and had got a connection with the profession unworthy a dignified body.—The Council of the College of Physicians had failed to assist the profession, or to assist in its government.—And from this unnatural position, of having many heads, yet no responsible government, Sir James Graham had come forward to relieve the profession. He called on the meeting to adopt the resolution which he now proposed.

Mr. Goodinge seconded the resolution. He insisted on the right of the general practitioners to a larger share in the management of the profession than the bill now gave them.—The resolution was carried.

Mr. Sealey proposed the next resolution, which condemned the bill's permission of quackery.—It was seconded by Mr. Wilks, and carried unanimously.

Mr. Oldfield, in an able speech, proposed the next resolution; which, while recognizing the past services of the Apothecaries' Society, distinctly approved the policy of separating from a trading body of that character, a profession aspiring to respectability.—The resolution was seconded by Mr. Ebdon, and carried.

A resolution, moved by Mr. Davis, and seconded by Mr. Peskett, was then carried, approving of the registration clause; and, after a vote of thanks to the chairman, the meeting dispersed.

TRANSACTIONS OF LEARNED SOCIETIES.

ETHNOLOGICAL SOCIETY, Dec. 11th. Admiral Sir Charles Malcolm, President, in the Chair. Eight members were elected.

Two papers were read:—1. "On the Natives of Puget Sound, the Straits of Juan de Fuca, and the Gulph of Georgia, but more particularly the Chenooks, the Shimsheans, and the Pilbellas, by W. Stoddard."—2. "On the language of the Oregon Territory, by Professor Latham."

The Chenooks inhabit the north side of the Columbia river. They are of slender form, short stature, and effeminate features. They pierce the ears and the septum of the nose, and flatten the head; bury their dead in canoes, and live principally on salmon. The Shimsheans number about 1,200, and inhabit the north west coast of America. They are lighter than the New Zealander, and the women particularly fair. The girls wear a piece of bone, pin-formed, through the lower lip, which, on their marriage, is removed for one of oval shape and of large size; several rings are worn on their fingers, and one in the septum of the nose, and bracelets round the wrists. The hair is neatly plaited into a tail, and the eyebrows are trimmed with great precision. They burn their dead, and as a mourning rite blacken their faces and cut off their hair; of sea weed and the inner bark of the hemlock they make cakes. The Pilbellas are divided into three villages. They are robust and well made. The dead bodies of the chiefs lie in state for two days, covered with a white shirt. The face is painted vermilion, and the head covered with white down; a natural cave is the sepulchre of this tribe. The natives of Fraser's river propagate a species of the wolf dog, which periodically produces a crop of long white hair, which is manufactured into blankets. They live in well made permanent houses of cedar wood; appended to the paper were short Shimshean and Pilbella vocabularies.

The languages dealt with by Professor Latham were those from Russian America down to New California, which he considers amount

to nineteen, which are mutually unintelligible. The differences between the Athabasean languages of the Oregon, and the Nootka Columbian languages of the Oregon are, according to Professor Latham, the differences between the Latin and Greek, the Welsh and Gaelic, the German and Icelandic, rather than those between the German and Russian, the Latin and Persian, the Greek and Lithuanian. In addition to the groups mentioned, Professor Latham named a third group, those of Russian America. Besides a careful digest of the vocabularies of the Oregon territory, amounting to forty-five, Professor Latham placed the Atna and Friendly Village languages in its true position, which must be considered an important step in American Ethnology.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, Dec. 10, 1844.—Mr. Stanley, President, in the chair.—*Observations on Cleft Palate, and on Staphyloraphy.* By W. Fergusson, Esq., Professor of Surgery in King's College, London.

THE author commences his paper by making some general remarks on the operations for cleft palate performed in this country, and abroad. He then proceeds to give a detailed account of a dissection which he had the opportunity of making, of the muscles which operate upon the soft palate, in an individual who had both the velum, and a portion of the hard palate, cleft. This description is followed by an examination of the opinions of different eminent physiologists, concerning the motions of the velum palati and its arches during the acts of deglutition, and by the author stating his own views as to the actions of the various muscles when the palate is cleft. This part of the subject he further illustrates, by describing four different states in which the flaps on each side may be seen, upon looking into the mouth of a person who has a cleft palate, and irritating them in different ways. By pursuing this course of anatomical and physiological enquiry, he arrives at the following conclusions: 1° that the flaps are slightly drawn upwards and to the sides, when the levator palati contracts; 2° that when the levator palati and palato-pharyngeus act strongly, and together, the flaps are so forcibly drawn from the mesial gap, that they can scarcely be distinguished from the sides of the pharynx; 3° that the flaps are forced together, and the edges come into contact, when the superior constrictor muscle contracts during the act of deglutition; 4° that the circumflexus palati possesses but a feeble power over the flaps; lastly, the fibres of the palato-glossus were very imperfectly developed in the specimen in his possession. The chief object of his paper is to communicate a novel plan of operating in staphyloraphy, founded on the above investigations, and which he has put in practice with most satisfactory results in two cases, during the last twelve months. The principle of his new proposal is to divide those muscles of the palate which have the effect of drawing the flaps from each other, and widening the gap between them when they contract, so that the stretched velum may be in a state of repose, and the joined edges may not be pulled asunder by any convulsive action of the parts, during the process of union. In other words, he advises, as an accessory to the operation of staphyloraphy, the division of the levator palati and palato-pharyngeus muscles; and, if requisite, the palato-glossus. In bringing forward this plan, he reviews the different modes of operating which have been pursued by numerous distinguished surgeons, who have written on the subject; and he concludes by entering into several minute details regarding the steps in his own operation, and by describing the particular forms of instruments which he has found best adapted for his proceedings.

The preparation of cleft palate, a dissection of the parts in the usual condition of the throat, a variety of diagrams, instruments, &c., were on the table, to illustrate the views of the author.

Mr. Stanley wished to draw the attention of the members of the society to the anatomy of the cleft palate, as detailed by the author, who, he was sure, would be anxious to learn whether any gentlemen present had had an opportunity of dissecting a case of that deformity, and also what had been observed during the dissection.

Mr. Caesar Hawkins enquired the age of the two patients upon whom Mr. Fergusson had operated, since he had entertained the views which he had promulgated in the paper which had just been read, and further, whether the fissure involved the soft palate only, or extended through the bony texture also.

Mr. Fergusson answered, that he had acted in those cases in accordance with a rule which had been universally agreed upon among practical surgeons, viz., that the patients should be of an adult age, and the parties alluded to had been so. In neither instance had the fissure involved much of the hard parts, nor did he think that such a condition made much difference as regarded the operation he proposed, for, as stated in his paper, the soft tissues alone were under the influence of the motor powers, which he had pointed out, and in the event of an operation similar to that followed by Warren, it was evident that there was no motory influence likely to affect the tissues dissected, from the bones. There were some casts on the table, exhibiting the condition of the cleft in the hard palate, and it would be apparent, on examining them, that the soft tissues, if dissected and brought downwards, would meet in the mesial line with great facility.

Mr. Stanley remarked, that the explanation given by the author of the paper, of the manner in which persons affected with cleft palate were enabled to swallow food, without its passing back through the nose, and also the recommendation of the section of the levator palati, constituting the principal novelties put forth by Mr. Fergusson, were highly deserving of the consideration of the members, but prior to discussion, they probably required reflection and experience.

Sir George Lefevre regretted to find a paper of such magnitude likely to be passed by without eliciting any observations. He would wish to ask Mr. Fergusson how long was it after the operation before the fissure was fully closed, and also whether the defect of speech had been completely removed. In concluding, he expressed his belief, that a paper of greater importance and interest had not been read before the Society for a long time, and he trusted, that the discussion would not be suddenly closed.

Mr. Fergusson, in answer to the queries of Sir George Lefevre, stated, that he had referred to the cases on which he had operated, more with the purpose of shewing, that he had some proof on the living body, in testimony of the correctness of his views, than for the purpose of detailing particulars, but as Sir George had questioned him on the subject, he should be happy to give a brief history of the two examples in which he had performed the operation. The first case was that of a young gentleman, 17 years of age, who suffered under this congenital defect. He had arrived at that period of life when he felt anxious to do something for himself, and as his interest lay with the army he had prospects of a commission, but he felt conscious that his chances were very indifferent, unless something could be done to improve the tone of his voice and his articulation. When he was first consulted about the case, the gap appeared so large, that he had not been over sanguine as to the success of the operation, in so far as regarded union, and as to the tone of voice he could only hold out hopes that it would be improved; for the experience he had himself, with reference to the voice, was not such as to induce him to say much on the subject. The young gentleman was willing to submit to any operation which should give chance of improvement, and accordingly a proceeding had been followed, such as that described in the paper. Unfortunately a part of the gap had opened again, but some months after, the patient cheerfully submitted to another operation, which had been attended with complete success. He well remembered with what attention he had listened to the first sounds which the patient was permitted to make. He observed a decided improvement, yet, on the whole, when the patient was allowed to use his voice freely, he had been disappointed: the tones and mode of articulation remained much the same as before the operations, and continued so until the party put himself under a teacher of elocution. About

eight months after the operation, this patient went under the tuition of a gentleman, well known to the profession and the public for the wonderful changes he had effected on the voice and articulation—Mr. Hunt, under whose instruction the improvement had in a short time been amazing; so much so indeed, that he (Mr. F.) had no doubt that he would be eligible for the profession to which he aspired, and he imagined also that when this gentleman returned among his friends, their astonishment would be equal to that expressed by the friends of Mr. Stephenson, the party on whom the operation was first successfully performed by Roux, when they heard his voice on his reappearance among them. The other case was that of a young lady, also about 17 years of age, who was so conscious of her great defect, that she seldom attempted to speak, preferring to remain silent when in company. She was willing to submit to any operation which should offer a chance of improvement. The proceeding had been successful in her case. He thought that it would be improper not to mention, that although he had stated in the paper that union had been complete, there still remained, in this instance, a small aperture in front, which, however, he had no doubt would be closed by and by. It must be known to those who are familiar with the histories of these operations, that they occasionally have to be repeated, and that apertures remain for some time after, until closed by the use of caustic or cautery. In this example it might be said, that the patient still required to learn to speak, and he imagined that if placed under an able teacher of elocution, that she would soon be able to articulate with facility. As regarded the tone of voice, he could not from his own experience say much, but he had questioned both Dr. Mütter and Dr. Warren, when they were in this country last summer, on this subject, and he learnt from them that they had reason to be disappointed in some instances. It was *easy* to tell in the first few days whether the union was likely to be successful: in three, four, six, or ten days the stitches were removed, and if the parts then kept together, there was nothing further to apprehend.

Whilst on these subjects, he would refer to the history of a case lately told him by Sir Benjamin Brodie. Sir Benjamin had operated successfully on a young gentleman of high connections, but his power of speech was in no degree improved until he had taken lessons in elocution; when the change was so great, that the party soon after obtained a commission in the army.

Dr. Gregory enquired whether, in either of the two cases, mechanical means had been tried, prior to the performance of the operation, and whether they had produced any result; if so, of what nature. He would further be glad to learn Mr. Fergusson's experience of mechanical applications generally in such cases.

Mr. Partridge wished to ask Mr. Fergusson whether there existed any difficulty in the elevation of the soft palate after the operation; whether there occurred any difficulty in deglutition, and whether the palate was always pendulous?

Mr. Fergusson, in answer to Dr. Gregory's questions, stated that no mechanical means had been adopted in either of the cases referred to, and he had himself no experience regarding artificial palates. He believed, however, that there were gentlemen in the room well qualified to give their opinions on such topics. Mr. Partridge's question he (Mr. F.) imagined led to a wide field of controversy, for he found that the highest physiological authorities differed in opinion, as to the action and condition of the soft velum during deglutition. For his own part, he imagined that there was but little movement in it at that period. He could say, however, that in one of his patients—the case which had been brought under his notice—the movements seemed much the same as in the natural palate. He felt satisfied that he could observe the action of the levator palati, just as in the well formed parts. This subject was alluded to in the paper, and he had no doubt that the levator palati had formed new adhesions to the velum. It was worthy of remark, that during the early attempts at deglutition after the operation, the fluid or bolus was

slipped backwards with great gentleness. The tender state of the parts, as well as the cautions of the surgeon, put the patient on his guard on such occasions. At first, too, the soft velum was so indurated and thickened that the party could use little freedom with it, but, in the course of time, it assumed more of a natural condition, and then both deglutition and speech were much facilitated.

Mr. Shaw remarked, that Mr. Fergusson's not laying much stress on the action of the circumflexus or tensor palati, might by some be deemed a weak point in the paper, as it might be supposed that if it were not divided, it might by its action tend to separate the lips of the incision. After some thought upon the subject, he was not inclined himself to attach much importance to its section but should be glad to learn Mr. Fergusson's opinion upon the subject.

Mr. Fergusson stated that he had mentioned in his paper his opinion that this muscle had but little control over the moveable parts. He had at one time supposed that it had considerable influence, but on a careful examination, both in the preparation referred to and in the natural state of the parts, he felt satisfied that the power of the muscle was not at all likely to interfere with the results of an operation. The shape, development, and course of the muscle, were all such as to convince him on this point, and he referred, in corroboration of his views, to a dissection of the healthy parts on the table in the room. The word tensor, perhaps, implied, in the estimation of some, a greater power than the muscle really possessed. The motion was scarcely more than perceptible; it was a mere act of tension.

Mr. Partridge enquired whether the circumflexus, or tensor palati muscle, was not remarkably small in the preparation that had been exhibited?

Mr. Fergusson replied that he did not think so: in fact, it appeared to him that the muscle was in reality larger than in the natural condition, and also that the action was in some degree more apparent in the specimen of cleft palate, than when the velum was entire.

Mr. Henry Charles Johnson enquired as to the degree of relief afforded by the operation, with respect to the regurgitation of food through the nostrils?

Mr. Fergusson said, that the partition seemed to have the complete effect in preventing the escape upwards of all articles of food or drink.

After the termination of the discussion on Mr. Fergusson's paper, several forms of needles were exhibited by Mr. Brooke, for facilitating the application of his "bead suture," in the operation of Staphyloraphy, and other analogous operations.

—The bead suture may be thus described:—A piece of ligature silk, with a knot at one end of it, is doubled, and the loop passed through a flat glass bead, about a quarter of an inch diameter; this loop is then drawn through the parts to be united, by one of the needles, the loop is then passed through another similar bead; this is most easily effected by a little hooked needle, resembling a tambour needle. The loop is then cut, and a knot tied on the end of that piece which has not a knot at the other end. By drawing the free ends of the two threads, the beads are brought close to the integument, and the separated parts into close apposition. The advantage of this suture is, that the pressure occasioned by the tension of the thread is diffused over the surface of a smooth glass bead, and has, consequently, the least possible tendency to produce ulceration; a result which constantly ensues in the common interrupted suture, when any traction is required to bring the parts into close apposition. The bead suture differs from the quill suture, in that it may be applied in any situation in which a suture may be necessary; and the parts are capable of being much more accurately approximated.

In all the instruments exhibited at the meeting, the same principle is adopted; namely: after the needle is introduced, the ligature is received in a small notch near the point of the needle, and is carried through the parts to be united, on withdrawing it. Where the line of separation is nearly in the same direction as that in which the handle of the instrument must be held (as in the palate), this appeared to be very readily effected

by means of a spirally-curved needle, mounted in a handle: when, however, the direction of the line of separation is nearly at right angles to the handle of the instrument, the ligature is carried through one side by a recurved needle, the point of which turns directly backwards, and returned through the other, by a needle only slightly curved at the point.—An instrument resembling a director, mounted in a handle, was also shewn, by which the ligature was readily and certainly lodged in the notch of the needle, when out of the finger. These instruments were considered, by several eminent surgeons present, to be well adapted to accomplish the object for which they were designed—that of overcoming the well-known difficulty of applying sutures in certain situations.

The next meeting of the society will be held on the 14th of January next.

MESMERISM IN LEICESTER.

To the Editor of the "Medical Times."

Sir,—I am not sorry to observe that, once in a while, you do not overlook the subject of mesmerism; it is forcing itself upon our notice more and more every day, and I do not see how, as candid men, we can shirk the examination much longer. As a physiologist, I am interested in learning *how much* of truth there may be in the system; but for this purpose we want more information. We want facts and materials from those who are in possession of them; and it is with this end that I venture to address myself to you upon the subject.

You are aware that, a few months back, there was performed at Leicester an amputation of the leg, under the mesmeric state, in which the patient, Mary Lakin, asserted that she felt no pain. The facts were referred to in your columns.

But it seems that you are not aware, that, since that period, a *second* amputation, and indeed one or two other operations of a serious nature, have also taken place in the same town, when the patients were in the mesmeric state, and again alleged that they felt no pain.

These facts having reached me accidentally, I wrote to a friend in Leicestershire for information; and these are his exact words in reply:—"The medical men in Leicester are *doing their utmost* to have the reports of the cases at Leicester suppressed, so that we hear little of them; the only paper I see regularly is the *Leicester Journal*, but it is obliged to be cautious." Now, Mr. Editor, can these things be so, in this age of active enquiry? Is it possible, that a mysterious silence is to be adopted, on a subject in which the public is beginning to feel so deep an interest? Either the alleged facts are false, or they are true. If false, let them be at once put down by an open exposure; if true, let the circumstances be published, honestly and philosophically.

However, under the present system of acting in the dark (the reason of which can only be surmised), I take the liberty of asking, through your widely circulating journal, if any of your readers will kindly answer the following queries.

Is it true, that a *second* amputation of a leg, alleged to be without pain, has taken place within the last few weeks in the town of Leicester, making thereby the *third* operation of the kind that has occurred in England?

Is it true, that the operating surgeon in this case was the very Mr. Paget, who, in the case of Mary Lakin, a few months back, wrote a disparaging letter, which appeared in your columns, respecting its truthfulness and reality?

Is it true that Mr. Paget himself, of his own accord, and after that same letter, called in the aid of mesmerism for this second patient?

Is it true, that the amputation took place openly in the infirmary, in the presence of several medical men?

Is it true, that the parties present declared themselves, at the time, satisfied with the result?

Is it true, that one of the medical men, who, after the amputation of Mary Lakin's leg, expressed himself sceptically and sneeringly as to the powers of mesmerism, was himself privately, at that very time, and in his own house, sanctioning

the use of mesmerism, for the benefit of a member of his own family?

These things are said to be the case, but every one of them may be false; but this suppression of facts, and this curious mystery respecting them, give a significance that they would not otherwise possess. I care not, whether the facts be real or unreal. I ask only for the truth; and, in the spirit of a philosophical enquiry, I sign myself,

INVESTIGATOR.

Dec: 13, 1844.

NECROSIS OF THE FEMUR.—Dr. Handyside has reported, in the *London and Edinburgh Medical Journal*, two cases of necrosis of the femur, in one of which he was able to save the limb, and in the other he was obliged to perform amputation. In the first case, that of a girl, nine years of age, the disease occupied the left femur, and the necrosed bone protruded through an opening in the skin, discharging matter freely. The limb was much bent; the general health greatly affected. The sequestrum not yielding to moderate traction with strong forceps, an incision, several inches in length, was made with a strong scalpel down to the new bone, in the direction of the sequestrum: the soft parts were then dissected a little to each side, and the incision was carried through the newly-formed bone, down to the sequestrum, which being again seized with the forceps, readily yielded to strong evulsive force, exerted in a rotatory manner. The operator then, placing a hand firmly on each portion of the still bent thigh, proceeded to remove the distortion by straightening the contracted parts which had been felt, during the previous steps of the operation, to be as yet soft and pliable, and which yielded to moderate and continued extension. The patient was much relieved by the operation, and fully recovered; the only drawback being a phagedænic appearance of the wound for a few days. She was dismissed rather more than four months after the operation, the thigh being then only slightly bent outwards, and the limb shortened about an inch. She walked with the ancle-joint partially extended, as in talipes equinus, resting the weight on the ball of the foot, and thus compensating for the shortness of the limb. She had recovered the command over the hip and knee-joints, and could use the limb freely. The sequestrum which was removed, was from four to five inches in length, and involved the whole circumference of the os femoris at its middle, and also the entire thickness of the bone. The medullary canal was empty and pervious, except at the middle, where it was obstructed by a cribriform bony septum. Dr. Handyside regards the necrosis in this case, as caused by inflammation of the shaft of the bone.—In the case where amputation was performed, the patient was a lad, 18 years of age, who had suffered a severe fracture of the right thigh, near the knee-joint, with great bruising; but no fracture in the thigh, the condyle, or into the knee-joint, could be detected. There were also two lacerated wounds near the joint, but not communicating with it. The fracture was reduced, and the inflammatory action combated by appropriate treatment; but the bones did not unite, pus formed at the seat of fracture, the popliteal space sloughed, and, finally, a necrosed portion of the shaft of the femur protruded. Under these circumstances, as hectic had supervened, the sloughing continued to extend, the flexor tendons were exposed, and the fractured portions of bone could be felt, bare and rough; amputation was performed. The patient recovered rapidly, and he was dismissed in about four weeks, in good bodily health, with a solid and fleshy stump. On examining the parts after amputation, both ends of the fractured bone were found to be necrosed, and no new formation of bone had taken place within two inches of the injury. The synovial membrane of the knee-joint was thickened and congested, and a deep irregular ulcer was found on the external condyle, penetrating through the cartilage to the bone.

PSIDIUM POMIFERUM.—The editor of the *Provincial Medical Journal* says, the *Psidium pomiferum* is a native of South America, Mexico, and the West Indies, and is found also in different parts of India, where it is presumed to have been intro-

duced, though it is said to be indigenous in Cochinchina and the Moluccas. The guava is frequently used by the private soldiers in the West Indies, as an astringent in dysentery, diarrhoea, and bowel complaints generally, and surreptitiously, and without the knowledge of the medical officers, even in the military hospitals.

THE LONDON MEDICAL DIRECTORY.—Some doubts about the genuineness of this work having been uttered in a few quarters, we have great pleasure in mentioning (the names of the Editors having been communicated to us) that gentlemen may rely both on the respectability of the work, and on the fact, that the promises made by the Editors to the Profession will be fulfilled. We think it of extreme value to the medical community, and, therefore, would seek to remove all obstacles to its success. The work will be published by Mr. Mitchell.—We believe that a rival Directory has been also advertised.

BIBLIOGRAPHICAL RECORD. FROM 23RD NOV. TO 14TH DEC.

Ashwell's (S.) Practical Treatise on the Diseases peculiar to Women, 8vo, 2s. cloth, Part 8. to complete sets, 6s.—Bird's (G.) Urinary Deposits, their Diagnosis, Pathology, and Therapeutical Indications, 8vo, 8s, cloth.—Audubon (J. J.) The Birds of America, from Drawings made in the United States and their Territories, 7 vols. just completed, £24. 10s. imp, 8vo.—The Animal Kingdom, a simplified arrangement of Natural History, on the System of Cuvier, &c., 18mo. 2s.—Wigan (A. S.) The Duality of the Mind, proved by the Structure, Functions, and Diseases of the Brain, and by the Phenomena of Mental Derangement, and shewn to be essential to Moral Responsibility, &c. 8vo. 12s.—Lefevre (Sir G.) An Apology for the Nerves, or their Importance and Influence in Health and Disease, 8vo, cl. 9s.—Lizar's (A. J.) Elements of Anatomy, 8vo. cloth, Part 3, completion, 6s.—M'Arthur (E.) The Scale of Medicines with which Merchant Vessels are to be furnished, in pursuance of Act 7 and 8 Vict. cap. 112, with Directions for the Use, Observations on some of the Accidents and Diseases to which Seamen are peculiarly liable, and Directions for Preserving the Health and Promoting the Comfort of Merchant Seamen, 18mo, 2s. 6d.—Lugol on Scrofulous Diseases, by Dr. Ranking, 8vo. cloth, 10s. 6d.—Curtis's (J. H.) Treatises on Health, the Eye and Deafness, 8vo. 1s. each.—Shaw's Medical Remembrancer, 2nd Edition, 18mo. cloth, 2s. 6d.—Evans' (J.) Lectures on Pulmonary Phthisis, with Appendix, 8vo. cloth, 7s. 6d.—Æschylus Supplices, Recensuit emendavit explanavit Fredericus A. Paley, M.A., 8vo. bds. 6s.—Æsop in Rhyme, with some originals, by J. Taylor, 4th edition, 18mo. cloth, 1s. 6d.—Sixty Gems from the Jewel Box of Thomas a Kempis, sq. 32mo. cloth, 8d.—American Biblical Repository, edited by H. Agnew, 2d series, vol. 12, Oct. 1844, 12mo. 5s. 8vo. sewed, 7s. 6d.—Ancient History; The History of Greece, from various authentic sources, both ancient and modern, royal 8vo. cloth, 6s. 6d.—Anti-Coningsby, or the New Generation grown Old, by an Embryo M.P. 2 vols. post 8vo. bds. 21s.—Journal of the Royal Asiatic Society of Great Britain and Ireland, No. 15, Part 2, 8vo. sewed, 4s.—Caldecott (R. M. Esq.) The Life of Baber, Emperor of Hindostan, 8vo. cloth, 8s.—The Ball Room Annual, 1845, imp. 32mo. 1s.—Banking Almanack, Directory, Year-Book, and Diary for 1845; containing the Calendar, Diary, Meetings of Banks and Public Companies, the Foreign Exchanges, Note Circulation Returns, Abstract of Parliamentary Financial Returns, the Mint, the Funds, the Revenue, Interest Calculations, Commercial Acts of Parliament, corrected List of Banks, General Directories, and a Digest of Banking and Commercial Law, 8vo. cloth, 5s.—Barth (C. G.) Bible Stories for the Young, translated from the 30th German edition, Old Testament, 18mo. woodcuts, cloth, 1s.: New Testament, 18mo. 1s.: complete, 2s.—Batcheller's (W.) New Dover Guide, including a concise Sketch of the Ancient and Modern History of the Town and Castle, with such other general Information as may be useful to Visitors, and a short Description of the neighbouring Villages, 6th edition, 12mo. cloth, 3s. 6d.—Binney's (T.) Illustrations of the Practical Power of Faith, in a Series of popular Discourses on part of the Eleventh Chapter of the Epistle to the Hebrews, 2d ed. fcp. cloth, 5s.—Blakelock (R.) The Atonement and the Doctrines connected with it, a Course of Sermons preached before the University of Cambridge, Jan. 1844, with an Appendix, containing a Synopsis of Dr. Waterland's Summary View of Justification, bds. 4s.—Ponsonby (Mrs.) The Border Wardens, an Historical Romance, 3 vols. post 8vo. bds. 31s. 6d.—Book of Fun, or Laugh and Learn, 2d series, fcp. woodcuts, cloth, 4s.—Botta's (C.) History of the War of Independence of the United States of America, translated from the Italian by G. A. Otis, Esq. royal 8vo. maps and plates, cloth, 13s.—Bowdler's (T.) Sermons on the Privileges, Responsibilities, and Duties of Members of the Gospel Covenant, Advent, Christmas, Epiphany, 12mo. cloth, 7s. 6d.—Bremer (F.) A Diary, royal 8vo. sewed, 2s. 6d.—Bricknell's (W. S.) Oxford Tract, No. 90, and Ward's Ideal of a Christian Church, a Practical Suggestion respectfully submitted to Members of Convocation, with an Appendix, containing the Testimonies of Twenty-four Prelates of the English Church against Tract No. 90, and a Series of Extracts from Ward's Ideal of a Christian Church, carefully printed from the original work, 8vo. sewed, 1s.—Bridge, (W.) The Whole Works of, 6 vols. vol. 4, cloth, 10s. 6d.—British Psalmody, a Collection of Four Hundred and Thirty-seven Psalm and Hymn Tunes, consisting principally of those in general use for Congregational Worship, both in Scotland and England, together with many Original Compositions and Adaptations from the Old Masters, the whole comprising Forty-seven

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Metropolitan Mortality for the Week ending Saturday, December 14th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1201	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	296	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	108	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	158	152	157
Diseases of the Lungs, and of the other Organs of Respiration	444	312	286
Diseases of the Heart, and Blood-vessels	42	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	78	66	69
Diseases of the Kidneys, &c.	5	6	5
Childbirth, Diseases of the Uterus, &c.	10	11	1
Rheumatism, Diseases of the Bones, Joints, &c.	11	6	6
Diseases of the Skin, Cellular Tissues, &c.	1	1
Old Age	78	74	71
Violence, Privation, Cold, and Intemperance	36	26	26

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ASE OF MAMMARY CYST, CONTAINING MILK, WITH REMARKS ON THIS DISEASE.

BY A. J. JOBERT DE LAMBALLE, D.M.P., M.A.M., Officer of the Legion of Honour, consulting Surgeon to his Majesty the King of the French, Chief Surgeon to the Hospital St. Louis, &c.

For the "Medical Times."

A woman, aged 29, was received at the Hospital St. Louis, on the 16th August, 1844. She was the mother of four children, the last being born on the 9th June, 1844. She did not suckle any child after her first accouchement, the right mamma became highly inflamed, which circumstance prevented her giving her child the breast, and ever since it has remained painful, and larger than previously: this, however, being the only disease with which this organ was affected. From that period, milk had been secreted by both mammae when the woman was not pregnant: it could be drawn easily from them by gentle pressure, and its quantity appeared greater than in many males, while suckling. The size of the tumour continued to increase, and, after each accouchement, it augmented gradually on the right side, without decreasing afterwards.

At her entry (17th August), the state of the tumour was as follows: on the inner side of the right breast, there was a tumour, of the size of a walnut, the shape of which varied according to the position of the part; thus, it was round when the mamma was supported; on the contrary, it assumed an elongated form when the organ was unsupported; its surface offered a granular feel to the touch, somewhat similar to that of the mammary gland itself; its consistence was soft, flabby, and like a bladder filled with water, upon the breast being allowed to hang down unsupported; on the contrary, it was firm and resistant, when pressure was exercised on all sides; fluctuation, similar to that observed in ascites, was easily made manifest; compared with its size it was light; limits distinctly marked; situated immediately under the nipple, which was slightly drawn outwards. The sub-cutaneous veins had acquired an abnormal development, and some were very voluminous, crossing the mamma from above downwards, and from without inwards. By pressure, a white cream-like liquid escaped from the nipple, but neither pressure, nor the escape of the milky fluid, caused the tumour to decrease.

Having diagnosed a voluminous cyst of the breast, extirpation was performed on the 17th August, as follows: two incisions were first made, comprising an elliptic portion of the skin covering the inner side of the breast; the cyst was then dissected out without any great difficulty, and, when opened with the bistoury, an abundant quantity of a white, inodorous liquid, analogous to milk, escaped; it contained no clots, and its quantity may be estimated at about sixteen ounces. Having opened the cyst throughout its whole extent, it was detached from the subjacent parts, and removed; the loss of substance was considerable, being about six inches in length. The walls of the cavity were formed by the tissue composing the mammary gland; numerous galac-

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tophori were divided, being visible on the surface of the wound, and were recognizable by the abundance of milk which escaped from their open mouths, and which was in every respect similar to that contained in the cyst. Two or three arteries were tied; the edges of the wound united by means of two pins and the twisted suture, and the usual dressing applied. The patient was then taken back to bed, and towards evening, she experienced slight fever, accompanied by cephalalgia, and a hard and full pulse.

Aug. 18th.—The wound was in a satisfactory condition, its edges being in contact; breast flaccid; no local inflammation; fever still intense; general and abundant perspirations; she appears to suffer much, but there is no *virium defectio*; insomnia (simple dressing).

19th.—Same condition.

20th.—Pulse still accelerated, but not so hard; skin hot and moist; pain in the loins; constipation. The angles of the incision are not united, and on pressure, a considerable quantity of a sanguinolent and milky liquid escaped. (Continue the dressing)

21st.—The quantity of the liquid escaping being abundant, and preventing the wound from uniting by the first intention, the piqs were removed, so as to allow the pus, which was of an unhealthy appearance, and mixed with milk, to escape freely. This done, by pressure, more milk was made to flow from the galactophori. The fever has nearly disappeared; skin moist; breast swollen, as in milk fever (Apply cataplasms, instead of the usual dressing).

She remained in the same condition, the following days. A large quantity of fluid was poured into the cavity, and thus thrown out.

28th.—The walls of the cavity have assumed a more healthy appearance; slight velvet-like granulations have appeared, which cover completely the surface of the gland; diminution in the quantity of pus, which is still mixed with milk; gentle pressure on the gland evidently causes milk to ooze from the upper side of the right surface, and to flow, though in small quantity, mingled with pus, into the cavity. General health good (Food is permitted).

29th.—Same state; milk escapes through one orifice only.

Sept. 1st.—The wound, though it has considerably diminished, is still deep, and full of pus.

7th.—An abundant transparent serosity alone now escapes from the walls of the cavity, when pressure is performed. The skin of the breast is wrinkled around the diminished wound, the edges of which are turned inwards.

11th.—The same kind of serosity flows in abundance from all the parts of the walls; towards the inferior angle alone, does milk escape (Cauterization of the wound with the nitrate of silver).

13th.—Gradual diminution of the wound in depth and in size; opening buried in the midst of the tissue; surrounding skin puckered.

15th.—The serous transudation is far less abundant; cavity diminished in size; mamma in the normal condition.

21st.—The wound is only three-quarters of an inch in length, and one-third of an inch in depth; serous transudation has almost disappeared.

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Oct 1st.—The patient left the hospital in the following state: wound not entirely cicatrized, there being still a sort of slit, a few lines in length and depth; skin puckered up all around, and sunk inwards opposite the solution of continuity.

Pathological Characters.—I deferred speaking of the pathology of this disease, until all the details of this interesting case had been given, in order not to distract your attention from the symptoms. The tumour was composed of three cysts, which evidently had been produced by the abnormal development of the lactiferous ducts, or galactophori; and, in order to proceed with regularity, I will describe:—

1^o *The State of the Breast and the parts surrounding the Cyst.*—The granulations which form the tissue of the mammary gland were more evident than in their normal state, and were not all of the same size; for, while some seemed to be atrophied, others on the contrary—and these were in greater number—were hypertrophied, and, being united into lobules, formed considerable masses. The mamma, owing to the presence of the cyst, was much larger than usual; and this will not seem extraordinary, on reflecting on the mode of distribution of the lactiferous ducts, with respect to the granulations. The skin was quite sound, and united to the subjacent parts by a filamentous cellular tissue. The fascia superficialis seemed to have undergone no change, either in its nature or its structure. The fat was not equally distributed; it was in a very few places collected in lumps, and in some parts it shewed itself under the form of a layer; in the midst of this substance, were several granulations, which might formerly have been considered as adipose vesicles; they seemed to be isolated and independent of the mammary gland. Numerous vessels were found in the tissues which separated the skin from the cyst.

2^o *The Tumour.*—It was composed of three distinct cysts, one anterior, and the other two posterior, which did not communicate with each other, and which were surrounded on all sides by the mammary gland, except in certain spots, where the granulations appeared to be fewer in number, and evidently separated from each other. The anterior cyst was prominent and membranous, and formed a cavity in the midst of the mamma. Interiorly, it was quite smooth, of the nature of a mucous membrane, and white in the greater part of its extent; several ulcerations existed, one of which, about an inch in diameter, occupied its centre, and, after destroying its walls, attacked the gland itself. The surface of the ulcerations had a yellowish tint, which seemed to be produced by the liquid contained in the galactophori. Two kinds of tissue were easily recognized in this cyst; the one mucous, and internal, the other dartoid or fibrous, and external, forming, by their union, the parietes; several orifices opened into this cavity; each had a valve, by which it was imperfectly closed. These valves were evidently intended to hinder the liquid from retrograding, and acted in a mode similar to those of the ureters. Some of these orifices were ulcerated, and their diameters were different. A probe, introduced into one, entered a canal, which, after penetrating to a certain extent, ended in a *cul-de-sac*. In the

numerous ducts which opened into the cyst, other canals terminated, and of which the orifices were likewise furnished with a small semi-circular valve. These were so dilated, that an injection of metallic mercury could be made to penetrate into the canals; this, however, could only be done by injecting them, one by one, and not in the usual way, owing to the presence of the valves. Several mucous folds were also perceived here and there.

The second cyst was quite round; smooth internally; presented no ulceration, nor any notable alteration; somewhat larger than a pigeon's egg, and surrounded on all sides by the mammary tissue, which was considerably hypertrophied. Superiorly, it was united to the preceding cyst, and, throughout the rest of its surface, was in contact with a third cyst, situated between these two. As in the former, numerous orifices, furnished with valves, were to be seen in its interior, disposed in a manner similar to that of the ureters in the bladder; the ducts were shorter, but their termination and structure perfectly similar.

The third cyst, situated more superficially than the two former, and parallel with the second, was elongated, cylindrical, and presented numerous orifices furnished with valves. Towards one of its extremities, a canal was visible, being, as it were, bent on itself, and forming the continuation of the cyst, which offered a certain number of orifices, indicating other ducts.

Besides these three cysts, there was another which separated the two principal ones, and which was remarkable for its elongated form, and the number of orifices opening into it. Towards its centre, there was a species of canalicular prolongation, leaving the direction of the cyst, to become deeper, and presenting, in its interior, several openings. Evidently, this species of appendix was nothing more than a galactophorus, considerably dilated.

To this may be added a similar fact, met with by one of my pupils—M. Niobe—on a woman who died shortly after her accouchement; the pathological symptoms were in every respect similar.

Towards the end of Oct., 1844, M. Niobe found, while dissecting, three cysts of the mammae, in the following case. The female, to judge from the state of the breasts, and of the uterus, had, a few days after her accouchement, an attack of metritis, ending in suppuration. A great number of small, perfectly circumscribed, abscesses existed in the walls of the uterus; seven of them presented cavities full of healthy pus, the smallest capable of containing a pea, the largest, a small nut. The internal surface of the uterus was softened, of a violet-red colour, and presented in certain parts a layer of blackish and bloody detritus; its cavity was considerably dilated, and the size of the whole organ was equal to that of the head of a new-born child. The uterine veins and sinuses were not examined; the peritoneum contained a few ounces of serosity, without any traces of inflammation.

The mammae were voluminous; the right, uniformly tumefied throughout its whole extent, presented nothing remarkable either externally or internally; the left, on the contrary, presented an irregular form, being elongated in the vertical direction, so that its inferior edge was an inch lower than the gland of the opposite side. This mamma was also most voluminous inferiorly, and this species of prolongation, which formed about one-third of the organ, was visibly separated from the superior two-thirds, by a deep transversal furrow, and contained three cysts, answering to the following description:—

The largest of these cysts was of an elongated, cylindrical form, curved at both extremities, and ending in a *cul-de-sac* in the tissue of the mammary gland. The horizontal portion of this cavity offered considerable analogy with the lateral ventricles of the brain, and was about two inches in length; the two portions, curved at right angles, were each about an inch in height. In order to give an accurate idea of the size of the cyst, its interior may be said to have been capable of containing an ordinary leech, full of blood. The internal surface of this cavity was remarkable for its smooth and polished aspect, and for the great number of

openings which it presented. The external portion was adherent to the tissue of the gland, by means of the great number of ducts which opened in the interior of the cyst, as well as by numerous fibro-cellular prolongations which penetrated into the interior of the mamma. Twenty orifices were discovered in the interior of the cyst, the smallest of which allowed a probe to penetrate readily; they were not perfectly circular in shape, but parabolic, and appeared to be furnished with an incomplete valve. On pushing aside, or rather on raising, these valves, it was easy to perceive that the orifice, just described, was the termination of a large duct which opened into the cyst, and on which were numerous other smaller ones, running in a direction perpendicular or oblique to that of the principal duct. On examining more attentively, so as to discover the origin of the cyst, it was found to be composed by the reunion of several small ducts, running from the tissue of the mamma, and ultimately uniting together. This was the order presented by these canals, followed as far as it was possible. Other ducts appeared to end suddenly in a *cul-de-sac*; and, as in the two former cases, their walls gave passage to several canals, distributed like hepatic veins, and whose parietes were pierced by extremely minute openings, evidently the orifices of very small veins. All these trunks and canals were lined by a prolongation of the internal membrane of the cyst, which, in both cases, was very analogous to the inner coat of the veins.

The other two cysts, situated near the preceding, were perfectly isolated, and had no communication whatever with it; their cavity was much smaller, being capable only of containing a small nut. They presented, like that already described, an internal membrane, and numerous orifices, in every respect analogous.

All three were full of a yellowish-white liquid, presenting considerable affinity with the milk contained in the other parts of the mamma, the only difference being that it was somewhat more fluid and of a darker colour. The quantity, in the largest cyst, might be valued at about a tablespoonful, and in each of the two others, at about a teaspoonful. Finally, after having laid open the cysts throughout their whole extent, on exercising pressure on the surrounding glandular tissue, a milky fluid flowed from the orifices which were visible in their walls, in sufficient quantity to fill the emptied cyst, and perfectly analogous to that contained in the mammary gland.

(To be continued.)

CLINICAL LECTURES ON MEDICINE.

Delivered at the GREAT CHARITY HOSPITAL, Berlin,
By Dr. SCHONLEIN,

First Physician to the King of Prussia, Founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

[Prepared from the German, for the 'Medical Times.']

Pneumonia seated in the inferior Lobe of the left Lung—Pain as a Diagnostic Symptom in this Disease—Imperfection of our Modes of Investigation, in Central Inflammation of the Lungs—Crisis—Recovery.

May 15th, 1841.—William Liebrecht, a labourer, 36 years of age, of powerful make, who had never previously suffered from similar disease, and who has an excellently-formed chest, was, without any apparent cause, attacked with great febrile disturbance, on the 9th of May, not preceded by shivering, and slight pain in the head, and, soon afterwards, with acute pain in the left side of the chest. With this pain he, likewise, had a troublesome cough. He entered the hospital yesterday. On examination, considerable inflammation was found in the lower part of the left lung, accompanied by strong fever; the pulse was full, tense, and accelerated. A free venesection was, therefore, immediately ordered, and repeated in the morning; cupping-glasses were also applied to the affected side of the chest. The local symptoms now presented by the patient are as follows: there is a sensation of oppression in the left side, but the pain has disappeared. The pain, com-

monly observed during pleuritis, which runs from the affected side and back down to the loins, merits our particular attention, as it may readily lead into errors. For, if the pleura alone be attacked, it is not uncommon to mistake the pain for that of rheumatism, and to overlook inflammation altogether, until it is too late. I particularly recollect a case, where this mistake was made, until a hectic fever had developed itself, and, after some weeks, a swelling was observed presenting itself below Poupart's ligament. It afterwards appeared that the pus had descended along the psoas muscle. This error, arising from the distant locality of the pain, is by no means a rare occurrence. We are well aware of this in other kinds of inflammation: thus, the pain, in carditis, is occasionally felt in the region of the bladder and ovaries;—in inflammation of the liver, in the left hypochondrium; and in that of the hip-joint, in the knee, &c. I only mention this with a view to caution you against misconstruing this pain, and not to be guided by it alone in your diagnosis.*

* There, also, occurs, in some cases of pleuritis, a violent pain in the back, and stiffness of the spinal column, which symptoms are caused by extension of the inflammation to the serous membrane of the spinal marrow. Allen has described this, in his excellent *Synopsis Medicinæ Practicæ*, under the name of *pleuritis postica*. Schönlein relates a case of this kind (in November, 1840). It was that of a labourer, Charles Kobbe, 54 years of age, who had been brought into the hospital affected with pleuropneumonia of the left side, and simultaneous inflammation of the serous lining of the diaphragm, accompanied by a violent pressure towards the os sacrum, a sensation of constriction about the abdomen, and formication and numbness in the left lower extremity. A copious venesection was immediately instituted, and cupping-glasses were repeatedly applied to the os sacrum, owing to which energetic treatment, the patient was cured. Schönlein remarks on this occasion: These violent pains in the spine are frequently considered as rheumatic, and treated as such, but paralysis takes place ere long, and rapidly reaches so great a height, that a favourable result can be obtained by any treatment. This form of inflammation generally occurs after having caught cold, or from having got wet. I often had an opportunity of observing it at Würzburg, in cases of soldiers, who, after a hot day, were exposed to the cold night winds, in their scanty clothing, especially in the month of May; in such cases, it early exhibited itself under the terrible symptoms of tetanus, which soon terminated fatally. It is, therefore, of great importance to recognize the disease in its first stage. The diagnosis is not so very difficult: the pain is seated exactly in the median line of the spinal column; the latter is stiff, very painful upon every movement, and upon pressure; the pain is muscular: to these we must add symptomatic phenomena, differing according to the part of the spine which is attacked. If the lower part of the spinal column is affected, the patient will experience a feeling of constriction about the bowels, if a tight band had been passed round them; the abdomen, however, remains soft. There is, also, a feeling of numbness in one or both lower extremities, and his walk is of a crawling character. The organs of the pelvis also soon become affected: the urine is discharged with difficulty; it flows scantily, and immediately throws down a precipitate. Constriction of the chest is produced, if the cervical part of the spine is affected (as Allen has observed), and vomiting frequently takes place; the tongue is sometimes perfectly clean; there is a dry cough (often without the organs of the chest being materially affected at the same time), and paralytic symptoms take place in the upper extremities. Abstractions of blood, particularly topical, mercurial frictions, and large doses of calomel (at first combined with jalap), should be immediately administered, when the symptoms display themselves, instead of losing our time with anti-rheumatic remedies, embrocations, &c. Baths, to excite the cutaneous secretion, should only be employed subsequent to this treatment.

In the instance before us, we are less liable to mistake, owing to the constant and troublesome cough. Percussion, on the left side, laterally and behind, gives a faint, dull sound:—bronchial respiration is heard simultaneously with inspiration; the cough is generally dry, but a little mucus, mixed with blood, is expectorated. As to the general symptoms: the pulse is now soft, 84 per minute; the skin begins to be moist; the urine is rather darker in colour, containing a mucous cloudiness, which precipitates itself on cooling; these, therefore, are already indications of a crisis. Venesection, however, must be again had recourse to, should increase of the affection take place towards evening.—*Prescription*: An emulsion, containing laurel-water; mucilaginous drinks, and frictions with grey mercurial ointment, and ol. hyoseyam., to be made upon the chest.

May 17th.—The amelioration, yesterday observed, is to day more marked; the local as well as general symptoms were somewhat increased towards evening, and a venesection of eight ounces was, therefore, repeated. A copious respiration has since taken place; the urine exhibits a tendency to critical precipitation; the frequency of the pulse is lowered to 60 per minute; the tongue clean; the cough more rare; auscultation indicates but a few traces of crepitation; the inflammation, therefore, has not yet quite disappeared, although it is again considerably diminished. There being no longer any diarrhoea, we may now add nitrate of potash to the emulsion already prescribed.

18th.—The favourable symptoms which have taken place, since the last abstraction of blood, continue; the cough is more rare, but the sputa are still tinged with blood. The local symptoms of the chest have disappeared altogether; the patient breathes freely and deeply, without pain; auscultation does not shew anything abnormal.—The antagonists of this new method of exploration assert that it still has many imperfections (and this its advocates are well aware of); but it would be the greatest injustice to condemn it on that account. This imperfection is most felt when the inflammation is seated in the central portion of the lung, and is covered over by healthy pulmonary tissue. In such case, normal respiration will alone be heard, whilst the deeper-seated inflammation is not discovered. Here, however, we shall have other symptoms to guide us, and which will thus supply the want of auscultation: as, for instance, the bloody sputa, &c. The results which the stethoscope affords us, though they serve as a principal basis for our prognosis, yet do not constitute it alone. The quality of the sputa, in this case, shews that a deeply-seated inflammation still continues, although it is decreasing. We shall, therefore, continue a strictly antiphlogistic treatment, though abstractions of blood are no longer necessary.

18th.—The symptoms have again experienced a favourable change, during the last 24 hours; the sputa no longer contain any traces of blood; the crisis, also, is more apparent, by the perspiration induced by the urine; there is no exacerbation of fever towards the evening. We may, therefore, now discontinue the medicines, and have only to protect him against injurious external influences.

21st.—The crisis, in this instance, has manifested itself almost solely through the skin, whilst the urinary crisis was but slight—a fact the more remarkable, since the local symptoms had been so intense, and had been of some duration previous to commencing the treatment, compelling us to bleed four times within 48 hours. The urine certainly throws down a precipitate; instead of former dark colour, it is now clouded by mucus, but there is no uric acid, or red sediment, such as is generally found in violent cases of pneumonia. The circumstances, however, of the urine being clouded, and the continuance of secretion of the skin, prove to us that the critical period is not yet terminated; and it is always to be feared, as long as this latter continues, that it may be interrupted, and that the disease may reappear. The patient, therefore, may certainly be left without medicine, but not without a strict watch being kept upon him. He

was enabled to leave his bed a few days afterwards, and was finally dismissed, as cured, on the 2nd of July.

Pneumonia in the inferior Lobe of the left Lung.—Typhus apprehended.—Inflammation of the Lung, assuming a nervous Character.—Retgression of the Inflammation.—Influence of the cause, occasioning the disease, and of the temperament of the Patient, on the course and the termination of the inflammation.—Crisis.—Recovery.

May 24th 1841.—Henry Fuchs, labourer, 24 years of age, had never had any other disease worth mentioning, excepting a tertian ague. The present complaint has evidently originated in a blow from the rudder of a boat which he was steering, and by the violence of which he was thrown overboard. He states, that he did not suffer any material inconvenience immediately afterwards; nor was there any swelling, nor fracture of the ribs. On the fourth day subsequent to it, however, he experienced violent pains in the locality of the injury. Cough and fever also took place. An emetic was given to him, which had no other effect, than that of producing copious stools, and thus the patient was brought, on the following day, into the hospital, where he has already been subjected three times to general, as well as local, abstractions of blood. The respiration is rather quickened and superficial; he complains of an acute pain in the left side of the chest on drawing in his breath deeply or on any movement; he lies perfectly flat on his back. The left or injured side of the chest naturally claims our attention first. In front the sound heard on percussion is clear; there is no pain existing, not even upon pressure, (pleuritis costalis, therefore, cannot exist); percussion gives a dull sound behind, and a dry crepitation is then heard; bronchial breathing, also, is manifest, which proves that the first degree of inflammation exists in some spots, and the second degree in others. The pulse is 120 per minute; tongue dry and brown; skin burning hot. Abdominal symptoms are also present; the abdomen is swollen, but without pain; there is a mucous diarrhoea. The emetic may partly account for the affection of the intestines, but the febrile symptoms must not be wholly attributed to it. We here have some reason to apprehend the development of typhoid phenomena conjointly with the inflammation of the lungs, which is the more embarrassing, as the inflammation of the lung requires an energetic antiphlogistic treatment. It is evident, however, that decidedly established symptoms must have greater influence on our treatment, than such as are merely possible. We shall, therefore, once more institute venesection, and administer an emulsion of oil, with laurel water. Nitrate of potash is not here admissible, on account of the violent irritation of the mucous membrane of the intestines, produced in consequence of the emetic given before the reception of the patient into the hospital.

25th.—An abstraction of twelve ounces of blood was made yesterday morning (it was the fourth in 48 hours); the blood drawn was strongly cupped, and covered by a thick buffy coat. The treatment hitherto has afforded us no very decisive results; the inflammation continues in the same degree as yesterday; pain is felt during deep inspiration; the cough is more dry; only few sputa, but without admixture of blood, are expectorated. The symptoms of the intestinal irritation continue; there have been two watery stools since yesterday, and a rumbling noise was heard in the cæcal region. Respecting the febrile symptoms, there is some cerebral disturbance; the sleep is uneasy, and interrupted by dreams; the tongue, to-day, is of a paler red colour, and moist; the pulse 120 per minute, rather soft; the skin moist, but, beneath this humidity, a stinging, prickly heat is perceptible; the urine is dark, or red brown, cloudy, and very acid, but without any sediment. These last symptoms, according to the opinion of the ancient school, indicate the transition of the inflammation of the lungs into the nervous state. This so termed *status nervosus*, which often occurs in violent pneumonia, in consequence of the disturbed circulation of the blood (indicating itself by a small, contracted, and

frequent pulse, bluish face, delirium, coldness of the extremities), must, however, be distinguished from the state in which the fever has the torpid character from the commencement, as it occurs in the real *pneumonia typhosa*. These symptoms, therefore, are unjustly designated *nervous symptoms*. As the local phenomena are alone decisive in this instance, all the rest is of little importance; the changes in the febrile symptoms are certainly to be observed, but they must not have that influence upon the treatment, which the ancient physicians taught us.

We must still strictly adhere to the antiphlogistic treatment, modifying it by the nature of the reaction. The best means for producing the urinary secretion, which is still deficient, is by digitalis; we shall, therefore, administer to the patient an infusion of it (3ss. to ʒv. of water, with gummi mimos. and aquæ laurocerasi aa ʒij), and rub in, on the left half of the thorax, mercurial ointment mixed with ol. hyoseyam.

27th.—The state of the patient has materially changed for the better, within the last twenty-four hours. At our last visit, we found the local symptoms undiminished, although not at all worse. The remedies, since employed, were particularly intended to lower the action of the heart, and to facilitate the urinary crisis. The chest is still oppressed, but not so violently so as before; the cough is no longer so frequent, and the expectoration is more free; the sound on percussion is dull and faint, and bronchial respiration may still be heard at the affected spot, but it is no longer surrounded by a crepitative, but by a moist, rhonchus; the inflammation is, therefore, retrograding inwards. As to the febrile symptoms: the pulse, to-day, is lowered to 86 per minute; the skin moist, and warm; the secretion of urine is more abundant, and is clouded by mucus. Finally, the diarrhoea has disappeared.

Thus, the patient is more favourably situated than 48 hours ago, but still far from convalescence. The question now is: whether we have arrived at the point where hepatisation will terminate by simple resolution, or by suppuration? The latter is, perhaps, the more to be feared, from the peculiar origin of the inflammation, and from the peculiar temperament of the patient.

We may continue the same treatment for the present, but decrease the dose of digitalis to gtt. xx, and we will now add ʒjss. of nitrate of potash, which we were before obliged to omit, owing to the state of the mucous membrane of the intestines.

28th.—The patient continues to go on favourably. The prognosis, a few days ago, was very doubtful; but we can now pronounce a much more favourable one, although perfect convalescence may still meet with many impediments. The principal symptoms, now, are as follows:—the sensation of oppression and the violent pain are removed; at the commencement, we heard a bronchial respiration at the affected spot of the left lung, and round about it a crepitating sound. The first favourable point consisted in the circumstance, that the inflammation attained no greater extent; the retrogression commenced from that moment. The dry crepitation, first of all, became more mucous; the respiration at the side of the lung became freer, but still remained humid towards the posterior part; the bronchial respiration still continues, thus creating some difficulty in the prognosis. There are other circumstances connected with this disease, which also render the event problematical, and these are:—1st. The traumatic cause, which always has an unfavourable effect upon the course of the malady. 2nd. The circumstance that the individual suffered from tertian ague some time ago—a fact which does not seem to have remained without influence upon the constitution of the patient, if we may judge from his complexion. Diseases, especially inflammatory, in such individuals, usually take an unfavourable course. This is a point of the greatest practical importance, to which that attention has not been paid which it deserves.*

* Schonlein remarks, as follows, respecting the connexion of intermittent fevers and tubercular

The fever is now very moderate; the skin moist; the urine begins to form sediments. We shall now discontinue the digitalis, and administer calomel and sulphur. aurat. aa. grs. iss., morning and evening, instead.

June 2d.—The frequency of the pulse has now considerably decreased (being only 64 per minute:); the skin is of its normal temperature, and moist; the urine, which formed sediments some days ago, is now only clouded by mucus; the tongue humid. The sputa consist of simple bronchial mucus; there is still some pain at a limited spot of the left side, but the breathing is free. The principal thing to be noticed is: that another noise is audible; instead of the bronchial respiration, there is now moist crepitation, which dissipates our apprehension lest suppuration might take place; we, therefore, may expect a normal resolution.

The medicine, last prescribed, is to be continued.

June 4th.—The hope which we expressed some days ago, that normal resolution of the inflammatory symptoms would take place, is daily confirmed more and more. The fever has disappeared, accompanied with normal crisis. The most remarkable feature, in this case, was the manner, in which the resolution made itself apparent. The inflammation of the lungs, towards the lateral and posterior parts, was in the second stage, or that of hepatization, while it was in the first stage, or that of dry crepitation, in the surrounding portions; the respiration, at first, was humid, and the bronchial sound was then heard for a time; finally, the murmur gradually became more natural, and now we have only rhonchus mucosus audible there: so that we may, with certainty, expect a complete resolution, and the patient will probably be perfectly convalescent in a few days.

The patient was dismissed, as cured, on the 17th July.

Pneumonia, complicated with Intermittent Fever.—Recovery.

July 9th, 1841.—I have already stated* that a new disease, in a constitution deteriorated by intermittent fever, experiences modifications in its course, symptoms, and terminations, by which changes in the treatment also become necessary.

The present patient, four years ago, suffered from a quartan ague, which lasted nine months. Every symptom of it, however, had disappeared, leaving only a slight trace recognisable in the complexion. The pneumonia, for which he came into the hospital, seemed to be uncomplicated with any other disease, and its course, till the fourth day, led to no fear that convalescence would be impeded. In consequence of the antiphlogistic treatment adopted, distinct crisis took place, and the symptoms of the chest disappeared. The aspect of matters, however, soon changed: febrile reaction, with congestion towards

phthisis:—"Although intermittent fever and phthisis differ, inasmuch as phthisis very rarely exhibits itself in districts, where intermittent fevers are prevalent, yet individuals who have suffered from ague for a long time, on coming, when apparently cured, from a region where that malaria has been raging, into another country, and on exposing themselves to frequent catarrhs of the respiratory organs, often contract pulmonary consumption, even although they may have had no previous disposition to it. I first observed this circumstance in Swiss people, who returned from the fever-breeding districts of Holland, and subsequently on various occasions. The seat of the tubercular disease, according to my observations, was mostly in the left lung, corresponding with the spleen; and, usually, in its inferior lobe; the affection of the spleen was, at the same time, more or less apparent. The country between the Zürich and Wallenstadt Lake, which formerly was much exposed to intermittent fevers, owing to the overflowing of the river, exhibits a striking instance of this. Having been subsequently drained, intermittent fevers disappeared; but a more terrible disease, tubercular phthisis, which was formerly perfectly unknown in this district, now takes its place. The mortality remains the same, or greater, no longer caused by *intermittent fevers*, but by *phthisis*.

* See preceding case.

the head, accompanied by a flushed face and delirium, exhibited themselves in the evening, without any attack of shivering having preceded these symptoms; the pulse at the same time became quickened, and the skin dry. The patient fell to sleep soon after midnight, and a copious epistaxis succeeded. On the following morning a perfect remission took place; a repetition of the same symptoms ensued the following evening, without any increase of the pneumonic complaint being perceptible. But, on the third evening, the pneumonic symptoms once more declared themselves, rendering necessary a local abstraction of blood. Perfect remission took place again the next morning, followed by a violent exacerbation on the fourth evening, whilst the secretions from the skin and kidneys were perfectly suppressed, so that it was again found necessary to institute a copious venesection, and to administer tartar emetic. These means caused the entire disappearance of the pneumonic symptoms. Quinine was subsequently prescribed; the first dose of this was sufficient to moderate the following exacerbation, after which there was no return, so that the patient now is in a state of perfect convalescence.

This was evidently a state of constitution induced by the previous intermittent fever, which was recalled into action by the inflammation, thus forming a complication, which, on its first appearance, presented many difficulties in the diagnosis. It might be readily distinguished from pure intermittent fever: 1st. By the circumstance, that intermittent quotidian generally reaches its paroxysm during the hours of the forenoon—a fact which induced P. Frank to assert that, when the paroxysms of the fever take place daily in the afternoon, it will always give rise to a reasonable suspicion that some other complaint is at the bottom. The fever, in this instance, then, followed the laws of exacerbation of common inflammatory diseases. 2ndly. The paroxysm was not accompanied by shivering, nor even by the slightest indications of it. A marked sign of intermittent fever was, therefore, wanting. Heat only, with violent congestion of the head, was present. 3rdly. It distinguished itself by the kind and manner of the crises. There was scarcely any indication of crisis by the skin, and that by the kidney was entirely wanting; the urine constantly remained dark; but, instead of these, a crisis of pure inflammation took place,—a critical hæmorrhage from the nose.

You have now seen a well illustrated complication of two different diseases, which reciprocally influence each other. Some of these combinations had not escaped the early physicians, as, for instance, the combination of syphilis with scurvy. But there is yet much to learn as to the exact combining capacity of different diseases, and the influence which the one causes on the other,—facts which are not only of scientific interest, but also, as you have seen in this case, of the highest practical importance.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c.

(Continued from page 244.)

THE results of my enquiries are the following:—

1.—Pus globules are essentially distinct from the colourless corpuscles of the blood, though to a certain extent resembling these both in origin and appearance.(1)

(1.) It is still a question whether the exudation corpuscles originate in lymph globules, or in the central nuclei of the red corpuscles of the blood: (the former is the more probable conjecture,) and it is equally undecided whether the colourless corpuscles of the blood are formed from the central portion of the red corpuscles, or by an aggregation and a subsequent increased development of the exudation granules, (I incline to the latter opinion). But it is certain that pus globules are formed from exudation corpuscles. And it

2.—The coloured or colourless blood corpuscles are never, under any circumstances, transformed into pus globules.(2)

3.—The globules of pus have no analogue in any of the healthy solid or fluid constituents of the body; they are produced by an action (specific) of the cytoblasts or exudation corpuscles contained in the *liquor sanguinis*, which action is a modification or perversion of that vital force which the generation of normal tissues is commenced.

would appear that the colourless corpuscles of the blood, and pus globules, have one and the same *ultimate origin*—viz., from exudation granules, and that contingent circumstances determine the development of the one structure or the other. When the vital action of the blood is normal, the exudation corpuscles are regularly employed in the formation of colourless blood and other corpuscles; but when the vital action is heightened as in simple inflammation of the blood, then pus globules are formed. This action appears to be confined to the *liquor sanguinis*, and when influenced by contact of the latter with an inflamed or highly vitalized tissue, the formation of pus globules may proceed regularly and to indefinite extent; when, however, the action of the exudation corpuscles is regulated by the vital force of an inflamed part, the globules, in the process of formation do not stop at the pus stage, but pass on to a higher degree of development and become organized. Thus, the inflammation *per se*, of venous blood, (the vital action of which is low,) produces pus, as also does phlebitis, whilst arterial blood has a greater tendency to coagulate and organize during its inflammation, and in arteritis, the vessels either become lined with a dense organized membrane, or become plugged with a coagulum of a similar nature. Thus, also, the *liquor sanguinis* which is in immediate contact with an inflamed or abraded tissue generally passes into a definite structure of the same character, whilst the outer layer degenerates into pus globules.

The formative process of pus globules, then, seems to be intermediate between that of the colourless blood corpuscles and of the coagulable or organizable lymph of inflammation. Colourless blood corpuscles are formed slowly, for an ulterior purpose in the animal economy; the corpuscles which form organizable lymph are generally formed rapidly and with great vital energy; when effused in contact with a structure which needs reparative the living properties of this structure influence the corpuscles during the process of their development, and convert them into a living matter nearly identical with the parts they touch. Pus globules, on the contrary, are formed much more quickly than colourless blood corpuscles, and under an increased vital force; but wanting the adventitious stimulus of contact with inflamed tissue, they are not advanced to organization during the formative process; and neither being plastic nor vital, like the colourless blood corpuscles, are incapable of being retained in circulation and afterwards appropriated to the purposes of reproduction and growth. Pus globules would appear to differ from colourless blood corpuscles in being generated with more rapidity and energy, by which they are rendered incapable of passing into subsequent and gradual organization; and they do not become living definite tissue immediately upon their formation, because, to this end, they require to be in direct contact with the tissue they are afterwards to resemble.

* The colourless blood corpuscles are often as large as the largest pus globules, and yet, unlike the latter, they will elongate and accommodate themselves to the diameters of the capillary channels.

(2.) The only *vital transformation* acknowledged in physiology, is that in which living structures pass to a higher state of development. Organisms change from these, in the living body, are chemical and physical. Blood corpuscles become advanced into solid tissue, but they cannot *degrade* into pus globules, because the latter are the offspring of a vital genetic process.

—When the liquor sanguinis is effused on an abraded or abraded surface, its exudation corpuscles immediately begin, by their own vital power and tendency, to arrange themselves into nucleated cells; these cells, if aided in the course of their formation by contact with the inflamed tissue, are themselves converted into an analogue of that tissue; but if not sufficiently near to it to be so changed, they pass (accordingly as they are more or less remote from the organism) into imperfect pus globules.

—Pus may be formed in the blood (3) (espe-

3.) The formation of pus in the blood has been denied by some writers, particularly by Mr. Gulliver, who maintains that in the instances wherein pus has been said to have been detected in the blood, softened fibrine was mistaken for it. (See Ancell's Lectures on the Blood, *Lancet* for 1839-40, vol. 2, p. 743.) I am fully prepared to admit the unfrequency with which pus, generated in the blood, is to be found free in the circulation, but I cannot with Mr. Gulliver deny the fact altogether. By an inexperienced observer, softened fibrine (such as is often met with in the blood)—may be produced in freshly drawn blood by adding its coagulation with sulphate of soda—as may be procured by digesting fibrine at a heat of 112° for two or three days) might easily be mistaken for pus, but the microscopical appearances of the two are so dissimilar, that a practised observer could not possibly confound them. The white globules of the blood," again, described by Andral, and which have frequently been considered as pus, are probably only a variety of softened fibrine; they are granular, much smaller than pus globules, and, in fact, closely resemble the nuclei of pus freed from their envelope. With instances like these, pus has no aspect or property in common.

Mr. Wardrop has met with a distinct abscess in the centre of a polypous concretion in the left tricle. (See Ancell's Lectures on the Blood, *Lancet* for 1839-40, vol. 2, p. 743.) In the museum of the University of London is a heart, which contained a coagulum, in the centre of which was a collection of pus. Andral has recorded cases somewhat similar (Pathological Anatomy, translated by Townsend and West, vol. 1, p. 497); and Velpeau met with an analogous example. (Piorry and Lhéritier, *Traité des altérations du Sang*, Paris 1840, Art. Pyohémie, &c.) The formation of pus under these circumstances will be the less surprising, when the reader is reminded that coagula of blood often exhibit an imperfect organization and vascularity, and are to a certain extent (especially on their under surface) capable of injection. (See Mr. Dalrymple's *Medico-Chirurgical Transactions*, vol. 23.) The generation of pus in the blood, by an inflammatory action, *sua sponte*, of this fluid, is a common circumstance. I believe that it very rarely occurs in arterial blood, and it seldom opens in venous blood without the concurrence of phlebitis. In repeating and varying Gendrin's experiments, I have more than once succeeded in inducing pus in venous blood (retained by clatures in its proper vessels), without the slightest evidence of any inflammation in the coats of the veins; but more commonly the lining membrane has been slightly or deeply injected, showing that it fully participated in the irritated action established in the confined blood by the presence of foreign matters in it.

I may here take occasion to say, that the affirmed results of many of Gendrin's experiments are perfectly true, though his reasoning upon them is altogether incorrect. As I have before observed, the generation of pus in the blood, by stasis and inflaming the fluid, is due, not to the transmutation of the mass of blood into pus, but to the aggregation and further development of the exudation granules.

It has been repeatedly stated, that, during certain inflammatory and suppurative diseases, the colourless corpuscles of the blood exist in greater abundance than usual. This is not true. These colourless corpuscles are only a variety of pus

globules (chiefly in venous blood) during its inflammation; but the formation of pus under these circumstances is generally aided by an inflammatory action in the coats of the vessels (veins.) Pus may also be generated in the cellular texture of solid organs; in serous and mucous cavities, as well when the structure is entire, as during any lesion of it, and upon an abraded or ulcerated external surface.

6.—When pus appears upon an abraded or ulcerated surface, its formation has occurred *exterior to the blood-vessels*, by the action of the exuded cytoblasts already referred to; but when pus is discharged by a sincere, that is, an uninjured surface, (say a mucous one,) this pus has been previously formed in the contiguous blood vessels,—irritation or inflammation, and laxity of tissue, being the causes of the local *pus-genesis* and discharge.

7.—Pus is capable of being absorbed into the circulation, from any surface or cavity wherein it may have been deposited. This absorption is frequently chiefly effected by the contiguous lacerated veins.

If the pus be of a *specific* quality, or otherwise impure, symptomatic fever, and commonly death, result from its absorption. If it be *laudable*, and free from virus, either the envelopes of its globules become torn and detached, and the granules set at liberty, during the course of circulation; or, the pus, stagnating in the smaller capillary channels of the lungs, liver, brain, mammary glands, testes, &c., gives rise to what are called secondary purulent deposits, or metastatic abscesses. If these deposits do not excite suppurative inflammation of the surrounding integuments, and so discharge themselves, their watery parts become absorbed; many of the globules burst, leaving granules and envelopes, which are often mistaken for epithelium cells, corrugated, crenated, and tomentose corpuscles of various size, oil globules, shreds of fibrine, and saline matters;—the whole closely resembling, and being very often mistaken for, crude tuberculous matter.

Genuine pus—*pus laudabile* of the ancients—is of a yellowish-white colour, smooth and homogeneous to the naked eye, and of a consistence about equal to that of ordinary fluid cream. Hippocrates well described it:

Το δὲ Πυον ἀριστον λευκὸν τε εἶναι, καὶ λείον, καὶ ἰσὲς ἡκίτα δυσωδὲς.

Pus has a mawkish, or slightly sweet taste; (4) it is nearly inodorous when cold, but, when heated, it has an animal, or a mouldy smell. Freezing thickens pus, bursts some of its globules, and renders others of them adherent.

To the naked eye, pus appears to be perfectly homogeneous, but under the microscope it is seen to consist of corpuscles, oil globules, albuminous granules, and a semi-transparent fluid. Some of the corpuscles have a well defined outline; others are wrinkled, granular, crenate, or tomentose, on their surface. Their shape is chiefly globular, but many of them are disc-like. The latter always become spherical on the addition of water. Pus globules consist of an external membrane, (which varies in appearance from complete trans-

globules. They are larger, more irregular, and more opaque, than the former; are sometimes of a reddish colour, and curiously clustered. But they are not so dense and compact as genuine pus globules, and their nuclei are usually separated and surrounded by very minute granules, which seem to be exudation corpuscles that have not been developed into an external integument. These globules seldom obstruct the capillary circulation, or aggregate locally in any abundance, from the extreme facility with which they are disintegrated.

(4.) Dr. Good says: "apparently from its containing sugar." (*Study of Med.*, 4th. ed. vol. 2, p. 21.) This was the opinion of John Hunter, but it has been satisfactorily disproved by the experiments of Bonnet (*Lond. Med. Gazette*, 1837-8, vol. 1, p. 440.); though, more lately, Schultz has encouraged the notion that the pus of consumptive patients contains sugar. (*Med. Chir. Rev.*, July, 1844, p. 169.)

parency to perfect opacity,) and an homogeneous fluid (albumen,) in which float from two to five nuclei, each of from 1-800th to 1-1600th of a line in diameter.

The size of the pus globules is about twice that of the blood corpuscles. Mayo found them to be 1-2000th of an inch in diameter. (5) According to Weber, they measure from 1-2770th to 1-1385th of an inch in diameter: the majority being 1-2215th. (6) Gulliver found the most common size of pus globules, obtained from an abscess in the neck, to be 1-2666th of an inch in diameter; the extremes were 1-4000th and 1-1333rd. Numerous molecules were seen from 1-12000th to 1-8000th of an inch. The pus globules of gonorrhoea were 1-3000th of an inch, on the fourth day of the disease, and on the ninth day, were chiefly 1-2400th; the extreme sizes being 1-3200th and 1-2000th. (7) Gerber states the globules of pus to be from 1-300th to 1-700th of a Paris line in diameter. (8) Lebert says they average 1-160th of a line (1-80th of a millimeter.) (9)

In recent specimens of pus, the envelopes of its globules are capable of being dissolved by acetic, sulphurous, sulphuric, nitric, muriatic, and other acids. Pus which has been long kept is not similarly acted on by acids; in some instances the envelopes resist the action of these reagents entirely, or, at most, are rendered uneven or slightly ragged.

Pus globules may be obtained pure by repeated washings with distilled water; they are rendered opaque by alkalies, but are not dissolved by them. According to Pearson, these globules contain only 1-3000th part of inorganic matter.

If pus be left at rest for a few hours, it usually separates, with tolerable distinctness, into two portions, of which the upper is semi-transparent, consisting of serum, whose surface is occasionally covered with oil globules; whilst the lower, varying from light yellow to yellowish green, and now more, now less, in quantity than the serum, is chiefly composed of pus globules, serous fluid, and albuminous granules.

The specific gravity of pus is exceedingly variable, and is always an indication of the relative proportion of serous fluid and globules. Pearson estimated it at from 1.031 to 1.033; (10) and Mayo at 1.050. (11) Dr. Davy (12) found it to be:—

In empyema	1.028
In abscess of the thigh.....	1.031
In abscess of the axilla.....	1.029
In abscess of the arm	1.036
In abscess of the back	1.040
In vomica	1.042
Ditto	1.020

Brande rated it at 1.030. Dr. Golding Bird found it 1.0409. I have never met with a specimen of pure pus of higher specific gravity than 1.050, nor do I think its healthy character would be at all lessened by an increase of density, provided its chemical and microscopical properties were entire, and it contained no particles of disintegrated structure; but any kind of pus, the specific gravity of which was below 1.010, I should consider to be unhealthy.

Pus is neutral to test paper: after exposure to the air it may become acid or alkaline;—the former state is owing to the prevalence of acetic or lactic acid,—the latter, to the disengagement of ammonia. Impure pus may be acid or alkaline at the time of its secretion, and during decomposition it frequently evolves hydro-sulphuret of ammonia.

Pus decomposes very slowly in hydrogen, nitrogen, carbonic acid, and carbonic oxide gases; more quickly in oxygen; but most quickly in atmospheric air. Very pure specimens of pus, however, often decompose very slowly at ordinary temperatures in our common atmosphere. I have

- (5.) Outlines of Physiology.
- (6.) Muller's Physiology.
- (7.) *Med. Chir. Trans.* vol. 23, p. 21-22.
- (8.) *General Anatomy*, Trans. by Gulliver.
- (9.) *Louis on Phthisis*, Trans. by Walshe, p. 12.
- (10.) *Nicholson's Journal*, vol. 30, p. 17.
- (11.) *Physiology*, p. 475. 1837.
- (12.) *Anatomical and Physiological Researches*, vol. 2, p. 466.

at this moment a specimen by me, which has stood in my library for three months, at a temperature always above 60° Fah., and yet it evolves no odour, and has neither an acid nor an alkaline reaction.

The spontaneous decomposition of pus is retarded by cold, and proportionally accelerated by heat, unless the temperature be above 80°, and below 160° Fah., when the fluid dries and assumes the aspect of horn.

Mayo (13) says that pus coagulates at 112°; this only occurs to pus in a very pure form, and the microscope can alone reveal the change, which is imperfectly marked in the serum, and very little more in the pus globules.

Pus sinks in distilled water, and is temporarily miscible with it by agitation, but is not soluble in it. (14)

It is partially soluble, by long digestion, in concentrated acids, from which it is precipitated by water.

With fixed alkaline leys, pus gradually forms a whitish ropy solution, which is decomposed by water.

Pure ammonia at first thickens pus, then forms with it a transparent jelly, and gradually dissolves a portion of it.

Neutral salts of alkalies exert a feeble solvent action upon pus, and most of the reagents of mucus, albumen, and fatty matter, variously affect it.

Pus loses, by drying, 86.1 of water in 100 parts, (15) and hence contains 13.9 of solid materials, of which 5.9 parts are soluble in alcohol, and consist chiefly of fatty matters, whilst the remaining 7.4 parts are composed principally of albumen, and a substance, said to be peculiar to pus, and denominated *pyine* (16); *purium* (17); *puruline* (18); *fibrous matter* (19); *modified albumen* (20); and *tri-oxyproteine* (21).

This substance, notwithstanding the diversity of appearance and property which it manifests (due to various degrees of oxydation) is nothing more than a modified form of albumen.

By distilling pus, Bergman obtained, first, about 1-4th of the original quantity, in the form of an insipid water; on increasing the heat, a liquid came over, containing an abundance of ammonia, and accompanied by gaseous matters which he did not examine. Carbonate of ammonia was sublimed, in union with an empyreumatic oil. A light shining coal remained, of difficult incineration, and containing a trace of iron. (22).

(To be continued.)

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSWILL, Esq., Surgeon, Leicester.

IN entering upon the consideration of the production of animal heat, the recent researches of Liebig have greatly facilitated the enquiry, and it is in concurrence with his opinions that the subject will be treated.

The function of the lungs is to assist in decarbonising the blood; animal heat is a result of the chemical changes producing that effect. Now, the amount of the function will depend upon the amount of animal heat to be produced, and the amount of animal heat required will depend upon the condition of the atmosphere.

The food of man consists of substances containing nitrogen, and of substances containing no nitrogen. The first of these articles of diet possess precisely the same chemical constitution as that of

the different organs, whose continual waste it is their intention to repair; they furnish in themselves exactly the amount of carbon, oxygen, hydrogen, and nitrogen, which by a mere alteration in appearance are converted into blood, muscle, &c., &c.; the non-azotised components of the food, on the other hand, are not intended for the renewal of lost parts, their elements are required to yield carbon and hydrogen to support the animal temperature.

Man is subservient to the same laws that other heated bodies are. If objects in his vicinity are of a lower temperature than himself, to them he parts with the heat generated by the combustion within. If, on the other hand, a higher amount of caloric is possessed by them, they as readily part with it to him. In no respect, in this instance, does the human body differ from any other material substance; yet (notwithstanding this law from which he is not exempt), it has been most satisfactorily proved, that in every climate, under every circumstance, at the poles as at the equator, the temperature of his body remains the same. How is this power of resisting the action of climate brought about? Simply by the condition of the climate the individual inhabits.

The organs concerned in the production of animal heat are: the capillaries, the liver, the skin, and the lungs. These organs, by their *joint and healthy co-operation*, furnish the field for those changes which the food of the animal undergoes, the result of which is the production of animal heat; they are *all equally concerned in the intention, and connected in identity of function*, so that interruption at one point must be followed by disorder throughout; that is, presuming the functions of these organs, in the healthy condition, to be in equilibrium one with the other, it follows that, should the equilibrium be disturbed in one, the disturbance must be immediately conveyed to the others, and their organic functions will suffer a consequent interruption of healthy action; nor will the healthy standard be restored, until the organ affected resume its normal condition, or until the others, influenced by its abnormal state, shall have accommodated themselves to the increase or decrease in amount of function which has been entailed upon them, by the actual condition of the part primarily disordered, in order to furnish that amount which health or life demands. This state often becomes progressive, and the evil is aggravated by the failing of a second organ, probably induced by the condition existing in the first, so that a second link in a chain of disordered action results. Finally, death terminates the struggle, when the amount of effect necessary for the continuance of life is unable to be produced by those structures whose intention it is to accomplish it, or when that which is produced is in excess. Much, I apprehend, of that which is commonly termed "sympathy," may be explained by admitting that certain organs have a co-operating reciprocity of intention to fulfil, and that when one of the circle becomes the subject of disorder or disease, the perception is transmitted in succession to the others, as they become called upon to accommodate each its individual amount of function to the actual condition of the organ primarily affected; and the condition thus induced, which is the result of a *necessity*, receives for an explanation of its cause the appellation of "sympathy." The same thing is seen in the case where an artery is tied for aneurism; the main trunk, in connection with the branches, was originally engaged in conveying the circulation to a distant part to effect certain intentions; these intentions are vital to the part, and must be accomplished, or its vitality is lost; but the main channel is diseased, and must be obliterated, in order to save the life of the individual. Here we have an instance of organs similarly engaged taking on increased action, to compensate for the disordered condition of the main trunk; the collateral branches enlarge in calibre, and by their joint increased co-operation, furnish channels of sufficient magnitude to convey the circulating fluid to the limb, whose vitality would have been inevitably lost, and with it that of the sufferer, had not this self-adjustment to circumstances occurred.

Animal heat is the result of the combination of

oxygen with the carbon and hydrogen of the food, the flesh and blood, taken into the system, replacing an equal amount of their elements given off from the various organisms, in the shape of metamorphosed tissues which yield their carbon and hydrogen for the support of the respiratory process, whilst the excess of carbon, furnished by the non-azotised constituents of the food, is also expended in the production of animal heat, more oxygen being absorbed than is necessary to convert the metamorphosed tissues into carbonic acid and water; it is therefore intended to combine with the carbon and hydrogen of fat. Another source of animal heat is derived from the conversion of elements of starch, sugar, and gum into fat, a quantity of oxygen being liberated from the principles to accomplish this conversion, which, immediately entering into combination with carbon and hydrogen, either furnished by the fat itself, or derived from some other source, causes the production of carbonic acid and water, and the evolution of heat. Various circumstances are continually and daily operating to modify the amount of oxygen which is taken into the human body. The temperature and density of the atmosphere, the amount of exercise, the amount and quality of the food, are however the chief. The greater the rapidity with which the heat of the body is abstracted, the greater is the necessity for a supply of food containing carbon; for, since carbon of the carbonic acid which has been given out of the body, and the production of which carbonic acid has furnished animal heat, has been derived from the elements of the food, it follows that if we did not renew the supply of carbon from fresh material, the temperature would fall from deficiency of fuel, and death would result from self-combustion. Rapidity of cooling, therefore, entails rapidity of respiration, and a rapid supply of food to meet the intentions of respiration. Consequently, in those cold countries where caloric is speedily parted with by the body, man requires a character of food, containing from 80 to 90 per cent of carbon, in order to sustain his temperature, to enable him to resist the action of the climate, whilst the atmosphere, which by its extreme cold had robbed the body of caloric, by its condensing condition furnishes oxygen in an equal ratio, sufficient to maintain the temperature at a healthy standard by its combination with the carbon and hydrogen of the food. It is from this cause, that the inhabitants of the Arctic regions are enabled to consume such immense quantities of food in the shape of tallow, oils and spirits, substances containing much carbon and hydrogen, but which, under the circumstances, supply merely a sufficiency in condensed form to combine with the inspired oxygen.

On the other hand, in hot countries, where external temperature is equal, or nearly so, to that of the body, but little caloric is given off to the surrounding medium; consequently, but little animal heat is required to be generated; the demand for carbon in the shape of food, under these circumstances, being to furnish material for new deposits in order to renew the waste occasioned by mechanical exertions; consequently, we are not surprised to find that the fruits, on which the natives prefer to feed, contain only 12 instead of 90 per cent of carbon (the amount which was necessary for an inhabitant of a frozen climate), with the same cause (that is to say the heat), which supports the animal temperature, and dispenses with the necessity of carbon to generate caloric anew, rarifies the atmosphere, and causes it to contain, in the same volume, a small amount of oxygen, commensurate, however, to the requirements of the individual.

It has been observed that the organs concerned in the production of animal heat are the lungs, skin, the capillaries, and the liver. The next enquiry, to which it will be advisable to direct attention, refers to the modifications of the organic functions engaged in the production of animal heat.

Various physical and external circumstances are at all times, and in all places, tending to modify and change the healthy equilibrium of functions, which should exist in the organs concerned in the production of animal heat; nor will this be

- (13.) Physiology, p. 112.
- (14.) Alexander Trallian proposed to distinguish pus by its solubility in water.
- (15.) Kane.
- (16.) Güterboch.
- (17.) Koch.
- (18.) Michelotti.
- (19.) Jordan.
- (20.) John.
- (21.) Mulder.
- (22.) Gren's Handbuch, vol. 2, p. 426.

as surprising, when it is remembered that a variety of temperature the organisation of is subjected, for no animal with an equal ability is qualified to exist under such extremes of atmospheric influence; this he is enabled to accomplish by the assistance of his lungs, guided by past experience which, pointing out to him the structure most subject to disorder under the circumstances and position in which he is placed, he endeavours to rectify such disorder by taking those precautions which most efficiently relieve the suffering organ. In hot countries, exposed to the heat of a tropical sun, when the slightest exertion produces a sense of fatigue, the elements of the organic system do not so rapidly undergo decomposition, and the less amount of motion resulting from a want of exercise, as they do in cold countries, where mechanical efforts are required to produce animal heat, and furnish carbon to combine with oxygen. In the first instance, the natives of tropical regions avoid the diseases to which they would otherwise have been liable by abstaining from excess of carbon, by partaking sparingly of the most simple diet; a little rice, fruits, and vegetables, in order to furnish a moderate supply of carbon and nitrogen, are all that they require to support the burning sun and rarified atmosphere, to which their organism is subjected; whilst the European, placed in circumstances equally impatible with his demands, too rash at first to take heed from the experience of ages, and unwilling to forego the accustomed pleasures of the table, his impaired health points plainly to him the necessity of death by their prolonged indulgence, and the ordinary diet of his native country; but in indolence, unwilling to make the least exertion; partakes of alcoholic drinks calculated to produce a colder climate; stimulates his jaded system by spices and condiments, endeavouring by every method to accumulate that carbon in his system, which the oxygen of the inspired air is unable to consume by reason of its insufficiency; he makes an ineffectual effort to carry off the material which cannot be consumed in the system, and is stained with a bilious carbonaceous matter in the bowels, perhaps, attempt to relieve the same by the supervention of a dysenteric attack, the gorged and stimulated liver, spurred on by its capabilities, at last takes on disease to a extent which terminates in death. The liver is the organ chiefly liable to disease among Europeans in tropical climates, because it is taxed with an amount of function, which is only commensurate with the plentiful supply of oxygen furnished by the condensed atmosphere of colder climates; the lungs, under such conditions, have no function to accomplish, consequently, affections of this organ are rare amongst the natives. As oxygen is taken into the system, they endeavour to establish an equilibrium of organic operation by taking little carbon. The skin, as may be imagined, performs a high amount of function, in all circumstances, in hot climates; nor is any issue of the body exempt from that law which induces diseases, with excess of function, and disturbance of equilibrium. Cutaneous affections are extremely frequent in hot latitudes, for instance, of the dark races, to quote Dr. Copeland, "the much more active organ of depuration than that of the white; it not only exhales a larger amount of aqueous fluid and carbonic acid from the skin, but it also elaborates a more unctuous secretion to counteract the effect of heat, and to remove materials, which require removal from the blood, are eliminated in greater proportion from the surface, which, in the negro especially, performs excreting functions very evidently in aid of the process of respiration and of the biliary secretion; but, it assumes a far more important function, by its activity compensates for the diminished action of the lungs, liver, and kidneys." In the warmer districts of temperate climates, especially in those localities which are subjected to a humid, moist, and miasmatic atmosphere, the diseases, produced by respiration, are diminished, as Dr. Copeland has observed, that the most susceptible persons, exposed to such situations, were those who, in their own country, were constitutionally most prone to pulmonary disease. Whilst

the changes by respiration are, however, diminished, those effected by the cutaneous and intestinal mucous surface are increased; indeed, under all circumstances, the secretions and excretions from the intestinal canal must be looked upon as *the safety valve of the system*; it is by this channel that the unburned, and unassimilated, carbon is excreted from the body, lubricated by the mucous secretion of its inner coat; it is by this channel that nature is desirous of establishing an escape for that excess of food, which most individuals are in the habit of taking, and which is disproportionate to the demands of nutrition and of respiration; it is by the same outlet, that we endeavour to restore health to the system by purgatives, when excess of carbon is present in the body, or when the liver is taxed to secrete bile from the food beyond its healthy power. It is this canal which is so liable to disorder and disease in Europeans in tropical climates, and even among the natives, who, by an undue supply in the amount of carbon, have established an increased action of this outlet for the constitution, in the shape of dysentery, by which the system endeavours to relieve itself by the bowels, to prevent a worse affection of the liver. It is not meant to be implied by these remarks, that such disease is not unfrequently produced by other circumstances, but it is merely adduced as one of the exciting causes operating in its production. In temperate latitudes, it must be remembered, that carbon, in the shape of food, cannot be taken in so small a quantity as it should be in the tropics, because there is a higher degree of animal heat to support, and a greater amount of oxygen contained in the same volume of air, to combine with the carbon taken into the body, to sustain the purposes of respiration; neither can the immense quantities of carbonized diet be taken by the inhabitants of these districts, as are daily employed by the natives of still more northern regions; consequently, we shall find that if there happen to be a deficiency of carbon, and thereby an excess of oxygen, some structure must suffer, because the animal heat, of which the atmosphere has robbed the body, must be supplied, and this can only be accomplished by carbon and hydrogen, which, in such instance, will be furnished by the disintegration of the organic tissues themselves, thereby inducing a disproportion between the amount of supply and the amount of waste. On the other hand, if more food than is required be taken into the body, the liver is stimulated to secrete more bile than can be consumed, and disorder of that viscus results, or a deposition of fat in the cellular tissue takes place. In temperate latitudes, the organic functions are less under the influence of climate than in any other; the lungs, liver, and skin, all participating in a more equal amount of function. It is true, that diseases of the lungs are more prevalent than they are in hot countries; but affections of the liver and skin are less so. Climate, *per se*, is not the cause of those numerous organic diseases of the organs engaged in the production of animal heat, in temperate climates, that it is in hot or cold districts. The most prejudicial localities for affections of this description, are, those lying on the limits of the temperate and frozen zones, where constant change of temperature and rapid variety of climate succeed each other from day to day, where frost and rain, and heat and wind, alternate in quick succession—first affecting one function of the body, then another, affording no certain rule as to the amount of food, which should be taken either to support animal heat, or meet the exigencies of a varying weight of oxygen in the atmosphere. Precaution may be taken to obviate disease in situations whose climate is certain, and where the organic functions are performed with daily regularity—where the carbon, received in the shape of food, may be daily adjusted by experience to the supply of oxygen, contained in an unchanging and unvarying atmosphere—where tendency to disease in any one organ may be counteracted, by withdrawing from the system those substances which tend to aggravate the disorder. But when the climate possesses daily—nay, almost hourly—irregularity of character, it is impossible to form any certain rule as respects amount of diet, exercise, or clothing,—or distant conception as to the quantity of oxygen

taken into the system. In cold latitudes, as in the arctic regions, the temperature is subject to as little variation as it is in the tropics: the amount of caloric, abstracted from the body, varies but little from day to day—the quantity of oxygen, in a given volume, is subject to as little variation, and the supply of food is constant and equal, and always in proportion to the heat abstracted, and oxygen inspired. Diseases of the lungs are of less frequency in these latitudes, because the various functions, although performed with greater activity, are more equally proportioned. The skin of the Esquimaux is an active decarbonizing organ, as is evidenced by its dark hue, and the copious oily secretion which exudes from its pores; the liver is energetic in its functions, but, with its increased activity, does not furnish more bile than is sufficient for consumption in the production of animal heat; being carnivorous feeders, in order to ensure health, much exercise is necessary to promote those capillary changes whose result is the metamorphosis of their tissue, to furnish material for respiration, provided the non-azotised portion of their aliment has not been taken in sufficient quantity for that purpose. In those parts, however, situate in the northern portion of the temperate zone, the function of liberating the carbon from the blood is almost entirely performed by the lungs; the liver is furnished with abundance of material in the majority of instances from which to secrete bile, which, subsequently, undergoes combustion in the lungs, and metamorphosis of tissue is rapidly effected in the capillaries, whilst the skin is comparatively inactive; the cold, together with insufficient clothing, repelling the blood from the surface to the internal organs, gorging these organs with a superabundance of circulating blood, producing local congestions, and increased amount of function, which, finally, terminate in local hypercemia, and organic disease.

In the European, the liver is larger than it is in the Indian, so are the lungs; this must naturally be the case to constitute a condition of health; for increased amount of function requires an organ equal to its performance, and increase in dimensions of one organ engaged in identical results, in order to sustain a condition of equalized function, demands an equal increase of dimensions in the others.

The effects of climate are in no way more remarkably developed, than they are in the instances of individuals removing from one locality, to another possessing a widely different temperature; thus it is found, that consumptive patients derive much benefit by removal to a warm and moist climate, where the functions of the lungs are diminished by a double operating cause: first, the less amount of oxygen taken into them at each inspiration, by reason of the rarified and moist condition of the atmosphere, and diminished amount of caloric abstracted from the body; and secondly, by reason of the increased activity of the cutaneous functions. We also observe, that the inhabitant of a hot climate, who migrates to a locality possessing an opposite character, suffers most severely from affections of the lungs, kidneys, and bowels, and is cut off by affections of these organs, frequently in the space of a few months, or generally at the expiration of a year or two. Even Europeans, who have resided for a length of time in warm climates, are liable to these attacks upon a return to their native country, evidently instructing us that increase of function, in organs which have been unaccustomed to such an amount of activity, induces disease; whilst, from the sudden stop put by climate upon the functions of the skin, the lungs, bowels, and kidneys become congested, and endeavour to relieve the system by increase in their respective excretions.

That it is the *rapidity* of the changes induced by sudden variation of climate, may be gathered from the fact, that if these changes of habitat and locality be made gradually and progressively, the individual will suffer scarcely any interruption of health: another proof that diseases of the organs concerned in the production of animal heat, occurring in the northern portions of the temperate zone, are referable, as far as climate is

concerned, to the irritation caused by the frequent and rapid variety and change of temperature.

Climate must, therefore, be regarded as acting in two ways in the production of disease in the lungs. 1st. Directly, as an irritant, when the supply of material, necessary to effect the organic changes in the lungs, is not commensurate to the amount of animal heat required to be generated, or oxygen contained in the inspired air. 2nd. Indirectly, as an irritant, by causing congestion of them by the application of cold to the surface. Having now briefly considered the effect of temperature in connexion with the decarbonising organs, the action of food in the production of modifications in the organs, concerned in the disengagement of animal heat, will be next examined, and this enquiry will be accomplished with the greater facility, since its character and variety are intimately dependent upon climate; in fact, a nation's diet may be considered as regulated by its climate, inducing such conditions as to insist upon its peculiar character. The same remark will apply to individuals, whose diet should also be regulated by the peculiarity of their organisation, occupation, &c.

PHRENOLOGICAL MANIPULATIONS.

(To the Editor of the 'Medical Times'.)

SIR,—Some incidental remarks in a recent communication of Mr. Braid, in your paper, when discussing the *data*, "whether mesmerism confirmed the phrenological organology," appeared so very correct, and so confirmatory of my own experience, that I am induced to trouble you with a few observations: "On the Sources of Error in Promiscuous Phrenological Manipulations." The remarks alluded to are the following, which may well preface my own: "Thus, granting for the sake of argument, that all the separate organs of phrenologists were satisfactorily established, the extreme activity of one function or propensity, superinduced by habit and practice, and the dormancy or sluggishness of others, from want of exercise, might, or most probably would, give manifestations quite at variance with existing developments, estimated by the relative sizes of the different organs."—Vide Mr. Braid's paper, *Medical Times*, Nov. 30, 1844.

That there is truth in these statements will be rendered obvious before the conclusion of this paper. For, although I cannot detail my views on the subject of the direction which may be given to particular faculties, or to a group of the mental powers, yet I can show how fallacious must be the phrenological reading of character, without taking such facts into consideration, as obstacles to the attainment of great accuracy. For example, a case of this kind: Mr. —'s son Thomas, was a boy with a head not of the most superior kind; the animal propensities were as large as the moral faculties, yet the boy did not, as a youth, indicate impropriety of any kind, and many jumped at a conclusion, that phrenology was absurd! Before we explain this, and show that there is not any contradiction, let me bespeak attention to one important circumstance. The parents of Thomas were highly moral, religious, and intelligent persons, and from the dawning of his *consciousness*, he had the influence of their high-mindedness, acting directly on his moral organization, and indirectly this received an additional stimulus, by the most beautiful aphorisms of conduct, and the most sublime of precepts. Thus was he subjected to a two-fold process (example and precept), to render his nature better, whilst the *propensities* were allowed to rest, never being either directly or indirectly addressed. Again, some years since, I paid a visit, with a medical friend of great talent, to the Wakefield House of Correction, and although the female prisoners presented low, broad, and most depraved heads, there was one exception, a girl who had been committed either for stealing or pawning stolen goods. Her moral organisation was most beautiful, and with anterior lobes above the average. Enquiring into her history, I was informed that both her parents had died in her infancy, and that she had been put by the parish authorities to board with some very low, vulgar, and ignorant people, in a very bad locality, where models of depravity, and all kinds of crime were

constantly presented for her imitation. She could neither read nor write, so that her intellectual powers had not received any direct cultivation.

Now, the brain is subject to the organic laws, so that whilst *exercise* increases the activity, and, consequently, improves the function of an organ, *neglect* destroys the healthy tone of it, depresses its function, and renders it torpid and inactive. What, then, is the value of phrenological manipulations, in which the actions of an individual are indicated? There is always a liability to error. We cannot say, on looking at a skull or cast, or even a living head, that such and such is the power and activity of any group of organs? Can a mere inspection intimate whether they have been cultivated? Can we guess what accidental circumstances may have given a partial or a particular activity to a set of organs, and left others in an inactive state?

As an answer to these questions, and to prove the correctness of these views, I will conclude this paper with an account of a skull in my possession, as it will also demonstrate the accuracy of Mr. Braid's statement. This skull is that of —, an executed murderer, and presents the following appearance:—The anterior portion, if measured from the *meatus auditorius externus*, is longer than the posterior portion to the *occiput*, whilst the skull is not so low as others in my collection.

The *anterior lobes* are as good as those of many persons, who are regarded as intelligent, and the *sin-cipital region* (the moral and religious group), is table-shaped, or, in other words, the *consciousness*, *benevolence*, *veneration*, *hope*, and *marvellousness*, are most of them full, and some of them large, so that a regular practising manipulator might say, judging from a craniological examination, that he was a man of some intellect, and of a decent and respectable character! That such was not the case, you will acknowledge, or he would never have been executed as a murderer, and one who indicated ferocity, and such great depravity, that I am told, when the benevolent chaplain of the goal offered him, in his last moments, the consolations of religion, that he not only swore at him, but, to evince his perfect contempt, also spat at him!

The history of this criminal explains this apparent anomaly, and confirms the truth of the previous observations. He was the offspring of criminal parents, and was brought up in the lowest haunts of vice. He was very early initiated into a life of drunkenness, profligacy, and low debauchery. The pot-house was his school; the brothel his house of prayers; cards and gambling his relaxations; and cheating and thieving the height of his ambition. Such an education would only affect the organs in the base of the skull, and, if rendered into phrenological language, would comprehend *gustativeness*, *secretiveness*, *acquisitiveness*, *distinctiveness*, *combaticiveness*, &c., and the *cerebellum*. These powers were constantly exercised, whilst the higher attributes of man (the moral and religious) were utterly neglected, so that if it is ascertained that the organs of the brain are precisely under the same laws (organic), which affect the growth and function of all other organic instruments, then we shall anticipate the results as shown in this skull when sawn open. The anterior and superior portions of the skull (comprehending the seat of the intellectual and moral faculties), presented the *bone near half an inch thick*, whilst at the base of the brain and cerebellum, the *skull is diaphanous*, literally can be seen through.

Let no one attribute these appearances to the age of the criminal, as he was rather under twenty. Nor let it be said that the base of the skull is always thin. In this case the *thinness* is evidently the result of the activity of the organs alluded to, for at the base of the skull, and at the cerebellum, there is a complete absorption of the *diploe*, and of the *inner table of the skull*.

This, and many similar cases, have convinced me, that in all phrenological manipulations, particular actions, or special talents, should not be specified as accurately estimated. For example, it should never be stated in heads of the usual proportions, "You have very good *conscientiousness*, or you are *charitable*," or that "you are a *musician*, or an *artist*, &c.," but simply, that such are the tendencies if they have been trained, &c.

The practical inference, I may, with your mission, find time to give some other opportunity of deducing.

I am, Sir,

Your's respectfully,
J. A. LEVIE

14, Devonshire-place, Brighton, Dec. 20, 1844.

CASE OF TWINS.

SIR,—As the following extraordinary and authenticated case of a woman in this neighbourhood, having been lately delivered of twins (an interval of *thirty-two* days between each in is, I believe unprecedented, and a statement which must prove extremely interesting to members of the medical profession; I deem, therefore, my duty to give the same publicity, request you will have the goodness to record the fact for their information, in the next number of the *Medical Times*.

I am, Sir,

Your obedient humble servant

JOHN IRVING

Surgeon, Royal Navy, M.R.C.S., London; Surgeon, and Agent for Sick-quarters at Moville; Surg. Superint. of the Moville Dispensary.

Mary Faulkner, aged 35 years, a robust, healthy, middle sized woman, and wife to John Faulkner, a small farmer residing in the quarterland of Drung, parish of Upper Moville, county of Donegal; has been married 7 years, in which time she has had three still-born children and two living, the youngest of whom is ten years old. On Tuesday the 1st of October she was seized with labour pains at the end of nine months pregnancy, and a messenger despatched for Mr. Burleigh, a private practitioner in this town, to attend her; he, there, hastened to her relief, and, soon after his arrival, delivered her of a healthy but rather small female infant, and, in three hours afterwards, the expulsion of the placenta took place by natural contraction of the uterus, without medical interference. Mr. Burleigh, on examining the patient at this stage, clearly ascertained that the uterus was still in a gravid state, and corresponded with her own feelings; accordingly he remained in the house for many hours, expecting that parturient symptoms would manifest themselves; in this, however, he was disappointed, and he returned home, (a distance of miles,) leaving directions that he should be for when labour commenced; on the third day afterwards, he paid the woman a visit, and, to his surprise he found her out of bed, following her usual domestic affairs, and in the enjoyment of good health; being still convinced that the uterus contained a second child, he became anxious as to the result, and, consequently, continued to visit her frequently. At length, on Saturday, the 2d ult., labour did come on rapidly. Mr. Burleigh was summoned, and he arrived as a large healthy male infant was born, he himself extracting the placenta two hours after arrival. Neither on the first or second occasion, did any untoward circumstance occur to retard a quick recovery, for, on the third day after giving birth to her second child, she was attending to her family concerns. Mr. Burleigh having mentioned this most extraordinary singular case to me, as related above, I felt it sirous to give a personal visit to the mother and her twins; I did so on Monday last, the 25th inst., and was much gratified in seeing the three individuals as well as possible. In addition to the above statement, I ascertained from the woman herself, that a rupture of the membranes, and considerable discharge of the liquor amnii, took place a week before the first labour commenced, that no lochial discharge whatever supervened, and what is also worthy of remark, there was the slightest secretion of milk until the second labour was over, when the mammae, which were large and well formed, soon became distended with the fluid.

The medical gentleman mentioned, and intelligent women, namely, Bridget Dermott, Fanny Collins, who witnessed the delivery of twins, are willing, if necessary, to make out the foregoing incontrovertible facts.

Donegal, Moville, Nov. 30, 1844.

CORRIGAN ON INFLAMMATION.

everything coming from Dr. Corrigan on the subject of inflammation has a peculiar interest for the profession, and no small bearing on the advance of our science, we have great pleasure in placing before our readers the following observations, made in further elucidation of those in a previous lecture]:—

I shall now proceed to draw your attention to the definitions which have been attempted of inflammation, and to explain to you the causes which have made all attempts at definition unsatisfactory. The following is the definition of a great writer, "Frank":—"Heat of the part, redness, swelling, hardness, for the most part with pain, of acute pain, now burning, now puny, now fixed, now heavy, sometimes no pain, the colour of the part redder or darker than natural, most often accompanied with fever; a quick pulse, strong and hard, often contracted, sometimes natural; with a tendency in the tumour to run into suppuration and gangrene." In this long and laboured definition there is not one constant character. Hunter defines inflammation to be "an increased action of that part which a part naturally possesses." This definition is worse than the former; it gives no criterion by which the increased action is to be judged, and it involves an hypothesis, as to the nature of the change; and were we to take his definition strictly, spasm of a muscle would be inflammation, for spasm is an increased action of that part which a muscle naturally possesses. In the latter part of his work he observes, "I shall call the name of inflammation whatever produces the following local effects, viz: pain, swelling and redness at a given time, and these dependant on the action of one immediate cause." This attempt is not more successful than the former. In this, as in the former definition attempted, there is not a single constant character; for example: tension is not constant in some of the most dangerous inflammations, as gastritis, enteritis, &c.; hardness, instead of being constantly present, is absent altogether; and organs affected become softer than natural, as in pleuritis, hepatitis, gastritis, &c. The colour of the part, instead of becoming in all cases redder or darker than natural, becomes often lighter or paler, as in arachnitis, peritonitis; and the colour varies in different stages of the same attack, being in the first stage dark and in the next lighter, as in pneumonia. Pain not only varies in kind in every stage, but is often absent altogether, as in cerebral inflammation, pericarditis, &c.; and lastly, fever instead of being constantly present, is not only absent in the early stages of inflammation, but is substituted by a very opposite state, viz: a state of collapse. Thus, a definition cannot be given of inflammation, and the explanation of the failure of the former attempt will not only tell us why it cannot be given, but it will give us a clear and analytical view into the nature and into the explanation of the varied treatment which you so often see prescribed in what is called inflammation.

Now, the living body constructed only of one part, for instance, of cellular tissue, and that the parts belonging to any one part were equally affected by every other, and that only the one part pervaded every part of it; or, in other words, if the living body were homogeneous in structure and function in every part, then we might give the name of inflammation to a certain alteration of structure or function, and recognise it by its characters, as those characters would be uniform. Such, however, is not the constitution of the living body; we recognise in it, as essential to its very existence, three great functions constantly in operation, viz.: 1st, circulation, or the passing through every part the blood, or a modification of it to furnish the elements of support; 2nd, nutrition (including secretion, &c.), or the action by which those elements are applied to the continued support and renewal of each part; 3rdly, innervation, or the nervous energy acting in each part, whether of organic or animal nature, the possession of which is the most distinguishing feature of animal, as distinguished from vegetable nature. If we for a moment consider common phlegma, or local inflammation of a

portion of cellular tissue, we at once recognise in it that inflammation is a tripartite phenomenon. We observe in it, 1st, a greater quantity of blood than natural, dependent on a lesion of the primary function of circulation; 2ndly, an effusion of lymph or serum, with the necessary tumefaction, being the lesion of the function of nutrition; and, 3rdly, pain being the lesion of the function of innervation. Thus we see that each of the three great primary functions contributes, in its respective lesion, a share to the formation of the compound phenomena, inflammation; still, were the relations of these respective lesions to one another to continue the same, the definition of inflammation could, notwithstanding, be laid down with precision; but it is not so. The characters of inflammation, the results of its analysis, must alter in every tissue, and in every organ, according to the relation which those great primary functions bear to one another. Thus, in the tissue of the lungs, where circulation is so active, and vessels so numerous, the lesion of this function constitutes almost the whole change in the onset of pneumonia, the most remarkable feature being congestion, or a greater quantity of blood than natural in the vessels; while, in a serous tissue, such as the pleura or peritoneum, any remarkable lesion of circulation cannot be detected, red blood not circulating in the membrane; but a secretion of lymph, or serum, a lesion of the function of secretion, constitutes the most remarkable feature of pleuritis, or peritonitis; while, again, in other tissues, as the nervous, in sciatica, in ordinary toothache, the lesion of innervation, or intense pain, is the most prominent feature. Thus, not only will the characters of inflammation differ, according as each tissue is distinguished by the preponderance of any one of those primary functions, but each organ in the body will furnish its own characteristics in inflammation, according to its tissues and its functions. There cannot, therefore, be any general definition of inflammation, which would apply to all the tissues, still less that could be made to apply to all the organs.

But does this exposure of the failure of all attempts to define inflammation—this analysis of it into a derangement of several functions—throw difficulties in the way of treatment, or render our principles of treatment more obscure? On the contrary, it gives us a clearer insight into treatment than we could otherwise obtain, and explains many points in practice that we could not otherwise understand. Let the beginner, with this analysis in his mind, observe the treatment of a simple phlegmon. Local bleeding (or general, if required) is employed to unload the vessels to remove the lesion of circulation, purgatives are employed to promote an active secretion and determination in another part or surface, and fomentations, plain or medicated, are employed to diminish pain and irritability, to act upon the lesion of innervation in the part. Let us carry this analysis a little farther. In the early stage of pneumonia we trust to bleeding and tartar emetic, because the lesion of circulation is the principal aberration we have to remedy. There is not pain or lesion of the function of innervation worth taking into account, while in an equally early stage of dysentery we use opiates in large quantities, because the lesion of innervation, or tormina and tenesmus, that accompany the disease, constitute one of its important elements. In common acute ophthalmia, we trust much to those remedies (such as local bleeding, &c.) which act upon the lesion of circulation; while in irritable ophthalmia we use remedies such as tonics, sedatives, &c.; because the lesion of innervation in the part affected, marked by pain and intolerance of light, is the principal element in the case. Let us take our three most active and useful means to subdue inflammation—bleeding, purgatives, and calomel with opium—and we shall find their employment at once explicable under the analysis we have here adopted. We use bleeding to remove the lesion of circulation or distention of the vessels; purgatives, to determine the energy of the function of secretion to another than the part affected; calomel, because experience has long taught us that mercury has a specific power in removing aberrations of the function of nutrition exemplified

so well in its causing absorption of lymph in iritis, peritonitis, &c.; and opium, to diminish the lesion of innervation, the nervous irritability, both locally and generally, and which, if left undiminished, would tend to reproduce the disease. Even in the same disease it is necessary frequently to vary our treatment, and the analysis we have here adopted enables us to explain why we do so. For instance: in the first stage of pneumonia, when the lesion of circulation or congestion constitutes nearly the whole change, we employ bleeding and tartar emetic, but when the disease passes, in spite of our endeavours, into the second stage, we no longer persevere in the same course, but now exhibit mercury, because the second stage consists of an effusion of lymph; its principal element is now the lesion of the function of nutrition or secretion; while, should the third stage supervene, accompanied as it always is by wasting, irritative fever, we trust to opium to lessen this, the lesion of innervation, and to tonics and nourishment to meet the exhaustion and waste of the system. In other cases, again, this order is in a great measure reversed. Thus, in a sudden attack of pericarditis the shock given to the general system (like that from a severe injury) is so great, or in other words, the lesion of innervation is so imminent, that we are forced to direct nearly all our attention to it, and thus, for several hours after the attack has set in, we are obliged to administer stimulants; and it is only after we have removed this, the most urgent danger, that we can have recourse to remedies to counteract the accompanying lesions of circulation and secretion. It is, however, in practice, not only necessary to bear in mind this analysis, to recollect the combination of lesions we are contending against; but it is equally necessary to recollect that one or other only of these primary functions may be at first affected—the others then following like links of a chain—and to direct our measures accordingly. Thus, in some forms of headache, circulation may be the function first affected, the pain or lesion of innervation following on it, and requiring leeching, low diet, counter irritation, &c.; while in other forms of headache, the pain or lesion of innervation is the first link; the heat of head, throbbing of arteries, fulness, &c., being the second link, and requiring the exhibition of remedies, such as assafetida, opium, ether, &c.—remedies of a class totally different from the former.

In our views and our treatment of inflammation, let us then remember that—

1st. It is a compound phenomena, consisting, ordinarily, of a simultaneous lesion of the primary functions of *circulation, nutrition, and innervation.*

2. That its characters must differ in the various organs, according as those organs present in varying proportions these primary functions.

3. That its characters must also vary, accordingly as in an attack of inflammation, one or other of these primary functions is the most affected.

4. That in our treatment we direct our measures, or our combined measures, according to the proportion in which we judge these primary functions to be affected, and according to the order in which we judge the lesions to occur.

Then, in conclusion, I may observe, that this analysis, while it shews us that there cannot be a simple definition of inflammation, nevertheless explains to us (what is of much more consequence) the reason of the combinations we adopt in treatment, and of the alterations that take place in the course of treatment of a disease.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Hepatic Venous Congestion is the most common form of structural disease of the liver. Venous congestion sometimes leads to a nodulated state of the liver, which thus presents a series of patches. Besides these patches, visible after death, there are, however, other morbid appearances; the liver is greatly enlarged, together with increased redness of the tissue, which seems to be brought on by this state of congestion. The enlargement

takes place rapidly, and will sometimes subside almost equally quickly. In intermittent fever, this tumefaction has been known to occur in a few hours. This increased bulk arises from distention of the blood vessels of the liver, which thus gives an increased volume to the whole viscus. We sometimes see enlarged liver, not redder than usual, but possessing the ordinary amount of paleness. Now, hypertrophy of the liver may present various appearances, depending on different proportions of the light and dark shades. The liver also appears to be much closer in its texture than usual. The hepatic plexus of vessels may, likewise, become obstructed and distended with bile, the effect of which is to cause great discoloration of that part of the organ immediately around. The symptoms of simple congested liver may thus exhibit a great difference in appearance. You will sometimes have the vascular plexus enlarged, as well as the interstitial cellular tissue increased in size, and the effect of this is to give an hypertrophied appearance to the structure. The colour, also, may be of different varieties. Sometimes it is of a bluish tint, intermixed with the natural purple red of the liver, while sometimes it is of a perfectly brown or yellowish colour, arising from the intermixture of the red colour of the blood with the dye or stain of the biliary texture. This takes place in persons, who have had congested liver present with disease of the heart, even where the disease has not gone on to any very serious extent. Sometimes, we see this in persons who habitually indulge in spirituous liquors. In hypertrophy of the liver, there is an enlarged state of all the structures, generally.

This is the condition exhibited after ague. There is hypertrophy of the liver sometimes seen in young females, without any very obvious cause, giving rise to a large tumour in the abdomen, often extending as low down as the iliac region. This seems to be a simple hypertrophy, or increase of deposit of substance, without being always associated with any distinct morbid symptoms. The bile is secreted, and the functions of the liver go on; but there seems to be an increased growth of the original substance, from some unknown cause. The chief thing is, that there is an increased bulk and an exaggeration of all the constituents. The deposits that result from thickening or inflammation, however, do not alter the whole liver, but most commonly they exaggerate some particular structure more than others, thus producing the different structural diseases which the liver presents. Now, there are two or three especial ones that will occupy our attention. I may mention that they have most of them been injudiciously comprehended under the term cirrhosis, as if no structural change could take place in the liver without being accompanied by the deposition of one peculiar matter. In this case, generally speaking, we find that the liver contains less blood than usual; it is smaller than natural, being contracted in every part; and, on cutting into it, the usual amount of vascular texture is very much diminished. Cirrhosis, in its most common form, is accompanied by contraction and diminution of the natural structure of the liver, usually with a remarkable pallidity of the texture. Now, in the extreme degrees of cirrhosis, the liver is actually converted into a solid mass, in which very little of the natural structure can be detected. The vessels are smaller in size, in every direction, both the larger vessels and their more minute ramifications. Under these circumstances, the liver will often present an uniform appearance. The texture is hard and resisting, not very fragile, but rather tough in character. In some instances, however, instead of being thus uniform, the liver is granulated, and presents various irregularities: the upper parts are contracted, whilst other parts are somewhat hypertrophied: the contracted parts are pale, whilst the other parts are unusually dark, their darker colour being owing to the undue development of the vascular texture, as well as the biliary matter deposited in the tissues. This is a condition often met with in the livers of habitual drunkards. Sometimes, again, instead of these hypertrophied parts being of a darker colour, they are unusually light, paler than the rest, and surrounded by a vascular arcola. But in this disease,

instead of there being a contraction of the whole bulk of the liver, it may sometimes be enlarged in size; there is, in fact, an increased growth of the whole organ. This is the nodular form of cirrhosis, as contradistinguished from the granular form. We want a new nomenclature, to render these things distinct. Now, the recollection of these elements will enable you, I think, to understand the chief appearances presented in disease of the liver. There is, also, what appears to be another very distinct diseased condition, and that is a fatty degenerescence of the liver. There is no doubt that fat cells enter pretty freely into the natural constitution of the liver, but, at the same time, these may become unduly developed in certain diseased conditions. The disease in which this increase takes place most commonly is pththisis, more particularly of the acute character, accompanied by rapid emaciation. We do not exactly understand the cause of this change, but merely know the fact, that the liver does undergo this transformation, and becomes converted into a fatty substance, of a pale yellowish colour. If anything, the liver, under these circumstances, is somewhat smaller than in the natural state, and is remarkable for its lightness, both in colour and in weight, from the great amount of oleaginous matter in it. If a slice of the liver be laid between two pieces of blotting paper, and pressed, it greases the paper in a very remarkable manner. Such is not the case in the common state. This fatty degeneration impedes, when excessive, the proper function of the liver—that of the secretion of bile. So, also, with regard to other lesions of this organ—cirrhosis and its different varieties; these lesions must interfere with the secreting power of the liver, and, in such cases, there is almost always jaundice to a great extent. The excretion of bile from the blood is impeded. The amount of this depends on the rapid progress of the disease. A fatty state of the liver does not necessarily abolish its powers, and with hypertrophy of this organ, the secretion of bile may go on uninterruptedly. But there is another effect which I have adverted to already, as being produced in some of these structural diseases, and that is an obstruction to the circulation in the vascular structure of the liver, which cannot exist to any extent, without likewise deranging the general circulation throughout the body. The liver is the passage through which the blood returns from the intestines, and other viscera of the abdomen, and, consequently, should this be closed by the deposition of too much solid matter, or by the subsequent contraction of that matter, the result will be obstruction of the hepatic vessels and the great portal system, and venous congestion, to a great degree, will take place in the intestines. So that, in connexion with these diseases of the liver, there will be found various diseased states of the abdomen, indicating congestion. There may be hæmatemesis, from the congestion of the stomach and the intestines, as well as a discharge of blood per anum, and diarrhœa, together with gastrodynia, and various other affections; there may also be effusion into the cavity of the peritoneum, constituting ascites.

There are other affections of the liver that I must notice; such as *malignant* and *non-malignant formations*, *serous cysts*, and *hydatids*. One of these affections is carcinoma, which is not a very uncommon affection. Also, fungushæmatodes, or soft cancer, accompanied by a great deal of effusion of blood. In other cases, I have found appearances like scirrhus, with radiated bands, becoming constricted in the centre, as they grow larger. The manner in which these tumours form, with depressions in the centre, is rather interesting in a diagnostic point of view. I have been able to diagnose cancer of the liver, by finding, under the margin of the ribs, one or two of these hardened bodies with a depression in the centre. These conditions of the liver may not necessarily interfere with the secretion of bile: the function may go on, when the disease is only partial, and the circulation continue as usual; hence, carcinoma of the liver may occur to a considerable extent, without there being jaundice or ascites; nevertheless, should the tumour press on the gall ducts, it will interfere with the excretion

of the bile, and, in this case, jaundice will be produced. Again, sometimes these tumours become developed about the large veins, encompass them, and pressing upon them, and ascites is consequence; but it is not a necessary consequence. Melanosis is a thing very rare indeed.

Now, with regard to the *symptoms of these ferent affections*, they are extremely uncertain. Jaundice is frequently, but far from constantly, connected with cirrhosis of the liver. Sometimes cirrhosis seems to be prevented from terminating in ascites, by hæmorrhage taking place from time to time. I saw a case, lately, of greatly enlarged liver, and yet no ascites was present. I found, as I expected, that the patient had been in the habit of losing a large quantity of blood by stool. The following, then, are the general effects of cirrhosis, and depend on the obstruction to passage of the blood through the liver: they are ascites, hæmorrhoidal flux, melæna, hæmatemesis. The diagnosis of cirrhosis of the liver is often assisted by its being accompanied by contraction sometimes, where there is not much contraction, an irregularity of the surface of the liver may be felt, under the margin of the ribs. The effect of this contracted form of the liver, is usually to draw up its margin, and render it much thicker than usual; instead of ending in the usual margin, there is a thickness and irregularity, which may be perceived by the hand. Percussion is also of use in the diagnosis of this contracted state of the liver, from there not being the usual amount of dulness that is naturally found in the hypochondriac region; and, in cases of this kind, especially where there is much hæmorrhage from the stomach or bowels, the walls of the abdomen are often so flaccid that you can push your hand up between the ribs and the liver, and thus feel with remarkable facility. Dulness on percussion does not extend so high as usual into the cavity of the chest, nor so low as usual into the cavity of the abdomen. When the liver is enlarged, the character of the tumour may assist in forming a notion as to its nature; sometimes, in hypertrophy, it forms a smooth tumour, extending from the hypochondriac region downwards; in this way, you may distinguish it from ovarian tumours, and other tumours in the abdomen, that proceed upwards. Besides the dulness on percussion, there is an uniform feel all the way down. When there is cancer, there may be perceived certain prolonged irregularities on the surface of the organ, with a total absence of the above-mentioned smoothness of hypertrophy of the liver.

Now, a few words as to the *treatment of structural diseases of the liver*. Generally speaking, all we can do, is very ineffectual; just as in the treatment of extensive structural diseases of other important organs. The chief remedies are those usually applicable to hepatitis in its lower form, of congestion. We have considerable power in diminishing the simple state of hypertrophy, but I have already adverted to the fact of its being the starting point in treating these affections. I find that simple hypertrophy of the liver is reduced by remedies that tend to remove the congested state, a course of mercury, for example, provided it increases the secretion of the liver, is useful; but we find, sometimes, in these very affections, that it will diminish the secretion instead of increasing it, in such cases it should be discontinued. Iodine combined with mercury, given both internally, and used under the form of an ointment on the side of the liver, has been found to be of considerable efficacy, in reducing the enlarged state of the liver, especially in those persons who have had previous liver disease, or who have suffered from ague. In the more recent cases of ague, when there is great enlargement of the organ, and where there appears to be a great degree of congestion, the proper remedies for intermittent fever are, likewise, successful in removing the state of the liver. Bark, quinine, and arsenic, persevered in for some time after the fever is removed, will reduce the size of the liver very considerably. The other remedies that are useful are: nitro-muriatic acid, taraxacum, muriate of ammonia, and alkalis, given for a sufficient length of time; such means appear to have considerable effect in retarding, if not in removing, some structural diseases of the liver, and, in cases of cirrhosis

best remedies consist in palliative measures of a kind. Antiphlogistics may sometimes be resorted to; if there is much pain in the side, it requires local depletion, and counter-irritation may be combined with the medicines I have mentioned: mild purgatives, and alkaline remedies or salines, alternated with tonics, and not combined with too strict a system of diet.

I have but little to say on the subject of *the spleen and the pancreas*: it is not, in reality, so very practical a subject; it is interesting in a speculative point of view, but we know little about it practically. The spleen appears to be rarely diseased, except in connection with some general derangement. In intermittent fevers, it becomes enlarged or congested; and I have, in such cases, met with great swelling of the spleen, or what is called splenitis. There is pain in the left hypochondrium, shooting towards the epigastrium, accompanied by fever, and often by vomiting, and symptoms of irritation of the stomach, but without any intolerance of food,—the vomiting not increasing in any marked degree. In some few persons who have died with these symptoms, the spleen has been found very much enlarged, and the texture of a softer state than usual, and sometimes patches of lymph are adherent on the surface; this constitutes acute splenitis. The spleen, too, sometimes becomes the seat of purulent deposits, apparently arising from inflammation, connected with suppuration in other parts. The spleen appears to suffer in malignant fevers, where purification of the blood is interrupted; and, in some instances, the spleen has been found greatly enlarged, and converted into a dark, pulpy, sort of matter. This seems to be not a disease of the blood, than a malady originating in the spleen itself. This organ seems to be a sort of depository of the blood, a kind of safety-valve for blood that cannot be received elsewhere. Sometimes, the spleen becomes hypertrophied, from the blood flowing through it in increased quantity, and causing an increased deposit and stagnation of this fluid in its vessels. In a case of enlarged spleen, that was supposed to be an ovarian tumour, I found a degree of fluctuation in the part, and I considered this a proof of its containing some serous cyst; but, after death, nothing but an enlargement of the spleen was found. The spleen, when it does enlarge, causes great tumefaction in the left hypochondrium, extending down to the left iliac region; it has been known to become displaced from that region, and to fall down to the bottom of the abdomen. A case of this kind is very rare, and exceedingly difficult to diagnose. In other cases—common ones—where the enlargement is great, and constitutes a tumour in the left hypochondrium, it produces dulness in that region, extending along the left side, and posterior parts of the chest. The spleen is sometimes atrophied; I do not know that this leads to any especial harm. Occasionally, there are tubercles in the spleen; and Dr. Carswell states, that they accumulate chiefly in some children.

The treatment of affections of the spleen must be conducted on general principles. If there is anything like pain in the side, with symptoms of inflammation, supposed to be referable to the spleen, antiphlogistic measures should be employed; but it is stated that mercury acts injuriously in these cases. I can say but little from experience on this point. The congestion, after intermittent fevers, may be cured by quinine and cinchona, and I have found alum of considerable use in some cases. It acts as a common astringent. In the chronic enlargement of this viscus, as well as of the liver, iodine and purgatives, combined alternately with tonics, are useful.

I have still less to say about the pancreas. When it is inflamed, causing pancreatitis, it is supposed to produce deep-seated pain in the right hypochondriac region, and in the epigastrium, with a peculiar feeling of heat in the chest. This inflammation, and other affections of the pancreas, are supposed to give rise to dyspepsia, pyrosis, nausea, and vomiting; and a large quantity ofropyid has been evacuated by persons, who have been found, after death, to have had disease of the pancreas. The thing occurs so rarely in

practice, that we have little experience on the subject. Tumours of the pancreas are sometimes perceptible in the epigastric region, and cancerous tumour is at times found in connexion with scirrhus of the pylorus; this latter disease, in fact, frequently involves the neighbouring glands, and causes tumefaction below the margin of the ribs, on the right side, accompanied by great emaciation; and it not unfrequently involves the thoracic ducts, and is thus supposed to be the cause of the great emaciation that follows; but there are no distinct symptoms connected with it, that I can describe.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 197.)

The cases of dysmenorrhœa which I now propose to offer to your notice are those of a rheumatic or rheumatic-gouty character, varying from what appears to be little else than a mere rheumatic habit, to the more severe and complicated forms, which I have designated by the name of uterine gout. The two last cases which I have reported have already shown slight traces of this diathesis, although not sufficiently so as to form the leading features of the complaint; but in the following cases of dysmenorrhœa its various modifications and degrees will assume a prominent position, and, if I may so express myself, tinge them all with its own peculiar colouring.

The first is an unusually simple specimen of this form of dysmenorrhœa. How far this may be owing to my being at that time merely aware of the fact that dysmenorrhœa is occasionally associated with rheumatism, and, under these circumstances, is relieved by guaiacum, as shown by Dr. Gooch, Dr. Dewees, &c., I am, after so long an interval, unable to decide. The peculiarity of the case struck me forcibly at the time.

M. A. B., æt. 21, unmarried.—Dec. 2, 1836. Complains of violent pain at the catamenial periods, from which she has suffered for the last two years, since a severe attack of illness. The pain commences with great severity in the loins, extending round the pelvis into the abdomen, with much bearing down; it lasts for about six hours, when it is relieved by the appearance of the catamenia, the flow of which is sparing, but uninterrupted, lasting for three days, and leaving her weak and exhausted. Bowels regular; slight gastric derangement.—*Rx.* Pil. hydrarg. extr. hyoscyami, aa gr. v. o.n.; acid. nitrici dil. tinct. hyosc., aa m xv.; infus. gentianæ co., 3jss. bis die. M. Camphoræ, gr. x.; morphinæ acet., gr. i., mucilag. q. s. M.; ft. pil. ii. sumat. Initio paroxysmi, and rep. pro re natâ.

Dec. 16. Has had a more severe attack than usual, lasting twelve hours, and not relieved by the medicine; several coagula were discharged at the time; states that she has been constantly liable to rheumatic pains during the last five or six years, which have troubled her a good deal of late.—*Rx.* Pil. hydrarg. extr. gentianæ, aa gr. v. o.n.; sodæ carb., gr. x. o.n., ex aquâ cum pilulis sumend. M. Tinct. guaiaci ammoniatæ, m xl.; syrupi aurant., 3jss.; aq. menth. pip., 3j. M.; ft. haustus ter die sumendus.

Dec. 22. Much general gastric derangement; little appetite; bowels natural; expects the catamenia in a fortnight.—*Rx.* Extr. hyoscyami, ext. gentianæ, aa gr. v. o.n.; sodæ carb., gr. x. o.n., ex aquâ cum pilulis sumenda. M. Tinct. guaiaci ammoniatæ, tinct. gentianæ co., aa 3ss.; syrupi aurant., 3jss.; aq. menth. pip., 3j. M.; ft. haustus ter die sumend.

Dec. 30. Health improved; tongue cleaner; expects the period in six days. Pergat.

January 13. Catamenia appeared a week ago; the discharge came on in the morning, abated towards noon, when the pain commenced. It was not so severe as before, but lasted for about twenty-four hours; the discharge then returned slightly, but with relief, and she recovered quickly from the attack. Pergat.

Jan. 20. Health much improved; expects to be unwell in about a fortnight.

Feb. 24. The catamenial period appeared three weeks ago; the pain was much less, and only lasted two hours; health greatly improved.

I presume that it is quite allowable for a man to criticise himself, on the condition that he does it honestly; it may, perchance, thereby save some of my reviewing friends the trouble of doing so for me. I allude to the mode of prescribing, which, might, I think, have been more efficacious, and yet in simpler and better combinations. The guaiacum would have been in a more convenient form if it had been given in powder with carbonate of magnesia, and, when mixed in water, some sp. ammon. arom. might have been advantageously added.

The suffering at the menstrual periods, unrelieved by a powerful dose of morphia, and the existing evidence of rheumatism in the system, pointed out the line of treatment necessary to be adopted. The use of the guaiacum was immediately followed by relief; and, being an outpatient at St. Thomas's, there is every reason to presume that her dysmenorrhœal symptoms did not return, otherwise she would have again applied to me.

Mrs. P., æt. 40, stout and plethoric.—Aug. 27, 1843. Constipation; pain of head; sickness; flatulence; pains of limbs; creamy leucorrhœa; uterine flatulence; much sense of bearing down in pelvis, and of swelling and engorgement of the vagina, coming on and going off suddenly; during these attacks of pelvic congestion, she can scarcely sit down, and has general burning and flushing, followed by perspiration. The menstrual periods are always attended with severe pain, which has latterly much increased, with occasional exudations. Some years ago I attended her on account of inflammation of the right ovary, which was relieved: urine sparing and high coloured; that which is passed at night has a thick sediment of lithate of ammonia, sp. gr. 10.32: an immense excess of urea, and an equally large proportion of phosphates thrown down by ammonia.—*R.* Hydrarg. chlorid. extr. hyosc. aa. gr. v. h. s. M. Pulv. rhei. potassæ sulph. aa. ʒj.; mannæ opt. 3ij.; spir. myrist. 3ss.; aquæ carui, 3jss.; M. ft. haust. primo mane sumend.—*Rx.* Potassæ bicarb. gr. x: potassæ nitr. gr. v; sp. ætheris nitr. 3ss.; syrupi aurant. 3j.; aq. menth. pip. 3jss. M. ft. haust. ter die sumend.

Aug. 30.—Medicine operated well, and brought away a large quantity of dark coloured, unhealthy, feculent, matter, with great relief; the leucorrhœa has ceased; she has had no uterine flatulency or bearing down since; complains of rheumatic pain of shoulders, and stiffness of finger joints; bad taste in the mouth; foul tongue; after eating she flushes greatly, with a choking sensation of heat about the throat, and much flatulent distention of the abdomen.—*Rx.* Pil. hydrarg. extr. colocynth. co., extr. hyoscyami, aa ʒj. M. ft. pil. xij; sumat ij h. s. M. Acidi hydrochlor. dil., acidi nitrici dil. aa. 3ij; syrupi aurant. 3j; aquæ cinnamon. 3jss. M. ft. mist. cujus sumat cochl. min. j. ter die ex aquâ.

Sept. 4. Much better in every respect; still feels a hot tingling in the skin; has bearing down, and vaginal swelling and congestion to a slight degree; has also some uterine flatulence; complains of hæmorrhoidal congestion; expects the catamenia in two days; urine acid, yellow, with thick white sediment of lithate of ammonia; no excess of urea, sp. gr. 10.33; phosphates precipitated by ammonia, very copious and dense. Hirudines v ano.; rep. pil. et mistura.

Sept. 17. Leeches bled freely, and relieved her greatly; has menstruated since, and with less pain than usual; the discharge was of a better colour; no uterine flatulence since last report; less vaginal congestion and swelling; no throbbing about the rectum; pain of limbs better; leucorrhœa diminished; urine very scanty. Contin. pilula et mistura.

Sept. 23. Pain of limbs, uterine flatulence, and vaginal congestion much better; there is still some leucorrhœa; acid taste in the mouth; much burning and tingling in the fingers; urine extremely scanty; bowels regular, but the abdomen is very large; urine passed at night of an orange red

colour, acid, with a thick sediment of lithate of ammonia, but no excess of urea. Omit. mistura, rep. pilula.—R. Pulv. guaiaci. magnes. carb. aa. gr. x. M. ft. pulv. bis. dic. ex. aqua sumendus; hirudines viii ano.

Oct. 2. Was much relieved by the leeches, although she still has sensation of fulness about the rectum; vaginal congestion and flatulence diminished; pain of limbs very much better; urine increased in quantity; bowels open seven or eight times a day, and only feels relieved when this is the case; slight leucorrhœa, thick, slimy, and acrid. Pergat.

Oct. 10. Catamenia appeared on her return from my house, without much pain; she herself says that it was "nothing to be compared with former ones." Two days ago, after taking a long walk, she spit up some black blood; but she says that she has frequently done so at the catamenial periods. She has still leucorrhœa, but there is no vaginal congestion or flatulence, and the pains of limbs are much better; the bowels are open, the tongue is clean, and she feels altogether much improved in health. Contin. pulveres guaiaci and magnesie carb.

The above is a well marked case of that species of dysmenorrhœa which I have elsewhere described as depending on mal-assimilation of the albuminous and gelatinous principles, and which, for want of a better name, I have designated by the name of "uterine gout." It is indicated by the pain of limbs, uterine or vaginal flatulence, painful congestion, flushing, and swelling of the vagina, coming on and going off suddenly; the urine loaded with its ordinary saline ingredients, and with large excess of urea. The menstrual periods were attended with occasional exudations; and it is interesting to find that she had suffered formerly from inflammation of the right ovary, for which I had successfully treated her with antimonial ointment, but had neglected to take notes of the case at the time. I have already pointed out the connection which I believe to exist between this appearance in the catamenial discharge and the presence of inflammatory action in the ovary, and daily experience tends to confirm this view.

Considering the loaded state in which the circulation as well as the bowels appeared to be, I could do no otherwise than begin with a smart dose of calomel, which acted satisfactorily and with much relief. The uterine or vaginal flatus and sense of weight (probably from uterine, or, at least, pelvic congestion), were immediately diminished; and now, symptoms began to show themselves, which apparently had been hitherto concealed amidst the general suffering of the system, from an oppressed and impure state of the circulation. Rheumatic pain of shoulders and stiffness of the finger joints began to appear after the copious evacuations from the calomel, and the symptoms of gastric derangement (foul tongue, bad taste in the mouth) became more distinct.

It is curious to observe, under circumstances of severe derangement of the assimilating functions, how completely an active "searching" dose of calomel uncovers many of its features which had been enveloped in obscurity, and brings out their characters, prominent and well marked, which otherwise would have been indistinct. In severe cases of chlorosis, the symptoms of gastric and intestinal derangement show themselves in a marked degree after a dose of this sort, which had till then been nearly indistinguishable; and thus they enable the practitioner to decide with greater certainty upon the course he has to pursue. Having struck this blow, I could afterwards regulate the stomach and bowels without difficulty by milder doses. Even shortly before the menstrual period, she experienced but a moderate exacerbation of her symptoms, but the urine, although loaded in every other respect, had now no excess of urea.

The leeches, so far from diminishing or preventing the appearance of the menses, promoted the discharge, although they bled freely, and marked relief to all her symptoms was obtained. At the halfway period, there still existed a sufficient degree of engorgement of the circulation to require another application of the leeches;—the urine was scanty, the abdomen was large, but

there was no excess of urea. This symptom diminished after the dose of calomel, and with it many other symptoms of rheumatic-gouty diathesis, to which I have before alluded. As, however, there were still sufficient evidences of this condition in the system, as shown by the pain of limbs, uterine flatulence, tingling in the fingers, &c., I ordered the guaiacum and magnesia powders, and greatly relieved the loaded abdominal circulation by a fresh application of leeches to the anus. Some degree of hæmorrhoidal uneasiness still existed, and I should have again repeated the leeches on Oct. 2, had not the catamenial period been so close at hand.

The results of leeching the anus were well illustrated in this case. There is no remedy by which we can produce such effects upon the abdominal circulation as this; and I again beg to recommend it strongly to the attention of my medical brethren.

The connection which appears to exist between the transition of albumen into gelatine, and the production of animal heat, may serve to account for a fact which I have invariably noticed in cases of this sort, where there has been a considerable excess of urea in the urine, viz.: the frequent flushings of burning heat from which the patient was continually suffering. This symptom is not merely confined to the uterine system, but affects the trunk generally, the extremities, the face, and other parts of the surface, producing a tingling, fiery sensation, not unlike the commencement of nettle-rash.

I have elsewhere also endeavoured to show that, in the rheumatic-gouty diathesis, or, at least, the state arising from mal-assimilation, of which this patient afforded a good illustration, the mucous membranes, particularly of the uterus, vagina, and rectum, are most liable to be engorged, producing much painful congestion, and frequently attended with sudden and severe exacerbations; or that the vagina is not only in a state of exquisite tenderness, but is so swollen as to be nearly impervious;—that an analogous state of the mucous membrane, lining the air cells and passages in the lungs, is attended with all the symptoms of asthma;—that in those cavities lined by a mucous membrane, where its presence can be detected by its accumulations, as in the uterus, vagina, rectum, and bladder, gas (probably nitrogen) is frequently secreted to a considerable extent, and forms in these affections a peculiar symptom, which, as far as I know, had not been hitherto noticed.

How far the slight hæmoptysis on the 8th of Oct., was a result of this congested state of the pulmonary mucous membrane, or how far it was connected with a disposition to vicarious menstruation, I am not prepared to say. Lastly, I would also point out the effects of an increased action of the liver in these cases, as tending greatly to relieve the system of those morbid principles which are ordinarily thrown off by the kidneys and by the skin. The observations of Mr. Ure, in his valuable paper on these subjects, in the *Medical Gazette*, are very interesting, and point out the importance of promoting the secreting activity of this organ.

MAGIC, MESMERISM, HYPNOTISM, &c., &c., HISTORICALLY AND PHYSIOLOGICALLY CONSIDERED.

By JAMES BRAID, Esq., of Manchester, M.R.C.S., Edin., &c.

(Continued from page 226.)

It is rather a remarkable coincidence, that the very interesting paper by your correspondent, E. Clarkson, Esq., which immediately follows my communication in your last number, should, as well as my own, discuss the magical performances of Sheikh Abdel Kader. Mr. Clarkson, whilst he inclines, with me, to the belief in the induction of a state of self-hypnotism, by the fixed gaze on the inky globule, as the primary effect, adopts as the solution of the subsequent phenomena an explanation similar to that of the Mesmerists, of a direct sympathetic reflection of the ideas in the mind of the interrogator, on that of the hypnotized subject. Were this the case, however, they

ought *always*, or, at all events, *generally*, to be *right*, but we find them *oftener wrong than right*.

I believe the true solution to be this:—the nature of the question suggests the general idea, and the stranger being struck with this coincidence without reflecting on how natural such an answer was to such a question, addressed to a patient in that peculiar condition; through his own excitement of mind seizes the rude outline which he unconsciously fills up himself, so as to convince himself and others that the subject had a much more perfect perception of the object of observation than really existed anywhere else than in the *mind of the operator*. The more highly imaginative and enthusiastic, therefore, the parties are who are investigating such phenomena, the more likely are they to get what appear to be correct answers; but the less imaginative and abstracted will fail to obtain satisfactory responses to their interrogations.

I shall now give a few extracts from "Ward's History of the Hindoos," confirming the fact of the Yogee being all self-hypnotizers, by inducing a state of intense abstraction, from a steady fixed gaze at an object, with a suppressed state of the respiration.

The restraining and fixing of the mind is called *Yogu*, of which there are two kinds.

Sumprugnatu is meditation on an object, till the ideas connected with it are imprinted on the mind, and occupy all its powers. The proper objects of meditation are two, matter and spirit. It is of four kinds: meditation on the distinction between sound and substance, in reference to the Deity as a visible being, until the Yogee, by continued meditation, arrives at the non-distinction between sound and substance in reference to God. 2. Meditation on the Deity in reference to his form, as well as to time and place, till the Yogee is able to fix his meditations, without regard to form, time, or place.

At length the Yogee attains what is called *usumprugnatu*, in which, if he be perfect in his abstraction, the very shadow of separate existence will be destroyed, visible objects will be completely extinguished, and spirit alone become manifest.

The Yogee must, in the next place, for the fixing of his mind, attend to *prangamu*, that is: *to the gradual suppression of breathing, since the animal soul and the mind act in conjunction; in this work, he must first endeavour to fix the understanding by some act of the senses, that is: he must place his thoughts and sight on the tip of his nose; by which he will perceive smell; then bring his mind to the tip of his tongue, when taste will be realised; and afterwards fix his mind at the root of his tongue, from which sound will be perceived.* After this, if the mind is, &c. &c., it will escape the waves of passion and become truly fixed. He who meditates on God, placing his mind on the sun, moon, fire, or any other luminous body, or within his heart, or at the bottom of his throat, or in the centre of his skull, will, by afterwards ascending from these gross images of the Deity to the glorious original, secure fixedness of mind.

The Yogee still seeks God by meditation on his names, and on the import of these names, or on his existence; after which, he loses all remembrance of the names of the Deity and of their import, and *God is realised in the mind as pure light; and to this succeeds a state of mind similar to self-annihilation.*

Through meditation on the opposite of the sources of power (as by meditating on benevolence revenge is destroyed), the Yogee is greatly assisted in his efforts to obtain perfect victory.

The repetition of incantations brings before the Yogee the Deity, in whose name these are repeated.

Asunu includes eighty-four modes of setting at *yogu*; but, to be complete, the posture must be quite easy, neither painful nor attended with agitation. That a rigid posture may become easy, the Yogee must acquire it by degrees, as the members are able to bear it; and that he may be happy in these circumstances, he must raise his mind to the wonders of the heavens, and not confine it to body. When he has become perfect in the *Yogu* posture, he will no longer feel the inconveniences of heat or cold, hunger or thirst, &c. This pre-

ares the person for perfection in the suppression of the inspiration and respiration of the breath. In the work of suppression, the Yogee must permit the exhalation of his breath, at farthest, to be the distance only of twelve fingers' breadth, and gradually diminish the distance from his nostrils till the point of perfection is obtained. As it respects time, he must begin to restrain breathing for twenty-six seconds, and enlarge this period regularly till he is perfect. He must practise these exercises daily, or as often as he is able. The Yogee who most excels, confines his breathing to the distance of twelve fingers from his nose, and, even after restraining it for some time, draws it from no greater distance than his heart.

By withholding the mind from wandering, the organs are turned from their accustomed objects outward, and become subject to the Yogee.

The fixing of the mind so that it may not wander beyond the nose, nor descend inwardly beyond the level of the navel, is called Dharunu, in which the Yogee purifies the mind by benevolence; practises the duties connected with yumu and yumu, perfects himself in the Yogu postures; regulates the ingress and egress of the animal soul; and, fixing his eyes on the top of his nose, subdues all his members, AND ALL THE POWER OF THE ELEMENTS OVER HIM.

Sungyumu embraces the combined influence of all the various processes referred to, for perfecting the subject in his abstraction, and restraining of the mind from all visible objects. They then go on to relate the extraordinary powers and gifts bestowed on the perfected Yogee. Before we pass on to these marvels, which assuredly far transcend the clairvoyant marvels of modern Mesmerists, I would beg the reader's attention to a few remarks, in addition to those already quoted from my former paper, about the vivid imagination interesting every idea suggested to the mind, with all the attributes of present reality. If they pass into the condition with any particular associations and impressions, so certainly will they be realised to their fervid imaginations, and, from the law of double consciousness, will recur as often as placed in similar circumstances afterwards. Thus, the monks called Omphaophsicians, by fixing their eyes on their navels, with abstracted attention, and firm belief that they would therefore be favoured with a visible view of the transfiguration on Mount Labor, realise such daily visions. Now, accordingly, most of the wonders just to be transcribed, and which the Hindoos take to be realities, I can very readily exhibit with many patients; but I explain them *merely as vivid mental pictures, or dreams*. I have no doubt, but that in the intensely excited and concentrated state of the mind, there may be great vigour of the reasoning faculty, when brought into active operation, and that they may thus intellectually trace out, occasionally, the natural bearing of events and circumstances, with more acuteness than in the more diffused state of mind in the waking condition. This is realised occasionally in dreams; and thus far I readily advance, as also to the conviction of great exaltation of function of the organs of special sense, and other physical and mental faculties, enabling them to accomplish some feats which they could not do in the waking condition. I say, thus far I readily advance in respect to their exalted powers, but, as respects clairvoyance in the extreme sense in which it is generally alleged to exist, no proof yet adduced can satisfy my mind on the subject.

Amongst other erroneous physical facts which might be adduced, the following one is quite fatal to the existence of *accurate clairvoyance*. The Yogee says, "by the application of sungyumu to the centre of the bowels at the navel, he will become acquainted with the *anatomy of the human body*." Now, it is a notorious fact, that whilst there has been such a host of these eastern saints studying anatomy, in this way, for from two to three thousand years, they were just as correct, and no more, in their notions about the circulation of the blood, as the Europeans were before the discovery of our illustrious countryman, Harvey — they believed the arteries to be filled with air, instead of blood! Moreover, medical science, generally, is far from having attained to that advancement amongst them which it has in Europe,

which would have been the contrary had their clairvoyant powers been so accurate as alleged, and which induced a high authority to state that there was no perfect medicine but that of the somnambule.

Let it also be kept in mind, that by directing the ATTENTION to any organ or function, a positive *excitement of the organ or function* will be thereby induced. I could not induce a more decisive proof of the extraordinary exaltation of smell, and hearing, and feeling, especially as respects impressions from currents of air, than that afforded by a late patient. He was upwards of sixty years of age, possessed of an energetical mind, and had entire consciousness the whole time he was hypnotised, and could, therefore, on being aroused, give a clear explanation of the *cause of each manifestation* which had occurred, from the application of different tests.

Whilst asleep, and the legs and arms extended, I put twelve folds of a silk handkerchief over his thighs, and then slightly agitated the air by a book, which I held *six inches above the handkerchief*, when instantly down went the legs, the current of air being felt through *twelve folds of silk, his cloth trousers, and flannel drawers*. Breathing with the lips, or wafting with the hand, had the like effect. The same occurred also with either arm singly, and when the part was protected with *twelve folds of silk in addition to the coat sleeve and under-dress*. Two additional folds of thick cloth, however, made considerable difference, as was quite perceptible whenever it was tried. He could distinctly feel the wafting of the air, by the hand, at *twelve feet distance*. He could hear the *slightest blowing* from the lips, the face being turned from him, at *twelve and eighteen feet distance*, and two blasts from a pair of bellows at *fifty feet*, were heard sufficiently loud to awake him whenever it was tried, while inaudible to those watching the experiments at *half the distance*.*

Whilst labouring under a cold, which entirely deprived him of the sense of smell, I held a pink under his nose, which he seemed to enjoy greatly. I had proposed, before he went to sleep, to try whether he would be able to smell a rose. Having failed to procure a rose, the pink was substituted, and although removed before he awoke, he instantly told me it was *not a rose, but a pink*.

* I have been much gratified by the report of Miss Martineau's recovery under mesmeric treatment. Every one with proper feelings must be gratified to know that such a gifted lady, and such a long and severe sufferer, should have been restored to ease, and health, and strength, by whatever means it has been achieved. The narrative of her case, by the gifted authoress, is also calculated to arrest attention, and secure some greater consideration on the peculiar means by which this has been accomplished. I think it is to be regretted, however, that she has been induced to go into so much detail in regard to "J.'s" case. Thus, at page 1094 of the "Athenæum," she details what she believes to be a clairvoyant marvel, the girl describing in her sleep, with much accuracy, a shipwreck, and how the crew were saved, the girl saying she *saw* the whole as in a vision. Now, had Miss M. been aware of the *extreme quickness of hearing, which I have just alluded to*, she would have discovered a much more natural solution of the marvel, and which occurred to me the moment I read the case. It is this: the girl overheard her aunt relating the happy news below stairs, when she was in the mesmeric state, and instantly formed a mental picture, and, just as we do in dreams, rushed to the scene of action, and the apparent visual scene being more vivid than the auricular relation of the facts, the former are remembered, whilst the latter have faded away. Her declaring, as she does, through the law of double consciousness, "I saw the place and people themselves, like a vision," is quite consistent with veracity; she describes what she remembers, but forgets what excited the mental picture, or vision.

This case is a beautiful instance of the law of double consciousness, which, I believe, I was the first to bring prominently forward, as occurring in artificial somnambulism. This I did in your own columns last spring.

On now applying it to his nose, it had no perceptible smell to him.

This gentleman's sight was greatly improved, and a rheumatic affection of long standing was also cured by hypnotism, without the use of any other means.

In former papers published in your columns, I have recorded instances of other patients who have manifested extraordinary exaltation of the senses of hearing, heat and cold, touch and smell. I may add, that a few days ago, Master Vernon, Derbyshire (whom I referred to in my paper of 13th January last), displayed the exaltation of *smell* in the most beautiful manner. There were three ladies (strangers) present; and whilst he was in the further end of the room, and his back towards them, his mother procured a glove from two of these ladies; his mother then gave both gloves into his hand together, and desired him to give them to their respective owners. He *smelled to them*, and then walked round the room, and presented each glove unhesitatingly to the respective owner, and that without touching either of the ladies. Sight, of course, had nothing to do in the matter. He can readily tell any member of his family at eighteen inches or two feet distant, and will say he *sees* them; but if the nostrils are stopped, he will turn his head as if looking for them, and say they are gone away; but the moment the nostrils are unstopped, he will say they are come back again, and that he again sees them. Moreover, if at the distance of five or six feet, he cannot discriminate any one of them, although standing between him and the window. And, again, if a watch is put into his hand, and he is asked to name what o'clock it is, he will turn the watch as if he were looking at it, and then name a time, but it is evidently mere guessing, for he is seldom right; and if the same watch is put into the other hand, he will name a very different time, just as happens when asked to tell the time by a series of imaginary watches, they will be all different. I have observed this to be the same with most of my patients.*

* I think it is much to be desired that a series of experiments were instituted calculated to determine, more satisfactorily than has yet been done, the real merits of the alleged powers of clairvoyant patients. It has appeared to me that the tests generally applied for this purpose are of too loose a nature to satisfy the demands of a strictly inductive philosophical investigation of this subject; and I very much doubt, when all the sources of fallacy attributable to the peculiar condition of patients which I have pointed out have been accurately guarded against, whether the coincidences which occur would exceed what is recorded of the ordinary dreams of many individuals.

During the visit of "Alexis" in London, I had prepared a fair test, which a scientific friend was to have applied for me, of such a nature as must have proved the truth, or error, of the belief in his being possessed of such powers, in a manner which could have admitted of no doubt or quibble. Unfortunately, before a *seance* could be arranged, M. Marcillet and he left London. However, I shall here describe the nature of the tests I allude to, and should recommend those who are honestly inquiring after truth, to apply such the very earliest opportunity.

First, a small piece of good sized print, which no person knew the reading of, was cut off (some of the words consequently being broken words), and enclosed within *twelve folds of clean writing-paper*, which was stitched round and sealed, so as to prevent the possibility of any one opening and seeing in that manner. Without any masking of the subject, this was to have been presented to Alexis, who was to have been requested to name each letter through the twelve intervening folds of paper, M. Marcillet's noting each letter in succession. Then to turn the paper read the other side in the same manner. Finally, in the presence of the whole company, the paper to be opened, and the portion of enclosed print and the reading by Alexis to be compared. If they were *literally* the same, there could remain no doubt but he had accomplished it by some power unknown to us in the waking condition; but, if not *literally*

In transcribing the following marvels from "Ward's History," whatever feats are not fairly to be accounted for on the principles already explained, I shall endeavour to illustrate or explain by remarks included within parentheses.

"The Yogee who has perfected himself in the three parts of sungyumu, obtains a knowledge of the past and of the future (quickened memory and excited imagination); if he apply sungyumu to sounds, to their meaning and to the consequent results, he will possess, from mere sound, universal knowledge. (Hypnotic patients imitate with precision and with the utmost facility the vocal enunciation of any language, but do not understand the meaning of the words they utter.) He who applies sungyumu to the impressions of former births (lines of fate), from which actions and their effects proceed, will obtain a knowledge of the events of preceding transmigrations. He who applies sungyumu to discover the thoughts of others will know the hearts of all. (He will believe and talk as if he did so.) He who does the same to his own form, and to the sight of those whose eyes are fixed upon him, will be able to render his body invisible, and to dim the sight of the observer. (Either through imagination, or literally from both parties mutually hypnotizing each other, by the fixed gaze.) He who, according to these rules, meditates on his own actions, in order that he may discover how he may most speedily reap the fruits of them, will become acquainted with the time, place, and causes of his own death. He who applies sungyumu to that compassion which has respect to the miserable, will secure the friendship of all. (The excite-

correct, then it would be equally evident that he was not sufficiently clairvoyant to enable him to read through *twelve sheets of paper*. In case of failure, then a second, third, and fourth test, of a similar nature, to be applied, only with eight, six, and three sheets of paper intervening, care being taken in the latter cases to guard against any aid being taken of reading by *transmitted light*.

The fifth test was a portion of print included within organ-pipe metal, and soldered all round; and the sixth a word, not in common use, included within a piece of tinned iron, both to be tested in the same manner as already described.

Supposing he failed with all these, then there could be no question that he had *not* the power of seeing through *opaque bodies*. In that case I proposed the following experiment:—Let a portion of print be presented to him with the same number of folds of paper intervening between his eyes and the print, as in the first case, but the *print being visible to the gentleman applying the test, and no one else*. Alexis, whilst joining hands with the experimenter, to be requested to name each letter, to be noted down, as in the former case, the experimenter all the while *visually and mentally regarding the portion of print, but not to articulate the letters, even in the faintest manner*. The reason for this latter precaution is, that the extreme quickness of hearing of such patients would enable them to detect, *by hearing*, what might be quite inaudible to any one else. If he could, in this way, give a *literally correct reading* of what could not be done in the first experiment, then it would prove *community of ideas, or thought-reading, to an extent unattainable to us during the waking condition*. But, if unable to give a *literally correct reading* in any of these methods, it would go so far to prove, in a clear and comprehensible manner, that seeing through opaque bodies and accurate thought-reading are fallacies.

I perhaps ought to apologise for urging so strenuously such a rigid scrutiny on a point to which many gentlemen of the highest talents and attainments have subscribed their firm belief; but my mind is so constituted that I cannot be satisfied with the same amount of evidence as many others are. Moreover, I am particularly anxious that no unnecessary prejudices should be raised against phenomena which are demonstrably true, and of real practical value, from vain attempts to prove as true what may possibly be erroneous, from the extreme difficulties with which the inquiry is surrounded, leading many to overlook sources of fallacy with which I am familiar.

ment of the feeling of benevolence being carried into the waking condition, as already explained). He who, according to these rules, meditates on the strength of the powerful, so as to identify his strength with theirs, will acquire the same. (Through this and the law of concentration, I have seen a young woman carry a man or woman in her arms as cleverly as if they had been boys or girls.) He who meditates, in the same manner, on the sun as perfect light, will become acquainted with the state of things in every place. (He will believe and speak as if he really did.) Similar meditations on the moon, procure a knowledge, from mere sight, of the union, progress, and influence of the planets; similar contemplation, applied to the polar star, will enable the Yogee to distinguish between the stars and the planets, and to observe their motions. (If they previously had such knowledge, they will, by an act of memory, see them accurately, and with all the vividness of reality, or if unacquainted with them, imagination may still make them *suppose* they do.) By the application of sungyumu to the centre of the bowels at the navel, he will become acquainted with the anatomy of the human body. (Purely imaginary knowledge, acts of memory or by positive instruction conveyed during sleep, and which, through the law of double consciousness, would be remembered again in the sleep, although entirely forgotten when awake.) By a similar application of sungyumu to the cup at the bottom of the throat, he will overcome hunger and thirst; by meditating on the nerve corum, which exists a little below the throat, he will obtain a fixed and unbroken posture in the act of yogu; by meditation on the basilar suture, he will be capacitated to see and converse with deified persons, who range through the aerial regions; by meditation on extraordinary presence of mind, he will obtain the knowledge of all visible objects; by meditating on the seat of the mind, or on the faculty of reason, he will become acquainted with his own thoughts, and that of others, past, present, and future; by meditation on the state of the Yogee, who has nearly lost all consciousness of separate existence, he will recognise spirit as unassociated and perfect existence. (All included in this last sentence and the next, are clearly the result of *belief and vivid imagination*.) After this he will hear celestial sounds, the songs and conversation of the celestial choirs; he will have the perception of their touch, in their passage through the air; his taste will become refined, and he will enjoy the constant fragrance of sweet scents. (All this I can easily cause hypnotic patients to realise; and who does not see in it the results of an extremely vivid imagination, similar to that of the dreamy delirium of the opium eater, or the phantasms flitting before the patient, who is labouring under delirium tremens). When the Yogee, by the power of sumadha, has destroyed the power of those works which retained the spirit in captivity, he becomes possessed of certain and unhesitating knowledge; he is enabled to trace the progress of intellect through the senses, and the path of the animal spirit through the nerves. After this he is able to enter into a dead or living body, by the path of the senses, all the senses accompanying him, as the swarm of bees follow the queen bee, and, in this body, to act as though it were his own." (Now, all this extravagance I can easily make patients *IMAGINE* themselves accomplishing, but of course it is *only imaginary*, just as such feats are accomplished in dreams.)

Again, "the collected power of all the senses is called the animal soul, which is distinguished by five operations connected with the vital air, or air collected in the body. The body of the Yogee, who, according to the rules of dharunu, dhyanu, and sumadhu, meditates on the air proceeding from the anus to the head, *will become light as wood, and will be able to walk on the fluid element*. The body of the Yogee who thus meditates on the air, encircling the navel, will become glorious as a body of light. He who, in the same manner, meditates on the ear and its vacuum, *will hear the softest and most distant sounds, as well as those uttered in the celestial regions, &c.* (This accords with my proposi-

tion that *calling attention to any organ or function will exalt the energy of the function positively*, as well as excite ideas connected with such organ or function.) He who meditates on vacuum will be able to ascend in the air (in imagination). He who meditates, by the rules of sangyumu, and in a perfect manner, on the subtle elements, will overcome, and be transformed into those elements; he will be capacitated to become as rarified and atomic as he may wish, and proceed to the greatest distance; in short, he will be enabled to realise in himself the power of duty, to subdue all his passions, to render his body invulnerable, to prevent the possibility of his abstraction being destroyed, so as to subject himself again to the effects of actions."

"By applying the rules of sungyumu to the division of the four last minutes of time, he who perfects himself in this will obtain complete knowledge of the separate elements, atoms, &c., which admit not of division of species, appearance, and place. This knowledge brings before the Yogee all visible objects at once, so that he does not wait for the tedious process of the senses."*

"The Sipasian and the historians relate, that whoever carries this process to perfection, rises above death; as long as he remains in the body, he can put it off and be again reunited to it; he never suffers from sickness, and is fit for all business. The Hindoos hold that, whenever a man has perfected himself in this act, Brahma, Vichnu, and Mahadeva have no command over him, but *he rules over them*: and it is the belief of many, that, whoever becomes master of this process of devotion, coalesces with God himself."

I trust enough has been adduced, by these extracts, to satisfy any unprejudiced person that, in attributing these extraordinary effects to the causes which I have assigned, I am at least somewhat nearer the truth than those who believe the whole of the marvels described to be *realities*. After the amount of evidence adduced on the point, it is impossible to deny the fact, that the influence is *subjective or personal*, and not, as the Mesmerists have alleged, *an influence passing from another person*. Their processes, however, can produce varieties in the effects through impressions on the organs of sense, and mental belief and habit. The greater certainty and celerity with which patients can be thrown into the condition by the hypnotic than by the ordinary mesmeric processes, is also an important point gained. So long as there was so much time necessarily expended on processes, which, after all, might never produce the slightest apparent effect, there was little chance of it ever becoming generally available, even in cases where it was considered well calculated to benefit patients. Now, however, any intelligible person who fully understands, and correctly adopts, the methods I have pointed out, is just as certain to succeed (provided the patient *strictly* complies with the conditions), as far as requisite for curative purposes, as he can be certain of producing a given effect, by a particular medicine on a number of patients. In both instances differences of susceptibility will be met with; but, as the hypnotic process is conducted entirely under *personal superintendence*, its effects can be controlled and regulated with far greater accuracy than by medicines, which necessarily produce their effects during the absence of the medical attendant.

In our ordinary mode of practice many of our most important remedies succeed in curing certain diseases, whilst the *modus operandi* by which they accomplish the cure is a matter of mere conjecture. We do not, on this account, however, hesitate to prescribe them; we are ready to profit by expe-

* To these extracts from Ward, I shall add two from the "Dabistan, or School of Manners," vol. ii., page 240. "They pretend to have the power to attract whomsoever they like, and to render him obedient to their will; to give information of whatever is concealed, and to reveal the secrets of the heart; to possess the knowledge of the good and the bad hidden in the minds, as well as the relation and history of the world; and upon the mirror of their hearts are reflected the lights of the secrets, the splendour of the universe."

rience, and consider ourselves fully warranted to administer what has repeatedly proved successful under like circumstances. Now, by the same rule, it would be quite warrantable to apply hyponotism and Mesmerism in the cure of disease; for ample experience has proved that, properly applied, they may be rendered eminently useful in the cure of a certain class of diseases or disorders, and especially in those which have proved most rebellious to ordinary treatment, and are consequently styled the "opprobrium medicorum," and thus, too frequently, fall a prey to quacks. The honest and enlightened medical practitioner, therefore, ought to hail with delight, instead of trying to howl down with implacable enmity, what promises to be such a useful ally; for, that it will prove a panacea, or universal remedy, I should presume, no man is so visionary as to expect.

(To be continued.)

PHARMACEUTICAL SOCIETY.

Dec. 11, 1844.

Mr. MORSON, Vice-President, in the Chair.

A communication by Mr. Phillips, jun., "On the action of lead in distilled and river water," was read, in the course of which he detailed some experiments which he had made. He commenced by pointing out the action which formed the subject of investigation; in two bottles which were on the table, one of them containing distilled water, and the other Thames water, about six years since two pieces of bright lead of nearly equal size were immersed; in both experiments the lead was allowed to remain rather above the water, and was freely exposed to the action of the air; in a short time a quantity of yellowish-white pearly scales appeared on the lead in the bottle which contained the distilled water; these, after a short time, were detached from it and sunk; fresh ones were then formed, and this process has been going on until a large quantity of a white precipitate has accumulated; whilst in that containing Thames water hardly any action was apparent. The points of interest which appear to arise from these facts are as follow:—1st, Whether it is necessary that the lead should be exposed to the air; or whether the action would take place below the surface of the water. 2ndly, Whether pure or distilled water, deprived of all atmospheric air, has any action on lead. 3rdly, As to what is the nature of the white precipitate. 4thly, If, besides this white precipitate, any soluble salt of lead is found; and 5thly, as to which of the salts contained in river water the non-formation of the white precipitate is due. These questions have been already investigated, in this country, principally by Dr. Christison, whose observations appear in his work on poisons; as Mr. Phillips differs in some respects from him, he reviewed his opinions, and the experiments on which they are founded. The first question does not appear to have been noticed by Dr. C.; but, with regard to the second, namely, whether distilled water, deprived of atmospheric air, has any action on lead, he considers that it is without any, but does not give the details of the experiments he performed. With regard to the next question, the nature of the white precipitate, Dr. Christison, in the earlier editions of his work, stated that it was a pure carbonate, as he found that it dissolved with effervescence in acetic acid. Since then, however, Colonel Yorke has investigated the subject in the *Philosophical Magazine*, for August, 1834, and finds it to be a mixture of hydrated oxide and carbonate of lead; a hydrated oxide being first formed, which afterwards attracts carbonic acid from the air and becomes a carbonate. He carefully analysed a portion of the precipitate, taking the precaution to dry it first under the air-pump; and gives the following, as what he believes to be its composition and formula:

Oxide of lead 87.9
Carbonic acid 8.6
Water 3.5

Or $2\text{Pb} + \text{C} + \text{Aq}$.

In the later edition of his work, Dr. Christison appears to agree with this, except that he believes

a greater quantity of carbonic acid to be present than is stated by Colonel Yorke.

The next subject is the existence of a soluble salt of lead in the water besides the white precipitate; and here Dr. Christison agrees with Colonel Yorke, although for different reasons. He considers that a soluble salt does exist, and that it is formed by the further action of the carbonic acid on the carbonate, and holding it in solution; his experiment consisted in filtering some of the liquid above the white precipitate, and evaporating it to dryness; the residue then redissolved with effervescence in acetic acid, which was not the case if it was previously heated to redness. Colonel Yorke, however, looks upon the soluble salt as the hydrated oxide, which he believes to be slightly so, estimating its power of solubility in water at a 10,000th part. His reason for not believing it to be a carbonate, is, that on filtering the liquid and evaporating it to dryness under the air-pump, the residue dissolved in acid without effervescence.

The action of the salts contained in river water to protect the lead, has been principally investigated by Dr. Christison, and he believes them all to possess this preservative power, namely: the sulphate and bicarbonate of lime, and common salt, the power depending on the acids, and not on the base of the salts, a 4000th part of sulphate of lime, and a 2000th part of chloride of sodium being capable of exercising this power.

Mr. Phillips' experiments on these subjects were next detailed. There were placed on the table two bottles containing distilled water, illustrating the first; in them, at the same time, were placed two pieces of lead of nearly equal size: in both a white precipitate had occurred, but in that in which the lead had been exposed above the surface of the water, there was a far greater quantity of the precipitate than in the other, where the lead is covered with the water, and thence Mr. Phillips concludes from this experiment, that although it is not necessary that the lead should be exposed above the surface of the water for the action to take place, still, by offering a passage to the gases contained in the atmosphere, it is accelerated.

As Dr. Christison has not described the method by which he performed his experiment on the non-solubility of lead in pure distilled water, and as Mr. Phillips found some difficulty in ascertaining it, he described the process which he followed. He found that on boiling pure distilled water so as to deprive it of all atmospheric air, that when it had regained its former temperature, and was placed in a well stoppered bottle with a piece of lead, the bottle being perfectly full, although no action was apparent, and the lead remained almost as bright as when first placed in the bottle, yet if a little hydrosulphuric acid was added to the water, it instantly became of a brown colour, showing the presence of lead, the water having, on cooling, absorbed sufficient atmospheric air to act on it. If, on the contrary, the water was placed in the bottle when warm, the lead immediately added, and the bottle stoppered, on cooling a vacuum was formed, which it was impossible to maintain, and the lead was acted upon. He repeated the last experiment, but took the precaution, when the bottle was quite full, and no vacuum had formed, to plunge the stopper under mercury, and to pour water above the mercury. The experiment was allowed to remain for some months; the lead retained its original brightness, and on breaking off the neck of the bottle, it being impossible on account of the vacuum to take out the stopper, not the slightest effect was produced on the liquid by hydrosulphuric acid, thus proving that pure water, without the presence of air, has no action on lead. From these experiments Mr. Phillips was led to the same conclusion as Colonel Yorke, as to the manner of the formation of the white precipitate; in fact, he obtained small masses of crystalline scales, which had formed on the surface of lead, which dissolved without the slightest effervescence in acetic acid. He does not think, however, any fixed composition can be assigned to this substance, as, on repeating the experiment of drying it under the air-pump upon two different specimens, one of which had been

kept some years, and the other only a few weeks, in the former a much larger amount of carbonic acid was found than in the latter, showing that the precipitate had no definite composition, but that it depended, as to the quantity of carbonic acid, on the length of time it had been exposed in the solution. As to the existence in a soluble state of either of the salts of lead mentioned, he differs with the two authorities whom he quoted, and believed that what they considered to have dissolved, was merely the hydrated oxide of lead held in a state of mechanical suspension, because he found, on repeating an experiment of Colonel Yorke's, that of precipitating hydrated oxide of lead, and washing it with warm distilled water, that the filtered liquor gave a brown precipitate with hydrosulphuric acid, after all the soluble salts formed had been washed away; but that on refiltering a portion of it through more than one filter, not the slightest discolouration was given to the liquor by the test. As Colonel Yorke considered the soluble salt was the hydrated oxide, a greater quantity of which would exist, as already shown, at the commencement of the action of the lead on the water, he placed a piece of lead in distilled water, and carefully tested the filtered liquor daily, for some weeks, with hydrosulphuric acid, but in no case could he find the slightest discolouration; as the test is so delicate as to be capable of discovering, according to Plaff, a 100,000th part of the metal in solution, if, as Colonel Yorke states, 1-10,000th part of the oxide is held in solution, the test would, of course, have distinctly shown it.

Dr. Christison, considering that the formation of a soluble salt of lead was due to the carbonate being converted into bicarbonate by long exposure, he tested the liquid from one of the before mentioned experiments when the lead in distilled water had been exposed to the action of the atmosphere for six years, and could not detect the slightest discoloration after the solution had been carefully filtered. Mr. Phillips therefore concludes, from these experiments, that no soluble salt of lead is formed by the action of atmospheric air on lead in distilled water.

In examining the last question, viz.: which of the salts contained in Thames water prevented the action upon lead, he found that it was due to the sulphate of lime, for, on removing the coating that had formed on the lead (which, as Dr. Christison observes, prevents further action by forming an insoluble compound upon it) it was insoluble in dilute acid, the filtered liquor giving no discoloration with hydrosulphuric acid, but it readily dissolved in caustic soda, and the solution gave a black precipitate with the test. As Dr. Christison had stated that all the salts contained in the water were capable of protecting the lead, he placed in three bottles, containing dilute solutions of sulphate of lime, bicarbonate of lime, and chloride of sodium, three pieces of lead; in the first two the lead was perfectly protected, but in the last a precipitate took place. He also found that a soluble salt of lead existed, and that the liquor was slightly alkaline. These facts prove that, although the chloride of sodium, when a strong solution is present, has some effect in protecting the lead, still it does not do so altogether; for, when it is decomposed, and the chloride of lead formed, it being partially soluble does not protect the metallic lead from further action; whilst the sulphate and carbonate of lime, by forming an insoluble sulphate and carbonate of lead, do so effectually. The precipitate in the solution of common salt, he found to consist of chloride and oxide of lead, the oxide being most probably formed by the action of the liberated soda on the soluble chloride. His experiments were made with pure salt, which was found to contain neither lime, iron, magnesia, nor any sulphates; and he suggests that the reason of the error concerning the action of salt, may arise from the salt employed containing a soluble sulphate, which he found to be the case in all samples which he tried, and which would have the effect of protecting the lead.

In concluding, Mr. Phillips drew the attention of the society to the statement made by Dr. Christison, that rain water, when it falls, after a long continuance of dry weather, has but little effect on

lead, but that after it had rained for some hours, the water readily attacks it. Dr. Christison imagined this to be due to the accidental earthy ingredients the rain might at first dissolve from the roofs of buildings, but Mr. Phillips inquired whether it might not rather be owing to the ammoniacal gas contained in the atmosphere, which, as Liebig has shown, is dissolved by the rain water in the form of carbonate; a mere trace of salt will, as he has found by experiment, protect the lead from corrosion.

Mr. SQUIRE asked whether Mr. Phillips had made any experiments on the influence of water on lead in conjunction with other metals. He had frequently observed nodules of lead about the angles of cisterns near the solder, and it would be worth while to ascertain how far the new process of making the joints of lead vessels with the hydrogen blow-pipe would diminish the evil. He had recently been obliged to replace the bottom of a cistern of several hundred gallons capacity, in consequence of the perforations occasioned by the action of the water.

Mr. PHILLIPS replied, that he had not made any experiments on that point, but Colonel Yorke had attended to it in his paper.

A paper, entitled "Remarks on some Peculiarities in Extemporaneous Prescriptions," was read.

The term *incompatible* is used in reference to substances which cannot be mixed without some decomposition and change of properties taking place; but it does not follow because decomposition ensues that such combinations should never be made. There are many cases in which very efficacious remedies are produced by the union of substances which lose their original character when brought together; but it sometimes happens that in this manner changes are effected, which were not contemplated by the prescriber, and which are attended with some results which would not, *a priori*, have been anticipated. Of these remarks, the combinations of iodide of potassium furnish several examples. *R Potassii iodidi*, 3ss.; *potassæ bicarb.*, 3j.; *tinct. guaiaci*, 3ij.; *mellis*, 3ij.; *aquæ distillatæ*, 3iiss. *Capiat* 3j. *ter die*. This mixture is of a bright grass-green colour, arising from the action of the iodide of potassium on the guaiacum. The change is very remarkable, and might occasion surprise. When *tinctura guaiaci ammoniata* is used, the colour is brownish, and less unlike an ordinary medicine. *R Potassii iodidi*, 3ss.; *iodinii*, gr. ss.; *infus. zingib.*, 3viiss.; *syr. zingib.*, 3ss. *M. fiat mistura*. This mixture is of a dark blue colour, occasioned by the action of the iodine on the starch contained in the ginger. *R Potassii iodidi*, 3j.; *acidi aceticus fortius*, 3j.; *sp. camphoræ*, 3ss.; *ol. olivæ*, *mellis*, aa 3ss. *M. fiat linimentum*. The iodide is dissolved by the strong acetic acid, with very little discoloration. The camphor is not precipitated when added to the solution. The honey and oil being triturated in a mortar, and incorporated with the other ingredients, the result is a much more elegant liniment than might have been expected. *R Tinct. iodinii comp.*, 3j.; *liquoris potassæ*, 3ss.; *sp. ætheris nitrici*, 3iij.; *aquæ*, 3j. *M. cap. coch. j. min. e cyatho aquæ bis die*. In this case a yellow precipitate is thrown down, consisting of *iodoforme*, or according to some chemists, iodide of carbon. It arises from the decomposition of the alcohol, and does not occur unless alcohol or some analogous body, such as pyroxilic spirit, be present. The liquor iodinii comp. of the London Pharmacopœia is not liable to this objection, and may be mixed with liquor potassæ without producing any precipitate. An ointment made with iodide of potassium and pure lard, is white, and remains so; but if *spermaceti* ointment be substituted for lard, it is generally found to be more or less coloured, the colour becoming darker by keeping, and showing that free iodine is present. This may probably arise from the wax having been bleached with chlorine, a trace of which is retained; and thus a minute portion of iodine is liberated. Iodide of potassium should always be rubbed with a little water to a state of solution, or impalpable division, before the lard

or ointment is added; otherwise it is impossible to mix it completely, and the small particles of the iodide, which feel like sand in the ointment, irritate the skin.

Cloves and Iron.—*R Infusi caryoph. infusi quassia*, aa 3vj.; *tinct. ferri sesquichloridi*, m. xij.; *tinct. cardam. comp.* 3j. *Misce fiat haustus*. This compound is so black that the patient might suppose that the bottle had been accidentally filled with ink. This colour is always produced when cloves are combined with persalt of iron. This remark was lately exemplified by the compound infusion of orange-peel becoming black on the addition of tartrate of potash. On investigation, it was discovered that the tartrate, having been prepared in an iron vessel, was contaminated with a small portion of the metal.

Infusion of Chirayta.—Some mixtures, containing this preparation, are liable to become gelatinous; for instance, the following:—*R Infusi chiraytæ*, 3viiss.; *ferri ammonio citratis*, gr. x.; *syrupi aurantii*, 3iv.; *tinct. calumbæ*, 3ij., *M.* The only form for the infusion of chirayta which has been published on any authority, is half an ounce of the herb to one pint of boiling water, macerated for two hours. Some practitioners who have been in the habit of prescribing the remedy in India, consider this to be too strong, and that a drachm to a pint is sufficient. Mr. Squire recommends tepid instead of boiling water, and considers two scruples to a pint the best proportion. In either of the two latter cases gelatinisation does not occur, and it is only in some combinations that it takes place with the strong infusion. Mr. Fordred, some time ago, noticed a similar change in a mixture containing infusion of gentian and solution of potash. The following prescription is still more mysterious:—*R Conf. aromat.*, 3ij.; *aquæ*, 3vss.; *syr. zingib.*, 3ss.; *tinct. opii*, gtt., xxx. *M.* This was prepared about two months ago, and was brought back by the patient in a gelatinous state.

Compound Tincture of Cardamoms with Alkalies.—*R ammoniæ sesquicarb.*, 3j.; *sodæ sesquicarb.*, 3ij.; *tinct. cardam. comp.* 3ss.; *aquæ menthæ piperitæ*, 3v. Mixtures of this description frequently occasion trouble by changing colour. At first the colour is slightly augmented, and assumes a purple tint; but in the course of a day or two, it almost entirely disappears. The patient observes, that the new mixture is not like the last dose which remains in the former bottle, and sometimes concludes that a mistake has been made.

Infusion of Cascarilla, with compound infusion of roses, throws down a deposit and loses most of its colour in a day or two. The colour of syrup of saffron, when mixed with liquor ammoniæ acetatis and *sp. ætheris nitrici*, in the common fever mixture, is well known to fade in the course of a few days.

Cinchona.—We not unfrequently see prescriptions in which decoction of bark is combined with carbonate of ammonia or soda, as in the following prescription:—*R Decocti cinchonæ*, 3vij.; *ammoniæ sesquicarb.*, 3j.; *syr. aurantii*, and *tinct. cardamomi comp.*, aa 3ss. *M.* A white precipitate is the result, which is the alkaloid of the bark. It is probable that this may not lose its medicinal effect by the change; in fact, this particular mixture is said to be very efficacious in some febrile disorders attended with debility. The *tinctura cinchonæ ammoniata* is not a scientific preparation, as the active principle in this case is separated and lost. It nevertheless is a favourite remedy with some practitioners, and probably derives its efficacy from the ammonia, with tannic and kinic acids, and a small portion of the extractive matter of the bark. The following cannot be considered an elegant mixture:—*R Liquor opii sedat.*, mviij.; *quinin.*, disulphatis, 3j.; *ammon. sesquicarbonatis*, 3ss.; *aquæ menth. pip.* 3iv. *Cap. coch. j. min. ter die*.

Tinctura Opii, when combined with liquor arsenicalis, is decomposed, as in the following prescription:—*R Tinct. opii*, 3iij.; *liq. arsenicalis*, 3v; *aquæ anethi*, 3vij. *Misce ft. guttæ*. A dense brown precipitate is thrown down, and the supernatant liquor is almost colourless. *R Tinct. opii*, *liq. plumbi diacetatis*, aa 3ij; *aq. flor. sambuci*,

3vss. *Misce fiat lotio*. In this prescription a copious precipitate is thrown down, meconate of lead and acetate of morphia being formed. This decomposition is not objectionable, and the union of the above ingredients is not uncommon.

Sulphate of Zinc and Biborate of Soda.—*R Zinci sulph.*, *sodæ biboratis*, aa 3ss.; *aq. flor. samb.*, 3vj.; *vin. opii*, mxiij. *Misce fiat lotio*. A flocculent precipitate is thrown down, consisting chiefly of oxide of zinc, which carries with it the colouring matter of the opium. Borax has been said to be incompatible with compound infusion of roses but it produces no precipitate or change of colour, and a gargle consisting of two drachms of borax to half a pint of the infusion is neither unpleasant nor inefficacious.

Magnesia.—It has often been observed that mixtures containing calcined magnesia and sulphate of magnesia, combined with tincture and infusion of senna, or with tincture of jalap, or colchicum wine, deposit the magnesia in a solid form. After a few weeks, this deposit becomes so hard and compact, that it cannot be removed without breaking the bottle. When bruised and treated with water, it is found to be almost entirely insoluble. When it is boiled in water, and the mixture is evaporated to a concentrated state, no crystallisation ensues, although as much as an ounce of sulphate of magnesia, with three or four drachms of calcined magnesia, may be present. This concretion does not take place when carbonate of magnesia is employed, and it does not become quite solid unless some tincture or infusion, containing vegetable extract or gum, be present. Mucilage, which is sometimes ordered with the view of suspending the magnesia, increases the evil. It appears, therefore, that a portion of the sulphuric acid of the sulphate combines with the calcined magnesia, forming an insoluble subsulphate, which, when pure, is thrown down as a scumgelatinous mass, but which, when a tincture or infusion is present, unites with the resinous and extractive matter and becomes solid. Colchicum wine is particularly favourable to this result, and tinctures in general promote it more readily than infusions. In the following mixture, a similar result has been occasionally, though not always, observed. *R Magnesie calcinatæ*, and *sodæ subcarb.*, aa 3iij.; *mist. camph.*, 3viij. *M.* On making the mixture, it was found to be rather thick, as might be expected, but it did not form any solid deposit during several weeks. *Spiritus camphoræ* is miscible with liquor plumbi diacetatis in the proportion of two parts of the former to one of the latter, and in this form it is a convenient preparation, sometimes ordered as a concentrated lotion, to which water is to be added by the patient. But if a larger proportion of liquor plumbi be added, the camphor is partly precipitated. Liquor calcis and liquor potassæ are sometimes ordered in combination, and notwithstanding all the care that may be taken, a cloudiness, or even a slight precipitate, will occur. Even if this should be not evident at first, it will take place before the patient has finished the mixture, in consequence of the admission of air into the bottle every time the cork is removed.

Ceratum Plumbi Comp., when made with yellow wax, becomes white in blotches, that portion which is exposed to the air being first bleached, but when made with white wax, it is more liable to become rancid, and is not so good an ointment, although more uniform in appearance.

Extract of Belladonna is sometimes ordered in an ointment. To make the combination, it is necessary to soften the extract with a little water before the simple ointment is added. This preparation becomes mouldy in a week, but by the addition of a little soap, it may be kept unimpaired for several months.

Mr. SQUIRE observed, that he had experimented on the bitter infusions generally; and had ascertained, that tepid, or even cold infusions, were preferable to those made with boiling water. Although boiling water might, in some instances, extract a larger quantity of matter, it was generally in a more or less altered state, and sometimes comprised principles which it was desirable to exclude: for instance, in the case of infusion of ginger, mentioned in the paper, the blue colour

would not have been produced if the infusion had been made with cold water, by which none of the starch would be dissolved.

Mr. PHILLIPS, jun., said, he had also made experiments with hot and cold infusions; and thought the latter quite as strong as the former.

Mr. BELL confirmed this opinion; but observed, that a longer time was required for extracting the properties of the ingredients with cold water than with hot, and this appeared to be the only objection—time being often an object in the preparation of medicines.

Mr. URE thought the change which had taken place in the mixture containing aromatic confection, appeared to resemble what had been described by Dumas as the viscous fermentation. He found it had an acid reaction on litmus paper, and thought it possible that the chalk had been decomposed.*

Mr. BELL observed, that the two mixtures on the table had been prepared several weeks, during which time it was possible that further decomposition had ensued; but the gelatinization took place a day or two after they were made.

Adaptation of the electrotype process to very delicate articles. [Communicated by Mr. Mackinlay to Mr. Bell.]

In order to prepare non-metallic substances for this process, it is usual to cover the surface with plumbago, which, being a conductor of electricity, affords the means of precipitating metals on them by galvanism. But it is impossible to coat in this manner very delicate articles, such as feathers, flowers, and other small objects, for which purpose the following process may be adopted:—Dissolve one part of phosphorus in twelve parts of bisulphuret of carbon; dip the article to be coated in this solution for a moment; on withdrawing it, the bisulphuret of carbon, which is very volatile, will evaporate, leaving a film of phosphorus on the surface. Immerse the article in a dilute solution of nitrate of silver or sulphate of copper, and a precipitate of silver or copper will immediately be formed. The cast, becoming an electric conductor, may be introduced into the galvanic cell, and the process will proceed in the same manner as it does when plumbago is used in the first instance. The surface of the article should be quite free from moisture before it is introduced into the solution of phosphorus, which should be used with the greatest care, being highly inflammable. Phosphorus added to wax and stearine, forms an excellent coating for casts, as the surface becomes a conductor.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

(Reported by EVAN THOMAS, Esq., late House Surgeon.)

Varicose Ulcer of the Leg.—George Gray, æt. 24, a butcher, was admitted into King's College Hospital on the 22d of May, under the care of Mr. Partridge; is a native of the Isle of Wight, of intemperate habits, but has always enjoyed very good health. During the last four or five months, he has observed, that the superficial veins of the left leg have become large and tortuous, particularly so after long standing; but, for the last three weeks, this condition of the veins has now become permanent, on account, as he thinks, of being obliged to stand a good deal more than he used to do; he, however, continued work as before, till he received a blow on the front of the left leg, about a week ago, which caused an extensive bruise. He paid no attention to this, but followed his occupation as usual, till the contused part became very red and painful, and remained in this state till his admission. At this time, he was in very good health; the sore, which occupied the inner and

anterior surface of the left leg, was about the size of a crown-piece; its edges raised above the level of the surrounding skin; its surface, as well as the adjacent parts, livid; there is some tenderness along the course of the principal veins that lead from the sore, which are tortuous, and much enlarged, whenever he rests upon the leg; ordered to remain quiet in bed; to have middle diet; dose of house medicine; warm water dressing to the leg, which is to be raised a little above the level of the body.

May 25th.—Is improving; less pain in the leg; sleeps comfortably; appetite good. The trunk of the internal saphena, below the knee, is still large and distended, as well as the principal branches: omit the water dressing, and substitute the following lotion, which is to be applied, warm:—

R. Tinct. iodini, 3j.
Aqua, lb. ss.—M.

May 29th.—The sore is healing, the edges becoming level, with its surface granulating; free from pain:—continue the same application.

June 4th.—As the progress of the sore, towards healing, was so slow, and as one large varicose trunk was situated above the ulcer, and received the majority of the enlarged veins below, Mr. Partridge thought it advisable to apply ligatures to the principal ones: he first introduced the uppermost needle, in order to collect the blood in the veins, and the lowest three inches apart from the first, and a third, underneath a main branch which became larger as it approached the ulcer (the veins having been first distended by suspending the leg over the edge of the bed); hempen thread was now passed, from one end to the other, in the form of the figure of 8, and strips of lint under each point, to avoid any unnecessary pain; cold water dressing was next applied, from the ankle as high as the knee, which was to be constantly applied, and, on no account, to stir from bed; low diet, and a dose of house medicine.

June 6th.—The needles have excited little or no irritation yesterday; there was some redness and pain along the absorbents of the thigh, which was well fomented with hot water, and is quite free from it to-day: the house medicine opened his bowels freely; has no pain in the leg; the ulcer heals rapidly.

June 11th.—The needles were removed to-day; the ulcer is quite well: to keep very quiet in bed.

13th.—Feels no pain, or uneasiness, in the leg from the operation; when he stands, the veins do not distend as before; but, evidently, they are not entirely obliterated.

21st.—The punctures, made by the needles, have cicatrised. That portion of the vein, included between the two ligatures, gives an indistinct fluctuation; also firm pressure, made on the vein above, seems to cause a little distension; the leg is to be carefully strapped and bandaged. Discharged cured. Remarks:—

The cases, most applicable for the application of ligatures to varicose veins, are those in which there are one, or more, main venous trunks, leading from the ulcer, and into which the majority of the varicose veins, below, empty themselves. The favourable result, in the healing of the ulcer, and in the maintenance of the cure, seems to depend, not upon the permanent obliteration of the vein, but upon its diminished calibre; the contractions, in the situations of the ligatures, serving, perhaps, in some degree, the purpose of valves, in supporting the superincumbent column of blood.

ST. THOMAS'S HOSPITAL.

Strangulated Femoral Hernia.—Operation.—Sac not opened.—Under Mr. GREEN.—Hannah Haseldine, æt. 20; admitted on the 7th Feb., 1844, with strangulated femoral hernia.—She states that, on Monday night, the 5th inst., she was seized with a violent pain in the bowels, with sickness, at about 7 o'clock p.m., and the pain seemed to twist about the umbilicus; has not been subject to rupture. During the night, she discovered a tumour on the upper part of the thigh: a surgeon was sent for, who applied ten leeches to the part, and endeavoured to reduce it by taxis; this failing,

she was put into the warm-bath, and bled, but the tumour could not be reduced; and the symptoms of strangulation continuing to increase, an operation was proposed, and she was accordingly brought to St. Thomas's Hospital for that purpose.

Feb. 7th, 11 o'clock p.m.—*Present condition:* She presents a tumour, about the size of a pigeon's egg, lying on Poupart's ligament, but not directly in the line of the inguinal canal; it is tender to the touch, and tense and red: the finger can be passed more under the edge of the tumour, than is usual in cases of inguinal hernia; the countenance is pale and anxious; tongue dry; pulse feeble and quick; surface very cold; and has constant cough. Mr. Travers saw her immediately she came in, and considered that, the taxis having been long applied, together with the warm-bath and bleeding, we had better send her to the ward at once, and not subject her to further manipulation. She was, therefore, sent to Queen's-ward, where we examined her more minutely, and advised that, without delay, the operation should be had recourse to. Mr. Solly was, therefore, sent for, and coincided with Mr. Travers in opinion.

He, therefore, proceeded to operate immediately, and returned the hernia by dividing the stricture, without opening the sac. The intestine was distinctly felt to slip under the fingers into the abdomen, leaving the sac behind, which was afterwards partly returned, and the edges of the wound brought together by sutures. The patient was then put to bed, and, although the uneasiness was very much relieved, she still complained of great pain in the abdomen, and had some hiccough: she was very faint, and, therefore, a small quantity of brandy was given her in water, and a hot fomentation applied to the abdomen constantly.

3 o'clock a.m.—She has still some pain in the abdomen, more of a griping nature than inflammatory; her bowels have not been relieved.

8th, 9 o'clock a.m.—Is much easier; the pain has almost left the abdomen; her bowels have not been relieved; pulse pretty good; countenance more natural; hiccough ceased.

Mr. Solly ordered immediately a common enema, and waited half-an-hour to see if it operated: as this did not succeed, he ordered:—

Ol. ricini, 3j.
Træ. opii, m. xv.
Stat.

Hirudines xij., abdomini, and the bleeding to be encouraged by warm fomentations.

12 o'clock, noon.—The bowels have not acted; the castor-oil has, therefore, been repeated.

1 p.m.—Mr. Solly again saw her; and, as the bowels had not acted, another common enema was thrown up.

3 o'clock p.m.—The injection came away by itself; a house medicine enema was, therefore, administered.

5 o'clock p.m.—The enema came away, having a feculent smell, but not in great quantity more than the enema itself; the castor-oil was, therefore, repeated, and, about an hour after, she had a small liquid stool.

7 o'clock p.m.—She had another liquid stool, of a strong feculent smell; there was evidently a quantity of oil floating on the surface of the evacuation.

8 o'clock p.m.—She had another more copious evacuation.—Mr. Solly ordered her:—

Hyd. chlorid. gr. iv.
Opii, gr. j.

Sum. stat.

Mist. sennæ. co. cras manè.

9th, 9 a.m.—She continues improving; has slept well during the night; and has had evacuations. Ordered:—

Hyd. chlorid. gr. iv.
Opii, gr. j.

6tis horis sum.

Beef tea.

2 p.m.—She has had one dose of the hyd. chlor. c. opio, and expresses herself a great deal relieved, and has had another stool; there is still some lingering pain in the abdomen, aggravated by pressure.

Hirudines xx. abdomini.

9 o'clock p.m.—She has now had two doses:

* On testing the mixture with oxalate of ammonia, it was found to contain in solution a considerable quantity of lime; but on adding acetic acid to the sediment, some effervescence was observed; showing that a portion of the chalk remained unaltered. The effervescence was very feeble on account of the viscous consistence of the mixture.

her mouth is not at all affected; has had two motions since the last visit. The leeches have been applied, and bled freely; has had some sleep during the day; is now very easy; pulse regular; tongue moist.—Rep. the cal. and opium.

10th, 9 o'clock a.m.—Has not had any evacuation since 11 o'clock p.m. Her mouth is not affected; has slept pretty well; the wound was undone, and the sutures removed; there was some discharge from its surface, but it looked pretty healthy; it was again lightly strapped; and she was ordered to continue the cal. and opium regularly every six hours.

11th.—Continues improving; bowels open; tongue moist and clean; pulse regular; the gums are becoming sore.

12th.—Continues improving; has had three copious evacuations this morning; gums sore.—Ordered to omit the cal. and opium during the day, and to have:—

Hyd. chlor. gr. ij.

Opii. gr. j.

o. n.

13th.—Has had a good night, and says she feels almost as well as ever she did; no tenderness on pressure; bowels relaxed.—To leave off the calomel altogether.

14th.—Continues the same. The wound is rather sloughy at the bottom, and discharges an offensive matter.

Ordered to have:—

Cataplas. panis, applied twice daily.

15th.—The same.

17th.—Going on well. To apply a piece of lint, dipped in lotio nigra, to the wound, under the poultice, and may have a little meat.

18th.—Complains of a great deal of pain from cramp in the legs, which was relieved by the application of the hot water bottle to the feet; in other respects, she is very well.

24th.—Continues improving; wound nearly healed: having a little griping pain in the abdomen, a dose of ol. ricini e. tr. opii m. v. was given.

25th.—Has had her bowels moved by the oil; griping quite relieved.

March 2nd.—Has been going on well; the wound is quite healed.—To be measured for a truss.

8th.—She has worn her truss to-day, and been up; feels quite supported; very weak, and cannot walk about much.

16th.—She continued progressing favourably up to this date, when she was presented CURED.

PROGRESS OF FRENCH SCIENCE. FROM OUR OWN CORRESPONDENT.

Paris, Dec. 19th, 1844.

On the Accidents consecutive to *Blenorrhagia*: by Dr. Vidal (de Cassis).—Having considered, in a former number of the *Annales de Chirurgie*, cystitis and nephritis, the author describes in the present article acute prostatitis, a disease, which, as Professor Velpeau observes (*Dict. de Med. Verbo, prostate—inflammation*), has not as yet been sufficiently investigated, although, doubtless, it is not uncommon. Four cases are related, which may be considered as the most, if not the only, complete ones extant, in which the disorder could be followed through its different phases, from its commencement to its termination, by resolution. To these interesting cases, are added three others, characterized by incontinence of urine, and which may be cited as cases in which the tumour of the prostate did not exist near the rectum. In several of the patients, it was brought on by drinking: in one by an astrigent injection. The symptoms, besides those of inflammation, were: shooting and burning pains in the urethra, especially in the perineal region, and the finger, when introduced into the rectum, shewed that the gland had increased in size, was soft (in one very firm), and excessively painful when touched; retention of urine, necessitating catheterism, which, though easily performed, gave rise to no small degree of pain in passing through the prostatic portion of the urethra; suppression of the flowing; pain on going to stool. The treatment was principally antiphlogistic; as adjuvants, narcotics, and cam-

phor. The following case being, as the author states, perhaps the only one in which the relation, that exists between the two diseases (*blenorrhagia* and *prostatitis*), is clearly proved, may be given, as an example.—Diot, æt. 40, a journeyman; hair, skin, and eyes dark; of ordinary height; strong and hale; entered the Hospital *du Midi* on the 6th of Feb., 1843. He had never been affected with syphilis, or any other disease; four days after an illicit connection, a slight flowing appeared, but without causing any pain; this continued for ten days; after which, the urethra became the seat of a slight smarting, followed by frequent desire to make water, which increased gradually in intensity, and, finally, terminated in retention of urine. On his entry, catheterism was performed, the catheter penetrating with great facility; but it deviated slightly to the left on reaching the prostatic region: as soon as it was in the bladder, it allowed about 3xxij of urine to escape with considerable velocity. The canal was the seat of a lancinating, pricking, burning pain throughout its whole extent, but especially towards the perinæum, where it was so intense, that it prevented the patient from sitting down. The finger, introduced into the rectum, felt a swelling of a square form, two sides being parallel with the intestine, the third posterior, and the fourth anterior; the right posterior angle was far more prominent than the left, and this existed, though less developed, throughout the whole extent of the right edge. Pressure on the tumour caused great pain, and its consistency was that of a phlegmon, affected with obscure fluctuation. A very slight seromucous discharge took place from the meatus urinarius; the features were red; conjunctiva injected; eyes prominent; skin hot; pulse about 100; anorexia; insomnia. Since the evacuation of the bladder, the patient is somewhat calmer (*hirud. xxx., perin.; cataplasma lini posthirudines; infus. til. Europ. post.*). In the evening, the pain was less; but as the retention of urine continued, catheterism was performed again with the same facility. 7th February: No sleep during the night; catheterism necessary. At three, a.m.: tumour about the same size as the day before (*hirudines xxv. perin. semieup. et cataplasma lini post hirud. R Camphor. gr. vj. extr. opii gr. j muelag. gum. arab. q. s. pilulæ No. ij. hor. somn. sumend. R Camphor. 3j. vitell. ovi. No. j. decoct. althææ lbj. m. pro. enema*). 8th: Swelling somewhat diminished in size, softer, still as painful when touched, but less so spontaneously; a stool produced by the enema gave rise to severe pain in the tumour; a few drops of urine were expelled naturally; catheterism was, however, necessary to empty the bladder; no sleep during the night; facies better; pulse 90, not so strong. Continue remedies, but no leeches. 9th: Very slight amelioration; a few drops of urine expelled; tumour somewhat diminished; catheterism still as easy; pulse 85-90, strong; skin hot (*hirud. x. perin. omit. enema. contin. med.*). 10th: Notable amelioration; about a tumbler of urine evacuated drop by drop at seven or eight different times; a little sleep; spontaneous pain considerably diminished, but it still exists on pressure; the right angle, which was so prominent, is not more so than the left; tumour smaller and softer; heat of skin natural; pulse 70-75; appetite; discharge from the urethra more abundant, and more opaque, but nothing that would lead to the conclusion that an abscess had burst into the canal (*catapl. lin. perin. semieup.*); two cups of broth. 11th: About two glasses of urine evacuated naturally, but drop by drop; from time to time, however, during a violent effort, it flowed in a very slender stream, ceasing almost instantly; catheterism was needed only once in the twenty-four hours. The tumour examined, *per anum*, was found to continue to decrease, especially towards its angles; pain very slight, even on pressure; sleep interrupted only by the necessity of making water; appetite; pulse and skin natural. Continue the remedies, and broth. From this epoch, the amelioration continued, and, on the 26th, the urine flowed as before prostatitis declared itself. The discharge from the urethra increased in a direct ratio with the diminution of the other inflammatory

symptoms; turpentine at the dose of 3j. was administered, but without any effect; eubebæ (the dose gradually increased until 3v. was taken daily) was then prescribed; the second day after its administration, the discharge had considerably decreased, and ceased entirely on the sixth. The patient left the hospital quite well on the 3rd April.—An important remark must here be made, that the patients affected with prostatitis, complicated with retention of urine, were not very young men, their ages being 27, 30, 40, and 47; and in those where incontinence was the complication, the ages were 26, 33, and 38; whereas the other consecutive accidents occurred in patients much younger; thus, in 92 cases of orchitis, 33 took place between the 17th and 22nd year.

On Effusions in the Articulations.—A patient, in the wards of Professor Velpeau, furnished the learned surgeon of the Charité an opportunity of presenting some interesting remarks on the differential diagnosis, and the treatment, of this affection. The liquids which may accumulate in the bursæ mucosæ are of three kinds, serum, pus, and blood; and it is highly important to distinguish the species, on account of the difference in the prognosis and treatment. The study of these disorders is greatly facilitated by that of the larger serous membranes, peritonem, pleura, pericardium, since they are analogous to those found in the bursæ mucosæ; thus, inflammation, effusion of serosity, of pus, may take place in both, but are more frequent in the latter than in the former. This is easily accounted for, because they are subjected, not only to the general causes, but likewise to blows and similar accidents, to irritation from the movements they perform, to the propagation of diseases from the surrounding parts, bones, cartilages, and tendons. Like all other affections, those of the bursæ mucosæ may be divided into acute and chronic; evidently our patient does not offer the latter, since the disorder commenced only four days ago; the former, comprising inflammation, imposthume, hygroma, hematocele, needs only to be examined. Inflammation is accompanied by redness, intense pain, a pasty and oedematous swelling; nothing similar exists in the others.—Abscess. If the preceding does not exist, it is highly probable that this likewise is absent. It is true that pus sometimes accumulates with rapidity, when purulent absorption has taken place; but here there is nothing of the kind.—Hygroma and hematocele. The former is not so frequent as is generally supposed: at least after an accident which occurred only two or three days previously. But though it is rarely a primitive lesion, it is almost always a consecutive one; for, after falls, blows, &c., a sero-sanguinolent effusion is produced, but very soon the blood is absorbed, leaving the serosity alone. It may, therefore, be concluded that, when a patient is affected with a tumour, of recent formation, caused by a blow, without any real inflammatory symptoms, or pasty tumefaction, it is an effusion of blood, not of serosity. This is not extraordinary, since blood and serum may be effused, without producing any irritation; and this fact is rendered more evident, by comparing it with what takes place where pus is collected. But, since neither blood nor serum produce any irritation, how are they to be distinguished? When the effusion is sanguinolent, or sero-sanguinolent, the swelling is not very tense; by palpation, the walls appear to be very thick; this is owing to the density, and thickness of the liquid contained in the tumour, i. e. of coagulated blood mixed with fluid blood, or with coloured serum. The terminations of this disorder are: resolution—uncommon, especially when the clots of blood are voluminous; absorption—here, either the blood is absorbed, and hygroma produced, or the serosity disappears, and a solid tumour is the result; union of the two liquids, so as to form a fluid of a chocolate colour; formation of small lumps, similar to rice; inflammation, followed by abscess. In the treatment of this affection, dissections, compression, crushing, should first be had recourse to. If they fail, the tumour must be opened, by a sub-cutaneous puncture, and then crushed, or, after having been emptied, compression may be employed, or suppuration be allowed to take place.

To the preceding remarks, and as an illustration, I will add the details of a case which occurred in the wards of the same professor. V—, earter, *etat* 22, entered the Charité, on the 18th Nov., for a tumour of the right leg, caused by severe contusion. On examining the limb, a swelling, about four inches in length, was discovered on the inner and anterior portion of the tibia: edges firmer than centre; by palpation, small lumps were felt, and a crepitation produced; no pain, or symptoms of inflammation—therefore, it could not be an abscess; no fluctuation—consequently, it did not contain serosity; besides which, there was no serous cavity. It was formed by an effusion of blood. To obtain the cure, the Professor crushed the tumour, causing the contents to infiltrate the surrounding cellular tissue; and to prevent its increasing anew, established permanent compression on the leg. The patient left the hospital on the 27th November, with only a small wound on the diseased spot, which, in all probability, will soon be healed.

Cæsarian Operation.—M. Lebeu, Chief Surgeon of the Dunkerque Hospital, after some judicious remarks on the haste with which many surgeons publish their successes, relates the following case, which may be considered as successfully terminated, as 22 days have elapsed since the operation was performed, and as the patient left the hospital quite well:—M—, *etat* 17; menstruated at 16; subject to slow fevers; pale; feeble; rachitic; began to walk when 3 years old, with the aid of crutches; lower limbs short and crooked; tibiae curved forwards and outwards; muscles very slightly developed; dimensions of the trunk normal; her proportions were: height, 3 ft. 8 in.; from the summit of the head to the pubis, 2 feet, 1 inch, 2 lines; from the pubis to the sole of the feet, only 1 foot, 6 inches, 10 lines; pelvis presented no deformity above the brim, but, inferiorly, the sacro-pubic diameter was only an inch and a-half in extent. Labour commenced on the 10th October, at 3 A.M., and at 7 P.M., the cervix uteri was dilated, to the extent of about 3 inches, and the membranes prominent. Convinced that the accouchement could never take place naturally, the Cæsarian operation was proposed, and accepted, with resignation, by the patient. Half an hour after her entry, she was placed in a convenient position, and the operation was performed as follows:—Drs. Lequoy, Darras, Lemaire, Raoul, and Membos, kindly acting as assistants. The integuments and aponeurosis were divided on the linea alba, from a quarter of an inch below the umbilicus, to an inch above the pubis, so as to expose the peritoneum, in which an opening was made, sufficient to admit the end of the left indicator, which guided the bistoury, first upwards, and then downwards; the same manœuvre was repeated for the uterus, the incision extending upwards, as far as possible, so as to preserve the parts in the neighbourhood of the cervix uteri. As soon as the membranes were opened, the amniotic liquid escaped with force, and the back and left shoulder of the child presented themselves at the opening; passing both hands under the abdomen of the fœtus, it was extracted; the only difficulty which presented itself was, to get the pelvis out. The child was of the female sex; strong, and full of life; the bi-parietal diameter was larger than usual, being upwards of four inches. The funis was next cut, and the placenta, which adhered feebly on the left side and posteriorly, was soon removed through the incision, care being taken not to leave any portion of the membranes in the uterine cavity. No hemorrhage took place; the bladder and small intestines, which protruded, were gently pushed back; the wound was united by the suture, and by large strips of adhesive plaster; a compress full of holes, and smeared with cerate, was next placed on the part, covered with lint, linen, and a bandage round the body. The next day, (11th) very little fever and pain; pulse 90; lochia not very abundant; discharge from the wound very slight; 12 o'clock, same state; vomited twice. 5 p.m. intense pain in the whole abdomen; considerable degree of uneasiness; pulse 130. Venesection lbiss.; hirudin. L.v. abdomin.; lemonade as a drink. 12th Morning, very little pain; pulse 110; vomited three times during the night, but

slept a little; lochia more abundant; abdomen not so distended; straps of adhesive plaster of sufficient length to surround the body, with the exception of the lumbar region, and the bandages were renewed. 13th. pulse 100; passed a good night; no pain nor vomitings; abundant lochia; wound nearly dry; two stools; the woman is in good spirits and asks for food, which was refused. Barley water for a drink. 14th.—State continues to be satisfactory; no milk fever. Two tablespoonfuls of broth every third hour. The patient improved daily; food was permitted, although the pulse was at 90, in the morning, and 100 in the evening; the wound dressed every third day, healed rapidly; on the 23rd she was able to sit up, in an arm chair, and on the 29th left the hospital, cicatrization being nearly complete, and her general health perfect. The cicatrix was solid on the 5th Nov., and on the 30th, the patient was able to take care of her child, and go out as before without any inconvenience. The author, after relating this case, among other remarks too numerous to be inserted here, and too important to be curtailed, states that the success of the operation was owing to its being performed so early; that it ought to be employed as soon as the dilatation of the os tincæ is sufficient to permit the free egress of the clots of blood and the lochia; that the suture need not be employed, because it is not only useless, but also a source of pain.—(*Gaz. des Hopit.*)

On Noma, or Aquatic Cancer, or Stomacace. By Dr. Weber.—This disease is one of the most serious accidents in typhoid fever; is sometimes consecutive to rubeola, scarlatina, variola, and eroup. It commences by a greyish or blackish spot or spots in the interior of the mouth, on the gums or the inner surface of the cheeks. The ulcer exhales a gangrenous smell, and attacks in a few days the inside of the mouth, the cheeks, chin, eyes, forehead, and neck, changing the tissues into a dark mass, excessively fetid, which, on sloughing, lays the maxillary bones bare, and secretes a disgusting sanies. In general, death takes place rapidly; sometimes, however, after the eschar has fallen, the ulcer assumes a healthy appearance and cicatrizes, but, even then, the loss of substance is so great that mastication is prevented; the saliva flows constantly from the mouth, undermining gradually the constitution, and ultimately proving fatal. The remedies usually employed are: potential cautery; muriatic, sulphuric, acetic, or pyroligneous acids; creosote; ehlorine; chlorurets; but without much avail. In a case related by the author, the actual cautery was applied to four gangrenous spots, after which operation the child fell into a deep sleep; a few drops of tinct. arnic. mont. were next given; and the parts were frequently bathed with a lotion composed of decoct. cinchon., tinct. cochlear., and syrup. mor. nigr., and afterwards the tinct. myrrhæ was added. Very slight re-action took place; the eschars fell on the third day, the ulcers were cleansed, and after touching several spots with the nitrate of silver, the cicatrization was obtained. Finally, several teeth were loosened in their sockets, and three small portions of the maxilla superior, and two of the inferior, were affected by necrosis, and ejected.—(*Gaz. Med. de Strasbourg.*)

Curious Cases of Neurosis.—1^o By M. Cartei.—Mrs. —, mother of three children, remarked, about fourteen years ago, that whenever she raised her right arm, especially if in supination, aphonia was the result. The first attack was accompanied by a painful constriction of the chest, which rendered her breathing difficult, and lasted four hours. One of the paroxysms persisted during four months. Four years ago, she was affected by erysipelas of the face, after which she remarked that she could raise her right arm, and thought that she was cured; but the cause had changed its place, for now she could not raise the left arm, without losing her voice for some time. This woman is not hysterical, and the nervous centres are quite sound; no local affection has ever existed; circulation and digestion in their normal condition. (*Il Raccolitore Medico.*)—2^o—by Dr. Giron.—A little girl, three years old, was taken every evening with an irresistible desire to have her feet rubbed, and, if not complied with, threatened to bring on convulsions. At first the

paroxysm was very short, but gradually increased so as to last all night. During the day her pulse was normal; the respiratory and digestive functions were natural; the only untoward symptom was that the child was pale and weak, on account of the want of sleep; during the paroxysm, on the contrary, the pulse was much more frequent; burning heat on the head, chest, abdomen, and upper limbs; lower extremities moderately warm; face red; comatose state. The affection being, evidently, intermittent, at 8 p.m. a common enema was administered, after which the following was given:—R. Sulph. quinin. grs. x., assafoetid. \mathfrak{z} j. infus. camomill. \mathfrak{z} iv. pro enema. The little patient slept till 2 a.m., after which her mother rubbed her feet till 5 a.m. The enema was repeated; no paroxysm; the child slept till 6 a.m., and woke quite calm; a third enema, containing sulph. quinin. grs. vi. was, notwithstanding, administered; no relapse.—(*Clinique de Montpellier.*)

Academy of Sciences—Sitting of the 16th Dec.—M. Elie de Beaumont, V. P., in the Chair.—Received: List of the Linnæan Society—*Bibliothèque du Médecin Praticien*, 2nd vol.; presented by M. Flourens. This work, said the distinguished perpetual secretary, formed of a series of monographies, is published under the auspices of Dr. Faber, and is not only an exact and complete exposition of the state of medical knowledge in the present time, but likewise contains new ideas, which render it as new as instructive.

Researches on the Wounds of the Blood-Vessels. By M. Amussat.—From the facts contained in this memoir, the author concludes: 1^o That when the two carotids are divided at the same time by a large transversal wound, death is not instantaneous, as is generally supposed. The hemorrhage lasts several minutes, during which time the animal loses none of its faculties; 2^o That the carotids do not remain open, as might be supposed; and that, notwithstanding the size of these arteries, an obturating clot is formed, as when one only is divided. In examining the plates representing the arteries of dogs, and especially the carotids of oxen, slain after the Jewish method, the organisation of the clots was found to be the same as I indicated in my first memoir; 3^o That the division, whether simultaneously, or at very short intervals, of the eighth pair of nerves, and the two carotids in the middle of the neck, exercises no immediate influence on the colour of the blood, nor on the formation of the spontaneous clots, or obturation in the carotids cut across; 4^o That the spontaneous clots, formed at the extremities of the divided arteries, are composed of two parts: the one exterior, already described in my former memoir; the other interior, which is nothing more than an organised coagulum, perfectly similar to that which is produced by artificial obturation, pressure, cauterisation, ligature, or torsion; 5^o That the retraction of the inner and central membrane, which is one of the peculiar qualities of the arteries, described in so masterly a manner by M. Flourens, enables us to explain the formation of the clot, and the difficulties of finding it in the midst of the tissues in which it is buried; 6^o That the spontaneous clot is often with difficulty recognized. To discover it, the known anatomical relations of the divided artery must be called to mind, and the pulsations of the extremity of the vessel observed; besides which, the small sanguineous mass which constitutes the clot, may be felt by the touch; 7^o Finally, that it is evidently by an obturating clot, that hemorrhages cease spontaneously, whether the animal dies or recovers. Thus the doctrine of the interior and exterior spontaneous clot, as an obstacle to the flow of blood from the divided arteries, is the only true one; and, contrary to the opinions of Jones and Beclard, no extraneous aid is needed. Doubtless, the fact, established in my memoir, is but a very slight addition to the theory of J. L. Petit, in a physiological point of view; but it is especially important to the practical surgeon, as is proved by the serious, and even fatal, hemorrhages, which took place, because it was impossible to discover the artery, deformed, and masked by a clot.

On Gangrenous Ergotism. By J. Bonjean, Pharmacien, at Chambéry.—In a preceding memoir,

the author sought to prove, that the secale cornutum lost partly its toxic properties by fermentation and by baking. In the present, he communicates a case in support of this opinion. A family of eight persons (father, 47 years old; mother, 40; three daughters, 18, 17, and 5; and three sons, one 10 years old; and twins 28 months old;) after having lived on bread, containing about 4½ per cent. of ergot, were variously affected. All at once, the boy, 10 years old, complained of a pain in the left groin, which disappeared soon after, and re-appeared on the 8th Sept., in both legs. Dr. Pichat, called in on the 12th, remarked, on both calves, spots of a dark red colour, the size of the palm of the hand; feet icy cold; extremities so painful that the patient could not remain in bed, and the father and mother were obliged to keep him constantly in their arms. Leeches and poultices were ordered, but not applied. The feet and legs became the seat of numerous phlyctænæ, which, on bursting, allowed a serous liquid to escape; afterwards an intense itching declared itself on the upper third of the legs, followed by sphacelus of the feet, and lower two-thirds of the legs, rendering amputation necessary, after which the patient recovered. One of the twins was next attacked, gangrene affecting only one leg, and limited to just below the knee, causing the limb to fall off, leaving a wound similar to that produced by amputation. The only general symptom was diarrhoea. The father experienced for a week lassitude in all his limbs; the mother for three weeks a weakness in both arms; the rest of the family were not inconvenienced.—Two pounds of secale cornutum were eaten in the space of three weeks by a family of eight persons; the quantity taken by each individual may thus be estimated:—

The father, mother, and two eldest girls, eat	21 6
The boy, ten years old.....	4 1
The girl, five.....	3 1
The twins, 28 months.....	3 0

32

Or each member eat daily,

The father, mother, and two eldest girls....	3ij.
The boy ten years old.....	3iss.
The girl five.....	3iv.
The twins.....	3ss.

But, as the baking and fermentation diminished its powers, it may finally be considered that the boy, ten years old, eat about 3xxj., and his little brother 3vij. which makes 3j. for this, and 3j. for that daily.

Researches on the development of the Embryo in Animals; by Dr. Martin St. Ange, and M. A. Baudrimont. In Dec. last, the authors presented to the Academy a memoir, in which they proved that, during the evolution of the embryo, the egg emitted carbonic acid gas, and watery vapours, and absorbed oxygen. In the present memoir, they endeavour to complete their former experiments, by shewing directly the absorption of oxygen, and to discover, whether nitrogen acts a part in these various phenomena. The experiments were performed on the eggs of the hen, turkey, adder, lizard, helix hortensis, and several kinds of batrachians. The results were—1° That the volume of the air diminished in all.—2° That the volume of carbonic acid gas evolved, added to that of the uncombined oxygen, never equalled the totality of the latter before the experiment.—3° That the quantity of nitrogen, at the end of the experiment, was always greater than at the commencement.—4° That the volume of the exhaled nitrogen was always less than that of the oxygen absorbed, explaining thus the diminution in the quantity of the gas.—5° That oxygen is indispensable for the evolution of the embryo of the frog; carbonic acid gas and hydrogen destroy them rapidly. This is not extraordinary, since the circulation is complete in the rudimentary branchiæ, which exist in the tadpole while yet in the egg. The authors, therefore, conclude. 1° That oxygen is absolutely requisite for the development of the embryo in animals. 2° That, during this process, the eggs of oviparæ breathe like adult animals, and that the respiration is characterized by the exhalation of carbonic acid gas, nitrogen, of vapour of water, and by the absorption of oxygen.

On the presence of Semen in the Genital Organs of Mammifera after coupling; by Dr. Pouchet.—The experiments of the author, performed on rabbits, were consigned in a table, indicating from hour to hour (unto the 25th), the place in which the semen was to be found; the results are: from the 6th to the 25th hour, living zoospermæ may be seen in the vagina, and tubæ fallopianæ; until the 21st or 23rd hour, they were lively, but soon after drooped and died; about the 25th hour, the seminal animalculæ were destroyed, the tail being separated. Some were found frequently to have penetrated four lines in depth into the Fallopian tubes, and sometimes even twice as far;—they never penetrate beyond eight lines; consequently fecundation takes place in the uterus or commencement of the tubæ Fallopianæ, and MM. Bischoff and Wagner were mistaken, when they thought that they saw the seminal fluid on the ovarium.

Academy of Medicine. Sitting of the 17th Dec.—M. Caventou, V.P., in the chair.—The annual sitting of the Academy took place this day. At the commencement, a numerous audience filled the places reserved for the public; and if the members did not appear so eager, this is to be attributed rather to the early hour, two instead of three, than to lukewarmness. After a discourse, pronounced by Dr. Dubois (d'Amiens), annual secretary: "On the Progress of Medicine in France, compared to that of Surgery," and which met with repeated and merited applause; the chairman proclaimed the names of the authors to whom prizes had been awarded: Drs. Baillarger, Michea, Grisolles, H. de Castelnau, F. M. Ducrest, Alquié; and a mention honorable to Dr. Verga Andrea, of Milan:—and announced the following prize questions for 1846:—1°. *Prize of the Academy, £60.* "Indicate the composition of the bile in its physiological state; the changes which it may undergo, and the chemical tests by which these changes may be recognized; mention the causes of these changes, and the morbid alterations they may produce in the economy, as well as the symptoms, and the most appropriate mode of treatment."—2°. *Portal prize, £60.* "On the alterations of the lymphatic system in cancer." The candidates must seek to discover, by all the known methods, the part that the lymphatic system performs in cancer; to study the state of the lymphatic vessels and glands, in the periods of the different species of cancer; in cancerous tumours, in the neighbourhood, and at a distance from, the cancer; around cancerous ulcers, &c. They must attach themselves to elucidate the diagnosis of the cancerous lesions of the lymphatics, and to signalize the causes which favour their development and progress: finally, they must deduce from these new facts all the practical inductions which they furnish.—3°. *Civrieux prize, £48.* "On Suicide." (This prize was instituted by M. Bernard de Civrieux for the best memoir on the treatment and cure of diseases produced by nervous excitability).—Memoirs on these three subjects must be sent, p.p., on or before the 1st March, 1846, to the secretary of the Academy, Rue de Poitiers, No. 8.—4°. *Itard prize, £120,* will be awarded, in 1846, to the author of the best book or memoir on the practice of medicine (*medecine pratique*), or therapeutics (*therapeutique appliquée*); a necessary condition is, that the work, or memoir, be published two years previous to the awarding of the prize.—5°. *Argenteuil prize, upwards of £250,* will be awarded, in 1850, to the author of the most important discovery, or improvement, in the mode of curing stricture of the urethra.—6°. *Prizes for 1845.*—Memoirs must be sent before the 1st March, 1845.—*Academy, £60:* Emphysema of the lungs; its analogy with, and difference from, asthma.—*Portal prize, £48:* Analogy, and difference, between tubercles and scrophula.—*Civrieux prize, £48:* Hysteria.

Eulogium of Esquirol: by Dr. Pariset.—Though regretting to be unable to give the whole of the discourse pronounced by the celebrated perpetual secretary, still, I consider myself fortunate to lay some fragments before our readers, craving their indulgence should the translation appear to them unworthy of the original. This eulogium, listened to with the greatest attention, and received with enthusiastic applause, commenced thus:—"It is

of a master, it is of a friend, it is of my beloved Esquirol, that, to-day, the painful honour of speaking to you is devolved on me; and if, at the very commencement of my discourse, I permit my veneration for his memory to break forth, it is because there is a monitor in my breast which tells me, that I will find in you a corresponding feeling, and that my words are but the expression of your own sentiments. Who, among you, knew Esquirol, without loving him? Who, among you, has not repeatedly admired the elegance and firmness of his mind?—the elevation and loyalty of his character?—the fatherly care with which he surrounded his pupils?—the attention he paid, in order to make their talents shine forth?—the pity he felt for suffering humanity? And, if you were cognizant of his acts of kindness and virtue, say, did he impose limits to them?—was he the least ostentatious? No; his generosity knew no bounds. Kind and humane, he was one whose actions and works are an honour to France, and who, to render the sense of his loss, shall I say milder, shall I say more poignant, to us, has left us his memory as a constant model of rectitude, moderation, disinterestedness, and goodness. (Applause.)

"Jean Etienne Dominique Esquirol was born at Toulouse, on the 3rd Feb. 1772, and was destined, by his father, to receive orders. His preliminary studies terminated at the College de l'Esquille; his parents placed him in the seminary of Saint Sulpice, at Issy, to study what was denominated his philosophy. The Revolution drove him from this sacred asylum; he then returned to Toulouse, where he began to study Medicine. There, Gardeil and Alexis Larrey were at the head of the Profession in Medicine and Surgery: Gardeil, whose translation of Hippocrates, and the works of Diderot, has given so extraordinary a renown; Larrey, uncle of Jean Dominique Larrey, whose loss we recently deplored, and who was destined to be an honour to France. At the hospital, Jean Dominique was aide-major, and, in the school founded by his uncle, he was professor. It was under such masters—it was with such fellow-students—that Esquirol studied anatomy, physiology, clinical medicine, surgery, and operative surgery.

"Possessor of a commission as officer of health to the eastern Pyrenean army, Esquirol went to Narbonne, where he remained two years; Barthéz was in extensive practice there; he saw Esquirol and asked him to become his secretary; but the fiery Barthéz gave way, like the Prince of Conti, to violent fits of passion against his secretaries. What Moliere did with the prince, Esquirol did with Barthéz: he refused—he was afraid—he had another species of courage. None amongst us are ignorant of what took place at this unfortunate epoch, when the rage of reformers covered France with tribunals, whose cry was 'blood! blood!' Narbonne was not excepted; her tribunal sat permanently; before which a lawyer, the only one that was permitted, pleaded, in bad verses, for the prisoners, and the prisoners were constantly condemned. Disgusted with this odious mixture of ridicule and barbarity, Esquirol exclaimed: 'I could defend an innocent person better than that!' These words were heard by several females, the husband of one of whom was about to be judged: she besought Esquirol with tears to speak for this unfortunate man. Esquirol consented. Before the tribunal, inspired by the justice of his cause, and, moved with pity, he poured forth language so pointed, so moving, and so new, that the judges, surprised and charmed, acquitted the prisoner. Triumph of Orpheus over tigers. A proof that the best advocates in the world are sensibility and reason.

"On his return home, after accomplishing his duty to his country, Esquirol occupied himself with literature, mathematics, natural history, and medicine. In 1795, he went, as Government pupil, to Montpellier, and, in 1798, obtained two prizes on Natural History. The fortune of his family decreased daily, and, being a younger son, the smallness of his patrimony made him reflect on his future prospects, and devote his whole attention to that portion of his studies which presented the most advantages. Having made choice

of medicine, he set himself seriously to work. In 1799, he came to Paris, and on his arrival was as poor as were Portal, Vauquelin, Pinel, Dupuytren, and many others, whose talent became for them a source of renown and opulence. An act of heedlessness rendered his position still more precarious. In a fold of an old pair of breeches, he had hid a small sum in gold, which he owed to the kind and provident care of his father. This portion of his dress being too old to be of any use, was thrown by him out of the window; and that without removing his gold: he had completely forgotten it. He wrote to Toulouse, asking for a fresh supply. Disbelieved, this supply arrived but long after. He did not, however, despair; but remembering a friend, whom he knew while at the seminary, M. de Puyssieux, at that time the tutor of a child, who lately was at the head of the ministry—I mean M. Molé, and who then resided with his mother at Vaugirard,—Esquirol called on M. de Puyssieux, and was presented by him to Madame Molé, who received him with kindness, and gave him a room in her house: board and lodging, that was enough for the present; by study, the future would be obtained. Every day, for two years, Esquirol walked from Vaugirard to the Clinical Lectures of the Salpêtrière of the Garden of Plants, and the School of Medicine: a hard task during winter; but, in other seasons, rendered agreeable by a little bread, some fruit, and, above all, his conversations with Bichat, Schwilgue, Roux, Landré-Beauvais, warm-hearted and distinguished men, who felt a sincere friendship for Esquirol, and for whom, on his side, Esquirol always experienced mutual friendship and esteem. Happy period of poverty, study, and hope; the remembrance of which was pleasing to Esquirol, even to the last moment of his existence.

At this epoch, two clinical lectures attracted all the students of the Parisian Faculty of Medicine: the one was delivered by Pinel, at the Salpêtrière; the other by Corvisart, at the Charité. Two men, far different in character and mind, but who were unanimous on the principal point, that of making every one respect their persons and their profession, by public proofs of a reciprocal esteem. What made them overcome self love was the firmness of their minds, the natural generosity of their dispositions, and, perhaps, the secret sentiment, that the one possessed what was wanting to the other. Extraordinary circumstance! one would have thought that Pinel, who was received M.D., at Montpellier, was of the Parisian faculty; and that Corvisart, who studied at Paris, had graduated at Montpellier: both equally distinguished; the former, however, owed more to study and science; the latter, to natural genius. The latter men, who, by nature and instinct, know, as Hippocrates said, all without learning anything; and, according to Plato, by the rapidity and accuracy of their conceptions, seem to remember what they formerly knew. But to return; Esquirol was an assiduous follower of Pinel's lectures, and soon became the favourite pupil of his master. It was to him that Pinel confided the reduction of the second edition of his *Médecine Pratique*, which appeared in 1804. It may here be added, that Pinel taught what Corvisart could not. The Salpêtrière, like Bicêtre, is appropriated to a certain class of diseases, which, seldom, if ever, are observed at the Charité: I mean mental affections, to the study of which Esquirol paid special attention. Such a choice would be, I make bold to say, a lesson for philosophers, who wish to study completely the attributes of man. Under the tranquil exterior of reason, and in the peaceable performance of the acts which characterise it, the observer would be able to remark the secret springs which prepare, form, strengthen, and preserve it. It is when these springs are broken, when their regular action is disconcerted; in short, it is on the ruins of the mind, that we discover the origin, the concatenation, the close and mutual dependency of our sentiments, our perceptions, our ideas, our remembrances, our reasoning, our will, our actions; that is to say, of the wonderful succession of invention and skill, which shows the inexhaustible power of our intellect. It is there, it is in these remains, that the principal elements of man's science are hidden, and, as

a necessary consequence, the true principle of education, of all civil and criminal laws, and, I will add, unhesitatingly, of government. Sad condition of mankind! Our qualities are made manifest but by our infirmities! And, in order to learn the value of our most noble attributes, intelligence and liberty, both must be lost! The master of the world must no longer be his own!"

Dr. Pariset, after analysing the works of Esquirol, and recalling the numerous acts of beneficence by which he signalized himself, terminated thus this brilliant eulogium. "And now we have reached the slope on which we descend more and more. Study, years, disease, gradually undermine Esquirol's constitution, naturally feeble and delicate. He was subject to attacks of catarrhus, which, becoming more and more frequent, rendered respiration shorter, embarrassed, painful. In the beginning of December, 1840, while suffering from one, he was led, from an exaggerated love of his duty, to attend a meeting of the *conseil de Salubrité*; on his return, he felt himself much worse, and fever declared itself. Having lost none of his faculties, Esquirol measured the danger, and became convinced that the attack would prove fatal; but to soothe those around him, he sought to tranquillize them as to the probable result, consoling them for the pains he felt himself. Surrounded by his family, relatives, pupils, and friends, Louis, Leuret, Moreau, Calmeil, Mitivié, and Baillarger,—these two last, his successors at Salpêtrière:—he stretched his feeble arm, and murmured this final adieu: "I am about to leave you," said he, "think of me; prosper; but, above all, let peace never be banished from among you, for it is the positive assurance of all happiness." To feel all the charm and force of these divine words; "peace be with you," we must have before our eyes one of these annihilations, where all vanishes by degrees, except the true insight into what constitutes real worldly happiness. At length, the fatal moment arrived. On the 12th Dec., 1840, Esquirol slept the slumber of the just, in the arms of a holy and consoling religion, which opened to him the gates of a blessed eternity."

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

(From our Correspondent, Dr. MUSPRATT.)

Liebig's Second Lecture.—In my last lecture, I stated to you under what circumstances mellon is formed, and also spoke of the numerous sources from which it is obtained; I shall now speak of urea, and its products of decomposition.

Urea is isomeric with cyanate of ammonia, as will be seen on a comparison of the two formulæ—
Urea = $C^2 N^2 H^4 O^2$

Cyanate of amm. $C^2 N^2 H^4 O^2$ or $Cy O HO + N H^3$

Now, if we take three atoms of urea—

$C^6 N^6 H^{12} O^6$ or

$C^6 N^3 O^3 + H^3 O^3 + 3 N H^3$

and act upon them by heat, we obtain hydrated cyanuric acid, which I shall represent to you by the following formula—

$C^6 N^3 O^3 + H^3 O^3$

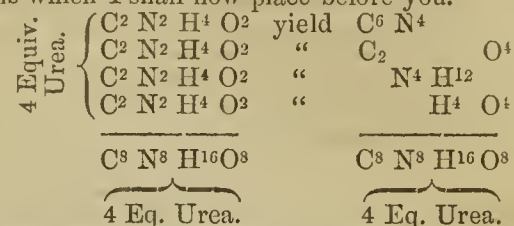
Now, by glancing at the last two formulæ, it will be seen, that the urea, by the action of heat, loses three atoms of ammonia, and the resulting white residue is hydrated cyanuric acid. By exposing the white mass to a very strong heat, a yellow body is obtained, which is *mellon*.

Cyanuric acid, when boiled in potash, and then treated with acetic acid, furnishes beautiful crystals of the former. Cyanuric acid dissolves, with the aid of heat, in the concentrated mineral acids, without suffering any decomposition, but if the boiling be continued for some time, it is resolved into carbonic acid and ammonia. When we obtain coloured crystals of this acid, we find, that the best way to purify them is, to dissolve in strong sulphuric acid, precipitate the cyanuric acid by water, and re-crystallize it from boiling water.

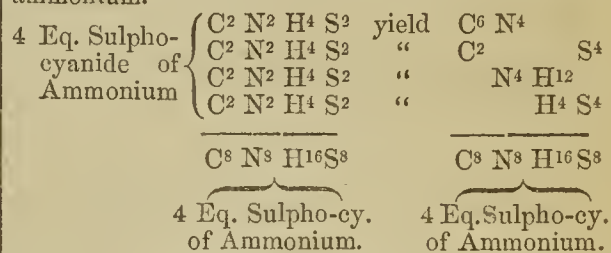
I shall now treat of some singular compounds furnished by sulpho-cyanide of ammonium.

The bodies furnished on heating urea are re-

markably similar with those obtained from the decomposition of sulpho-cyanide of ammonium, as you will readily perceive by comparing the equations which I shall now place before you.



Here, we find, that four atoms of urea are converted into one atom of mellon, two atoms of carbonic acid, four atoms of ammonia, and four atoms of water. Now, let us consider sulpho-cyanide of ammonium.



These transformations are exceedingly beautiful and simple, for we see, that the only difference between the two metamorphoses is, that sulphur supplies the place of oxygen.

When the temperature is not very high, the residue is a combination of—

$C^6 N^4$ with $2 (N H^3)$

Melamine.

We cannot assert positively, that *melamine* contains ammonia; we only know, that it yields the elements of this alkali. The formula for melamine is the following—

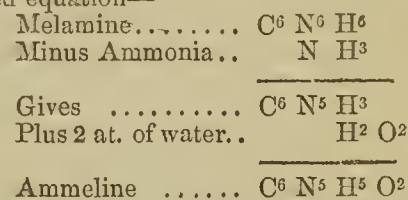
$C^6 N^6 H^6$

From the above formula of this salifiable base, you see, that we may even represent melamine as an amide—

$C^6 N^6 H^6 = 3 (N H^2 Cy.)$

which, with potash, gives cyanate of potash and ammonia.

Melamine is very slightly soluble in cold, and it dissolves even very tardily in hot water; it is neutral to test paper, and remains intact in alcohol or ether. It may be heated very strongly without undergoing decomposition, and forms, with acids, beautiful salts. When submitted to the action of hydrochloric acid, it yields *ammelime*,—a decomposition which I shall convey to you in the annexed equation—

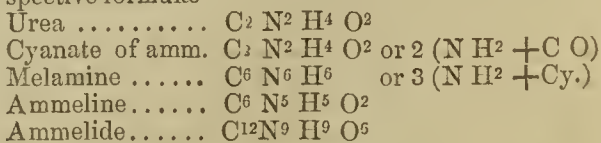


Ammeline is another interesting cyanogen compound, occurring as a product of the action of concentrated acids upon melamine, ammelime, &c. It is a white powder, insoluble in water, ether, and alcohol. When boiled for a long time in weak sulphuric acid, it is resolved into *cyanuric acid* and *ammonia*. The empirical formulæ of ammelide is the subjoined—

$C^{12} N^9 H^9 O^6$

You will now perceive, that urea and sulpho-cyanide of ammonium furnish very interesting decompositions. At a high temperature, they both give mellon, which, on increasing the temperature, may be resolved into cyanogen and nitrogen.

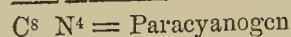
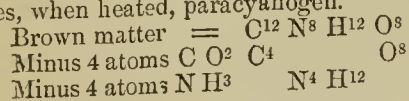
The preceding bodies that I have brought under your notice, I shall now represent by their respective formulæ—



I shall now treat of a remarkable compound, which is formed, either by heating the cyanide of mercury, or by dissolving the cyanide of silver in acids. In these two cases, a brown mass is obtained, containing nitrogen and carbon, not,

however, in the state of mellow. This brown substance has been called paracyanogen.

When hydrocyanic acid is allowed to decompose spontaneously, a brown matter is also obtained, which has been analyzed by Johnston. It also gives, when heated, paracyanogen.



The true constitution of this body is not understood, but it appears to be a combination of mellow with carbon—



Mr. Williamson is at present working upon this subject.

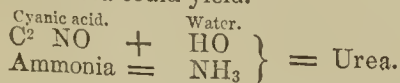
In my next lecture, I shall treat more fully upon cyanic, cyanuric, and fulminic acids.

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

[The following comprise the only articles of interest to our readers, contained in the last five numbers of the *Lancet*.]

FULMINATE AND CYANATE OF SILVER.—It has been proved, by the most positive experiments, that fulminate of silver has exactly the same composition, and the same atomic weight, as the cyanate. They are consequently isomeric, that is, they contain the same elements in the same relative proportions; but how different are they in their properties! Fulminate of silver detonates with extraordinary vehemence, whilst the cyanate may be subjected to friction, to concussion, to a tolerably high degree of heat, without undergoing the slightest alteration. It begins to ignite at 212° , but without detonation, and yields carbonic acid and nitrogen gas.

CYANURIC ACID.—Cyanuric acid has been known for some time: it was first produced by Scheele, who obtained it in the distillation of uric acid, and it was at first designated empyreumatic uric acid. Serullas, who obtained it by the decomposition of the solid chloride of cyanogen by heat, described it as cyanic acid. He believed the new acid to be different in constitution from the common cyanic acid, and considered it to be a compound formed by two atoms of oxygen to one atom of cyanogen. It was owing to this view of the constitution of the new acid that the name of cyanic acid was assigned to it; whilst the common cyanic acid went by the name of cyanous acid. This acid of Serullas was subsequently recognized as a product of the decomposition of urea by heat, and the view which Serullas had formed of the constitution of this acid altogether failed to account for the result of this decomposition. Upon exposing urea to a dry heat simply, two products were obtained,—viz., ammonia, which escaped; and a solid white substance, the cyanic acid of Serullas. According to Serullas's analysis, this acid contained double the amount of oxygen existing in the cyanic acid which may be supposed to exist in urea; consequently there remained, in a product of the decomposition of urea, a substance containing one atom of oxygen more than the urea could yield.



Urea fuses at about 248°F. , and at a still higher temperature it seems to boil; but this boiling is only apparent, being simply occasioned by the evolution of ammoniacal gas. If the elements of ammoniacal gas are subtracted from the formula of urea, there remain the elements of cyanic acid and water—i.e., of the hydrate of cyanic acid; but, instead of this, there remained the cyanic acid of Serullas, composed, according to his analysis, of $\text{C}_2 \text{NO}_2$, instead of $\text{C}_2 \text{NO}_2 \text{H}$; it was, therefore, completely inexplicable what had become of the hydrogen. This problem was subsequently solved; it was shown that Serullas, in his analysis, had altogether overlooked the hy-

drogen; and thus it became apparent that the cyanic acid of Serullas is nothing more than an isomeric modification of the common cyanic acid,—in short, that it contains the elements of the common cyanic acid, arranged in a different manner. The name, *cyanuric acid*, has been assigned to this third modification of cyanic acid.

FOREIGN BODY IN THE ŒSOPHAGUS.—Mr. Liston mentions the case of a boy, who, while herding cattle, was also engaged in preparing fishing-tackle for catching jack, consisting of three large hooks tied back to back, like a grappling-iron, by means of brass-wire. This the boy put in his mouth, and by some chance it slipped into the Œsophagus, while he was shouting after the cattle, who were straying. There was much fuss made about the case, and every body suggested some plan or other for extracting the foreign body, but it would seem that Œsophagotomy was not thought of. The lad had a long chain hanging out of his mouth for weeks together, and at last it was proposed to use a bone probang—a large ivory ball, with a hole in it—and this was to be pushed down to disentangle the barbs. By this time, however, extensive ulceration of the pharynx had taken place, and the foreign body was gulped up, to the relief both of the patient, and of the medical man.—***The operation of Œsophagotomy, which is very rarely required, is performed as follows:—the incision should be made, not in the median line, but by the side of the windpipe. An incision ought to be made in the superior triangular space of the neck, of sufficient length that the obstruction may be readily got at. The larynx must be turned aside, and the recurrent nerve, and other important organs of the neighbourhood, must be avoided. Guided by the foreign body, the parietes of the Œsophagus are to be cut through, and the obstructing substance taken hold of, and extracted with the forceps, vulsellum, or hook, as the case may be.

ACUTE RHEUMATIC FEVER.—In a strangely written communication, and one not couched in a very philosophic or professional spirit, Dr. Wilson contends for the analogy of definite and consecutive action between the rheumatic and other forms of fevers, and appears merely to recommend (for his meaning is not very clear) constant and careful attention during its progress, to guard against complications; for the disease itself, he says, in ordinary cases, is competent to the task of its own cure. He, however, adds, that it admits of great relief from various remedies, and may often be conducted by judicious treatment some days sooner to its end. When this is safe, it should always be done, for the case is never without danger while the fever lasts. Dr. Wilson's views may, perhaps, be gathered from the following paragraph; judging from which we should be inclined to regard him as a humoral pathologist:—"For the safe cure of rheumatic fever, we must often be content that our patient should become worse before he can be better. He recovers through a process of suffering, and by dint of inflammation; an action of this kind may be set up by every large joint in succession; and though of these local inflammations, no one would of itself suffice, it is certain that through them, collectively, the rheumatic crisis is in the main determined. There are no worse cases of acute rheumatism than those in which, with an equal amount of constitutional disorder, there is least of redness, heat, and swelling in the larger articular structures. Certainly the rheumatic inflammation of the heart, pericardium, and other thoracic viscera, is not prevented by a full development of the same peculiar action in tendon and ligament, yet, in any given number of cases, it will be found that the heart is most frequently involved when the arthritic symptoms are suppressed, recede, or do not from the first appear. After a succession of these local inflammations, and not till then, the constitutional disturbance begins to subside. It would seem throughout the disorder that, in familiar phrase, more good is done by the joints to the constitution, than by the constitution to the joints. In the treatment of this disorder, its analogies with gout and rheumatism should be continually remembered. Like them it may be partial, irregu-

lar, or suppressed, and like them it is rendered comparatively safe by development. Elbow, knee, wrist—every great joint, it may be in succession, sets up, maintains, and brings to a close its own special process of inflammation, irrespectively of each other, and this with abatement of the general disorder, which remains in operation throughout the system, until the arthritic crisis is everywhere completed and determined." With respect to the treatment, Dr. Wilson observes that, in a long practical experience of this disorder, he has found it sufficient in ordinary cases that the patient should lie still, be kept from cold, feed on bread, milk, and water, and take of medicines little but salines. These are generally prescribed, with an excess of the carbonated alkali, and are sometimes combined with a few grains of nitre. The true principle of treatment, according to him, is that of moderate interference with the necessary actions of the disorder, and of gentle ministration to its supposed necessities. The use of the hot-air bath he regards as exceedingly important in promoting excretion from the skin. In a large experience of many years, the hot-air bath has thus been repeatedly found to determine the character, and to limit the duration of the disease. From three to five grains of Dover's powder may be given every six hours, if the pain, restlessness, and general distress be urgent, but opium should be administered with a considerate hand. In its operation it is never merely anodyne: it pervades the entire system, and modifies every secretion. Its agency, there is reason to believe, directly influences the blood-currents while in passage through the chest. That it can be felt in the pulse and breath is in the daily experience of thousands. Possessing these powers, it is a question, Dr. Wilson says, whether, in the general result, opium, as a remedy for acute rheumatism, has been indeed a blessing to mankind. There never was more of dangerous complication in this inflammatory fever of heart and joints, than in these latter days, when opium has been the most largely used. Dr. Wilson is much opposed to the empirical treatment of rheumatic fever by bleeding, calomel, and opium, or colchicum. He does not approve of either.

SUPERNUMERARY NIPPLE.—Mr. Rising describes a case, where there existed a small supernumerary nipple on the right breast, below the natural one. It was not discovered until after marriage had taken place.

CARCINOMA UTERI.—Dr. Heming refers to the statement by Mad. Boivin, that of 707 cases of cancer, observed in the principal organs of the body, those of the uterus constitute more than half, and that the disease occurs most frequently in the uterus, next in the ovary, and, lastly, in point of frequency, in the mamma; but, he considers, from his own experience, that the mamma are much more obnoxious to carcinoma than the ovaries. Carcinoma of the uterus almost always commences in the cervix; there are, however, some exceptions to this rule. In carcinoma uteri, the cancerous matter may pervade its texture throughout, as a production of nutrition, or it may be collected into a mass, and form a distinct tumour, either attached to, or situated in the otherwise healthy cervix. In this latter case it is, according to Dr. Carswell, the product of secretion. This distinction Dr. Heming regards as of importance in cases where amputation of the cervix is contemplated, as such an operation is more likely to succeed in the latter, than in the former, case. Carcinoma of the cervix uteri commences by a sensation of weight in the vagina, and occasional pains of lancinating character in the pelvis. There is, sometimes, a discharge of mucus, tinged with blood; and hæmorrhage occasionally takes place to a considerable amount upon any unusual exertion of body or mind. If the catamenia have increased, they become more frequent and abundant, and are mixed with coagula. Strangury and retention of urine may be induced by the bladder sympathizing with the carcinomatous uterus, and heart-burn, vomiting, and attacks of nettle-rash, indicate the sympathetic disturbance of the stomach. On examination per vaginam, if the disease be carcinoma, the cervix uteri will be found enlarged and indurated, or a distinct tumour

will be felt, attached to or imbedded in it. Pressure upon the diseased part, in either case, produces lancinating pain. The os uteri will be found larger than natural, and open, and its lips indurated, everted, and their surfaces irregular; sometimes this orifice is so open as to admit the finger, which then seems to be surrounded by a hard, firm, cartilaginous ring. The os uteri is also found open in chronic inflammation; but then its borders are soft and broad. When ulceration takes place, there is usually a swollen state of the external parts with itching, and occasionally erysipelas; the orifice of the vagina is often excoriated by an offensive, sanguinolent and ichorous discharge, and hæmorrhage often takes place. The bladder and rectum also become greatly irritated by sympathy, the general system suffers, the circulation is hurried, the patient becomes emaciated, the food is rejected, the mouth is aphthous, there is considerable thirst, and the lancinating pain in the pelvis is most violent. The use of the speculum requires the greatest caution in cases of ulcerated carcinoma, and especially where fungous growths arise from the ulcerated surface, as these malignant excrescences bleed often on the slightest touch. Dr. Heming has known hæmorrhage of a most frightful kind, occur whilst the instrument was in the vagina, or immediately after its removal. In some cases it cannot be used, as the uterus becomes fixed low down in the vagina, and the canal itself becomes early involved in the disease; its coats become indurated, contracted and affected with malignant ulcerations. When the finger is introduced, it passes into a hard, contracted ring in the vagina, beyond which there is often a great ulcerated excavation, communicating with the cavities of the bladder and rectum. This disease sometimes makes dreadful havoc in a few months, and its ravages may be protracted during several years, with occasional improvement. The treatment can only be palliative; prior to the ulcerative process occurring, local, or moderate general blood-letting, may be employed to diminish vascular action; the reclined position must be observed, and saline purgatives exhibited in small doses. All circumstances must be avoided which may excite the parts; the discharge of mucus must not be checked by astringents, but it should be washed away with tepid water. If the patient be married, she should live as a widow. Dr. Heming once saw a melancholy instance of the rapid progress of the disease from the excitement of matrimony. The diet should be abstemious, and hæmorrhage from the part should not be checked, unless it continues to an alarming degree. When ulceration has taken place, the same plan of treatment will still be found of service; the discharge should be removed from the vagina by injections of tepid water, or by the use of medicated injections, containing hemlock, henbane, strong infusion of carrots, &c. Opium is the best remedy to relieve pain, and Dr. Steward states, that it is more effectual when introduced into the rectum, than when passed into the vagina, or applied to the part itself. Stramonium has been found serviceable, and Sir B. C. Brodie has derived advantage from the use of grain suppositories of extract of belladonna.

DISLOCATION OF THE UPPER EXTREMITY OF THE RADIUS INWARDS.—Mr. Robins was consulted by a youth, who had fallen from a height on to the palm of the hand, which he put out to save himself. The elbow was the seat of severe pain, and nearly immovable: it was also much swollen. The patient could neither straighten the limb, nor bend it to a right angle. The olecranon was in its place, and the end of the humerus was uninjured; the head of the radius, on a careful examination, was felt anteriorly. Mr. Robins made extension and counter-extension, pressed the dislocated bone while suddenly flexing the forearm, and thus reduced the dislocation. The accident is a very rare one.

FACIAL NEURALGIA.—Mr. Crisp, of Whittlesea, briefly describes a case of facial neuralgia, in which small doses of aconitine, and suppositories made with cotton wool, and moistened with a spirituous solution of extract of belladonna, appeared to do good.

GUANO.—At a meeting of the Chemical Society,

Mr. Warrington exhibited a portion of bone from Ichaboe guano, in which all trace of phosphate of lime had disappeared, and its place was supplied by sulphuric acid, potash, and ammonia. Mr. Warrington expressed an opinion that a large portion of the guano found in that locality had been produced by the decomposition of the flesh and bones of seals. It had long been the practice of the South Sea sealing vessels to touch at Ichaboe, to render down their oil, and to throw away the carcasses of the animals, which are then fed on by sea fowl.

GENERAL ENLARGEMENT OF THE TEMPORAL ARTERY.—Mr. Crawford consulted Mr. Liston respecting the case of a woman, 25 years of age, who had, what he called, a varix of the right temporal artery. The artery, as it passed in front of the ear, gradually became enlarged; on the forehead, it was joined by the enlarged supra-orbital artery, and almost immediately afterwards it dilated to nearly the size of the little finger, and pursued a most tortuous course, backwards, for about seven inches over the vertex, receiving branches from the left temporal, and being gradually lost behind the occiput; with the exception of pulsation, it exactly resembled a large varicose vein, and was lodged in a groove formed in the bone, in consequence of the absorption of the outer table. The whole course of the diseased vessel was exquisitely sensitive, and pressure on it had very little influence on the pulsation, which was only arrested by compressing the carotid. Mr. Liston advised the case not to be interfered with, because, in a similar instance, in which he tied the carotid, the coats of that vessel were found to be unusually thin, and fatal secondary hæmorrhage occurred ten days after the operation.

PUERPERAL CONVULSIONS.—Dr. Tyler Smith thus sums up the causes of puerperal convulsions, as explained by the reflex motory theory. Labour is a function of the excito-motory system, and the true puerperal convulsion can only occur when the central organ of this system—the spinal marrow—has been acted on by an excited condition of an important class of its incident nerves—namely those passing from the uterine organs to the spinal marrow, such excitement depending on pregnancy, labor, or the puerperal state. While the spinal marrow remains under the influence of either of these stimuli, convulsions may arise from two series of causes—of those acting primarily on the spinal marrow, or centric causes, and those affecting the extremities of its incident nerves—causes of excentric or peripheral origin. The centric causes, are, loss of blood, pressure exerted on the spinal marrow by congestion, coagula, or serous effusion within the cranium, etc., asphyxia of the spinal marrow from spasmodic closure of the glottis, and the influence of emotion. The peripheral or excentric causes, are, irritation of the incident spinal nerves of the uterus and uterine passages, irritation of the incident spinal nerves of the rectum, irritation of the gastric and intestinal branches of the pneumogastric nerve, and irritation of the incident spinal nerves of the bladder. As probable causes may be enumerated, irritation of the cutaneous nerves, the nerves of the mammae, and of the hepatic and renal branches of the pneumogastric.

CYANOGEN.—Cyanogen is a permanent gas at the ordinary atmospheric pressure, but it becomes fluid, under a pressure of three or four atmospheres. It is soluble in water, and of a characteristic and very penetrating odor; it is inflammable, burning with a purple red flame. The most remarkable and characteristic action of this compound radical, is its combining directly with metals, and amongst others with potassium and sodium; these metals take fire, and burn in cyanogen exactly as they do in chlorine, combining with the cyanogen without decomposition, and forming cyanide of potassium or sodium.

UREA.—Urea differs from oxamide only inasmuch as, to the same amount of carbonic oxide, it contains double the amount of amidogen existing in oxamide.

CALOMEL AND COLD AFFUSION IN TYPHUS.—Mr. Burgess recommends the exhibition of large doses of calomel, aided by the cold affusion, in the treatment of typhus fever, on the ground that the

great mucous surfaces, including the skin, are the seat of disease in typhus. Calomel in large doses, he says, acts proximately as a sedative, without losing any of its well known valuable qualities as an alterative, upon the absorbent and glandular structures. The first good it produces is, sound, calm, and undisturbed sleep, to which the patient has been long a stranger, during which the ganglionic, absorbent, and glandular systems are silently invaded by its alterative agency; the intestines become filled with secretions, ready to be removed by any mild cathartic (e. g. small doses of neutral salts) exhibited periodically and regularly to make them patent. The dose of calomel should be renewed every night, without any other medicine, (only the neutral salts in solution with infusion of senna, and the liq. ammon. acet.) and repeated till the functions approach their normal state. Cold affusion, over the naked body is to be practised daily, by throwing over it while in a sitting posture, a bucketful of cold water, during the acme of the febrile paroxysm. The cold affusion, Mr. Burgess thinks, acts by stimulating and strengthening the capillary and exhalent vessels, and the vascular and nervous systems, thus giving tone to the functions of the heart, equalising the circulation, and removing congestion. The mercury remains too short a time in the system to produce any specific irritation, or hypercatharsis.

SOFTENING OF THE HEART.—Mr. Tripe narrates a case of softening of the heart, following inflammation of the substance of that viscus, in which he formed the diagnosis of softening with hypertrophy, from the great languor and debility, the irregular, intermittent, and very unequal pulse and impulse, without mitral disease, and the signs of hypertrophy, whilst the first sound was short and flapping, and heard over a much larger space than natural, which could not arise from dilatation, as the increased dulness on percussion was not greater than could be caused by the hypertrophy. The results of the *post-mortem* confirmed his diagnosis.

ENLARGED BRONCHIAL GLANDS, COMPRESSING THE VENA CAVA.—In this case, narrated by Mr. Tripe, the diagnosis was, pressure on the superior cava, probably by enlarged glands; effusion into the right pleura, and a cavity in the same lung posteriorly. The pressure on the superior cava was indicated by the extreme congestion of all the veins which emptied their blood into it; by the œdema of the upper, and not of the lower, part of the body; and the enlargement of the superficial veins of the abdomen and thorax, by which part of the blood from the upper part of the body passed into the inferior cava. Enlarged glands were supposed to be the cause, and not an aneurism, because, although a tumour was detected by percussion, yet there was not any impulse, and bronchial respiration was heard there; it was most probably mere solidification of the lung, as there was not any bronchophony. The existence of enlarged cervical glands also supported this opinion, which was fully confirmed by the appearances after death.

REFLEX ACTION OF THE NERVOUS SYSTEM.—Mr. Rose describes two cases illustrative of Dr. M. Hall's views with regard to the reflex action of the nervous system. In both the cases, local injury was sustained across the spine, followed by paralysis, and the reflex action was in each instance most evident when the paralysis was most marked.

CAUSE OF AGUE.—Dr. Pidduck observes that the cause of ague is owing to the action of a poison taken into the system, and that that poison is not malaria, but malaqua, which, he says, is proved by the following facts: in all countries and localities where ague prevails, the water is impure, containing clay and vegetable and animal matters in a state of decomposition; a change in the situation or locality generally soon effects a cure; and a change in the water, whether by changing the position of the patient, or by the substitution of distilled water, or of fresh rain water, which has been boiled and filtered, for the ordinary water of the place, more speedily and effectually prevents the recurrence of the paroxysms, even than change of position. The prevention of ague consists in avoiding the predisposing causes, such as excessive evacuations, over-fatigue, watchfulness, intemperance, or cold; damp atmosphere, the want of proper nourishment and clothing, and the de-

pressing passions, as also the proximate cause, *malaqua*. Regarding *malaqua* as the proximate cause, how does Dr. Pidduck explain the occurrence of ague in persons lately resident in marshy districts, on their removal thence to a more healthy locality?

NOTICES TO CORRESPONDENTS.

In consequence of Christmas Day falling on a Wednesday this year, Mr. Guthrie could not deliver his customary lecture this week.

W. X.—So far from the Parliamentary Committee on Poor Law Medical Relief being useless, it has already produced very great benefits. In the parish of Stepney, for example, it has led to the appointment of an additional officer, at a salary of £200 a year.

Our last lecture of Pinel concluding the *Prolegomena*, a new and distinct portion of the course, of vastly increased practical interest, will commence with our next number.

Several papers, with answers to numerous correspondents, are unavoidably postponed to our next number.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may now be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

THE MEDICAL TIMES.

SATURDAY, DEC. 28, 1844.

TO THE READERS OF THE "MEDICAL TIMES."

WITH the new year, we beg to offer a new arrangement to our subscribers. On the one hand, we have numerous complaints that our friends, subscribing through some booksellers and newsmen, can never get our journal in due time: on the other, many who do get it in good time, from our office, are not in good time with their pecuniary acknowledgments. To meet the wants of the one class, and supply those of the other, we propose to enlarge our list of subscribers in direct connection with the office, and to offer such a bonus on prepayment, as may obviate for us the trouble and uncertainty ever accompanying a multitude of book debts. For a month from this date, therefore, the publisher will keep open "A Roll of Subscribers," in which gentlemen sending their names, with a post-office order, or an order on a house in town, for £1. 1s., will have their names honourably inscribed, and receive the journal by post, free, every Saturday morning for twelve months. Our readers will thus at once obtain a reduction from 26s. to 21s. in the year's subscription; a boon that, leaving us without a single subscriber not in prudent advance of his account, will be of equal service, let us trust, to both. Gentlemen living in remote country places, or procuring their copies late from their booksellers, will, probably, be the more apt to value this arrangement, since it will secure, as we have said, their obtaining the *Medical Times* with punctual regularity every Saturday morning.

The favourable occasion, for new Subscribers to enrol, offered by the new year, suggests to us a word to those gentlemen who are content to scan the *Medical Times* on the tables of Reading Rooms, or by the courtesy of friends. The *Medical Times* gives—it is now admitted by even our enemies—the best scientific information that the present state of Medicine can afford. Apart from our lectures by such men as Pinel, Guthrie, Williams, Corrigan, Brodie, Schönlein, Liebig and our original communications by Hodgkin, Rigby, Tuson, Guy, Costello, Smce, Knox, Cruveilhier, Jobert de Lamballe, and a host of their equals,

apart also from our Reviews, Editorial Dissertations, Pencillings, Notices of Facts, Reports of Learned Meetings, &c. &c., our pages, weekly, give the most complete Summary ever published of the Progress of Medicine and Surgery in Germany, France, America, and the wider dominions of our own Sovereign. To what extent do we give this information?—To the extent of not less than forty respectable octavo volumes per annum! At what price for the forty volumes? One guinea! And what distinguishes our Journal from all periodicals like it, is, that the advertisements which (in concurrence with our enormous circulation) so much aid us in dealing thus generously with our subscribers, are so carefully managed by our printer, that they need in no way deface the work when placed on the library shelf. The pages for mercantile notices are not numbered, and are wholly separable from the Journal in binding.

After this frank *eclaircissement*, we can of course have no reader not a subscriber, who can command an honest guinea. Poverty may excuse him—nothing else can. Thus, then, goes our "sliding scale:"—"No readers not subscribers: no subscribers not subscribers in advance: in other words, the MEDICAL TIMES, the secure stipendiary of nearly thirty thousand Doctors." We must be excused for being a little earnest in this matter. An income of £15,000 per annum, turned into one of twice the amount, would enable us to do exactly twice as much good!

In the next place, we must admonish thee, my worthy friend (for, perhaps, thy heart may be better than thy head), not to condemn a character as a bad one, because it is not perfectly a good one.—FIELDING.

THREE arguments have been offered to prove that the General Registration of the Medical Profession is "objectionable in principle," and *must* be "injurious in practice." First, it registers us in three classes: secondly, it is but an aggregation of existing forms of registration: thirdly, any system of registration is "without importance" to qualified Practitioners. A word on each.

First, we are told that the arrangements must stand "in a certain order;" and because in anything like order, the General Practitioner will appear in the third place on the register, we are told "he must necessarily bear 'the brand of a degraded inferiority.'" Why "degraded?" On what reasonable score shall the General Practitioner burst into fits of indignation, because he is not registered before, or at the same time as the Consulting Physician, or the Consulting Surgeon? What argument can be offered, that *anger* on such a matter would not be as silly as the uproar of the puerile "statesmen" and "warriors" of France, at the imagined insults of "*la perfide Albion*." We offer, as our readers know, no extravagant adoration to the Physician or pure Surgeon, and we would be the last to deprecate the high acquirements and solid usefulness of the General Practitioner; but we should be ashamed of ourselves if we could utter such fulsome flattery to intelligent men to whom we wished well, as to tell them that a register which places their names after, or intermingled with those of the Consulting Surgeons and Physicians of our country, is, forsooth, an insult to their dignity, and an act of practical "degradation" to themselves! The man has not breathed more opposed to invidious and useless distinctions than we: and our readers will bear out the fact, that we have ever advocated, as much for the protection of the poor as for the honour of our profession,

the principle, that the General Practitioners of this country should distinctly be recognized before the public as "Doctors" of Medicine and Surgery. But we never supposed, we never can suppose, a state of things which shall leave the Profession without its Corinthian adornment of a distinguished body of Consulting Surgeons and Physicians. We allow that that elevation should be always less equivocal and more scientific than it occasionally is at present: but, at all events, it should be there: a resource to mankind in extreme cases of malady, and a stimulus to labour, and guerdon of merit, for the gifted and industrious. Between the Student and General Practitioner we see a practical difference, though all, it may be presumed, are equal as gentlemen: between the General Practitioner and the "Consultant" a similar professional distinction may exist, compatibly with the best interest of ourselves and the public: and we are not quite sure that, between the "Consultant" and "the Professor," another step might not be interposed with general advantage. A succession of ranks, as so many rewards of merit—so many achievements of an honourable industry—so far from being an insult to the General Practitioner, would be his highest privilege. What is there in our position that so distinguishes us from all other portions of the human family, that we ought not to reward such of our members as do great or good things, and that we do not require the stimulus of honourable notice, in any way, to urge us to more than ordinary exertions? To our minds, one of the great evils of the Medical Commonwealth is, that while its rewards are dispensed often on a bad system, they are so contemptible as to be unworthy a man of true genius. Go to the Church—and there are prizes worth the ambition of the most gifted of our citizens. We affect to know nothing of the wisdom or responsibility of those who have the privilege of their distribution: but there the prizes are,—and if ill-managed, more is the pity. Go to the Bar—and mark the glorious guerdons that surely attend on genius and industry. The son of the peasant to-day, may, like Lord Thurlow, to-morrow tell the Barons of England—"I preside over you as your chief!" Why shall it not be so with us? The good to humanity is not smaller by our successes: the extension of a grand and hallowing science not less: Why shall our premiums, then, be so much more inconsiderable? We cannot fancy a reason; and, therefore, had we our way, the Medical Professorships of England should be so many Medical Bishoprics or Judgeships: sources of high honour and large incomes to the best members of our bodies. How many good men should we have produced for us in the struggle who should be best!

So much then for the argument—(the argument!) that a Register *must* be a curse which does not place the names of General Practitioners among the class of Consulting Physicians or Surgeons.

But the Register will, after all, be but "an aggregation of Registers." Suppose it were so, what is there in the circumstance that would prevent its being of infinite service? If the separate Registers were not of service, no expense would have been incurred to keep them; and if valuable separately, how much more so must they be in an united form? Union gives to many things virtues they have not separately; and while an embodied Register would have all the merits of the many disunited, it would have none of their faults. But the Government Register will be much more than an aggregation. Many medical men have their names on no register, simply because no

register is kept. When registers are kept, they are sometimes not accessible, and always full of faults. The dead are not struck off; nor the retired, nor the expatriated; and as there is nothing to identify the individual, he may be personated for a whole generation with impunity. Now with such a matter as registration, we must have the perfect thing, or we have nothing. If only one break occurs, it offers every daring pretender to Medical prerogatives, a loophole on which he can always count with certainty; for, on our present system, you may prove that he is no member of a dozen Colleges, and there shall yet be a dozen more from which you cannot separate him.

The argument that "any system of Legislation is without importance to the *qualified Practitioner*," is but another form of calling white black. Whatever the benefits, they must arise wholly to the "qualified" man. They are enacted for his benefit. A register, open as day, to the public, describes his education, respectability, and competency; and distinctly segregates him, on State authority, from a herd who now delude patients to believe them good as he; and if he derive no benefit from the honourable position of his order, and of himself, he must be much better—or worse—circumstanced, than the great bulk of those to whose attention we commend this.

But we must now leave for the present a topic, which a very unfortunate contemporary has described as one which nothing could have hindered from producing in him a dangerous excitement of the mind, but the fact that the ruin of the profession was contemplated by Government! What a solace to the writer (of a *Medical Journal*) must be the ruin of the Profession! But we give his own words: "If the ruin of the General Practitioners of this country were not contemplated in the measure of the Government, there would be no reading a single section of the Bill, without its producing a dangerous excitement of the mind."—Is this insanity? Yes, or no?

Cædimur, et totidem plagis consumimus hostem!

THE event which at first appears to possess but an individual interest, often assumes in its results a general importance; and the recent incident of two medical authors of respectability coming forward to substantiate, and refute, a groundless charge of plagiarism, offers a point or two for settlement of as high concern to the whole medical republic of letters, as to the reputation for talent and honesty of the two authors themselves. On the question of fact involved in the controversy between Professor Guy and Mr. Taylor, it is here, at least, not our business to enter. Professor Guy, in our opinion, has very handsomely disposed of it, in the communication we published a fortnight since; and, indeed, the well-known character of the two writers creates, *à priori*, a presumption, amounting to a moral certainty, that neither of these esteemed contributors to our *Medical Jurisprudence* could have knowingly incurred to the other the guilt of plagiarism. Mr. Taylor and Dr. Guy have minds formed in an essentially different type. Mr. Taylor, laborious and painstaking, prying into the bye-alleys and unknown remote corners of medical literature, with the *gusto* of the antiquarian, and earnestly massing together his "inconsiderate trifles," with the jealous care of a miser, reminds us of the ant of Torace.

Sicut

Parvula, nam exemplo est, magni formica laboris
Ore trahit quodcumque potest, atque addit acervo.

All his goods are personal; they are collected for his own individual consumption; and the pleasure of consuming arises mainly from the thought that they are his own laborious accumulations. No single idea of the ultimate uses ever comes in to sanctify and elevate the pleasure of degustation. Other men's means are his ends; he forgets his object wholly in the pleasure he takes in the journey. He is the Dryasdust of Medical Jurisprudence. Guy's tendency, on the other hand, is for results. Original, yet methodical; quick of apprehension, yet persevering; reasoning, whilst others would perhaps be content to take as found; looking at his facts more in their relations, than in their intrinsic elements; extracting uses from things thought worthless; and instinctively constructing an edifice out of what others would regard but as interesting curiosities. In other words, clever as most people in brick-making—if we may descend to so substantial an image—it is as a builder he finds himself at home. Or to give in one phrase the difference between the minds of the two authors,—Taylor's is a broker's shop, rich in disordered plenitude—the other's is an accomplished gentleman's drawing room, where an equal affluence of furniture looks the less from arrangement.

But, as we have said, it is not our object, here, to prove or disprove improbable charges of plagiarism against one or other of these eminent lecturers. Our aim is the more general one of commenting on the off-hand charge of piracy so frequently made by a certain class of reviewers, and of making a remark or two on a question yet somewhat in the dark—what are the rights and duties of authors in reference to their predecessors?

To clear our ground as we advance, we may describe the word "plagiarism," as one of that class of terms (abounding in all languages) which have the attribute—so fortunate for critics, and so unlucky for authors—of not being very clearly defined. *Appropriation without acknowledgment*, is doubtless its primary meaning, but the appropriation may be of discoveries, in which case the term, *piracy*, is often used; or of words; or, lastly, of a general plan and method not previously employed.

The appropriation of another's discoveries is by far the most serious form which plagiarism ever takes, for it robs a man, in one act, of the fruits of both his industry and his genius. It is a double theft, and merits the severest punishment that the critic can inflict. The appropriation of an author's words comes next; a less heinous offence, inasmuch as it merely despoils him of the fruits of his industry, and almost less excusable, since it implies in the offender as much laziness as dishonesty. To reprint old thoughts or facts, in other men's language, is to be a knave with no palliatory temptation, and a fool without necessity. The last phase of plagiarism is, the use of other's new arrangements and methods of handling literary or scientific subjects. This, as it appears to us, is the most venial of all the forms of plagiarism. Sound methods are, first of all, of those things which invite unconscious imitation: certain matters, to an orderly mind, must ever present themselves in the same way: there is but one natural arrangement that befits them: so that old methods may be closely followed, and yet a man who shall be accused of plagiarism on such ground, may often, with a good conscience, plead "not guilty." But here, again, there is a place for distinction. The method may be something more than a mere arrangement: it may be in the

nature of a discovery, and may rest on an uncommon process of reasoning, which entitles the author to the credit of originality. The use of such arrangement, without due acknowledgment, should not be allowed to pass without a word of reproof: but the stern rebuke due to the appropriation of another's discoveries, or the unacknowledged use of his words, would be here altogether out of place. In the three principal forms of plagiarism now pointed out, there are many degrees, so that a lower offence, if marked by unusual premeditation, and practised on a large scale, may equal a higher one, without such circumstances.

We will suppose a case illustrating as many complications of plagiarism as we well can do. We will make it as extreme as our imagination may reach—at the same time that we pass not the boundary of actual fact. Let us imagine a *literary-business* man, of moderate ability and attainments, eking out some neat official salary by small speculations as a book-maker, getting them up, now slop for chance sale, now carefully made to order. An opening offering with a customer more than ordinarily *verdant*, we will fancy a bargain thus struck. "For a moderate consideration, I will make you an *original*, 'a *vaary original*,' book, that will fit you like your 'skin.' 'Intus atque in cutem te novi,' and without writing (more than a check on your banker), you shall be a great author!" Agreed. The book is duly written, paid for, published, let us suppose: the purchaser receives daily, on his vast contributions to medical science, praises, which he hears with a modesty that but confirms their appropriateness: the maker "to order," who, like the awkward Allen,

"Did good by stealth, and blushed to find it fame,"

very surprised at his own cleverness (which, to do him justice he was the last to discover), has just *privately* whispered (to the public) that he, really he, had (*confidentially*) made the book, of which his employer was the celebrated author, when out comes the stupendous announcement (blasting the claims of both the *two* putative parents of one child), that the bantling had been taken, *main forte*, from a worthy French citizen, and that, though horribly mutilated, the traces of the true paternity were still strikingly visible on every feature.

This is, of course, a mere imaginative case: it is infinitely too gross to be literally true—*except under very peculiar circumstances*: but supposing that such circumstances could occur in fact, as they have occurred in more than fancy, we should here have presented to us a fair specimen of THE PLAGIARIST *par excellence*. No one phase of the many which vary the character of plagiarism would here be wanting. Plagiarising matter, manner, form, substance, accident and essence, he is so ingenious in plagiarism, as to make his own labour of plagiarism a new plagiarism; the climax is only reached when he has induced some one to do for him what he cannot do for himself—plagiarise his plagiarism—be the supposititious author of another's supposititious work.

Now, if the evil of this *practical* hypothesis were merely the wrong *per se* of so curiously complete a plagiarism, we doubt if the offence would get from us one word of notice. It is not because an indigent urchin thrusts his hand into a more respectable person's pocket, that the morning journals are to honour his exploit each with a leading article. But the misfortune is, that we cannot do justice to our hypothesis without the further supposition that the Exemplar of plagiarism

of to-day may, by some extraordinary oversight, be elevated to its judgeship to-morrow: that by some unhappy proprietary choice, he may criticise this hour, in a Medical Journal, the vices he exemplified the last in a medical work. It is here, then, the evil really commences.

As the bad man believes all bad, the thief all thieves, so will the plagiarist allow no man to be original. The Jamaica wharfinger elevated to the dignity of senator, voted restrictions on his former brethren, saying, "They are all rogues to a man; I was one of them myself for twenty years." So the plagiarist, raised to a critic with his authors. As if he felt that to look people comfortably in the face, he must first prove himself no worse than others—or rather, others no better than himself, he has a malignant pleasure, a deep policy of life or death to him, in making all plagiarise. He has a microscopic eye for resemblances; the beam in his own eye seems to sharpen his vision for the motes in others; and a beard in the fairest palm that lady ever delighted to shew us, is a less startling phenomenon than the places in which he detects plagiarism. Like bankruptcy to the insolvent, it is every where. Fielding, who knew the body well, tells us that he has seen poets convicted by them as thieves upon much worse evidence than the *resemblance of hands* has been held to be in law, and that every amorous widow on the stage, would inevitably be condemned as a servile imitation of Dido, if the fellows happily were not too ignorant of Latin to have read Virgil.

But we have said enough, both by induction and illustration, to impress upon the minds of critics in general, our own among the rest, that it is a duty they owe both to themselves and the public, to distinguish between the different kinds and degree of plagiarism. Let them brand in any way they please, and with the most forcible words they can find, the intentional appropriation of the discoveries of another—let them punish with rigour the unacknowledged use of his language; and visit with censure—subdued, but still just—the too close imitation of his method and arrangement; but in the name of common justice, let the punishment we inflict bear some proportion to the crime, and let our indignation be reserved for those whose offences against the unwritten laws of literature, are too flagrant to be doubted or excused.

While yet you breathe, away; the rural wilds
Invite; the mountains call you, and the dales;
The woods, the streams, and each ambrosial breeze
That fans the ever undulating sky.
Find then some woodland scene, where Nature smiles
Benign, where all her honest children thrive.

THIS motto, will tell you, worthy reader, that we have not yet done with the subject of fresh air and its services.

Whatever relation may exist between the digestibility of food and the amount of oxygen required for complete sanguification, it is certain that oxygen is a most necessary adjunct to this most elementary process of nutrition. A meal must be very light indeed, both in quantity and quality, to pass healthily through the digestive process, if the individual respire, during such process, an impure atmosphere. It is for this reason that dyspepsia is so prevalent amongst people whose occupations are confined and sedentary. Directly upon the completion of a repast, they resume their work, with nothing to help the quickened circulation—no exercise to encourage the heart's action, and give the lungs a fuller, fairer play—no pure and breezy air, to carry the noxious carbon from the

loitering blood; it creeps along a mass of impurity—

A drowsy tide,
That slow as Lethe wanders through the veins;
Inactive in the services of life;
Unfit to lead its pitchy current through
The secret mazy channels of the frame.

To this succeeds headache, flatulence, heart-burn, feverishness, low spirits, and the other symptoms of indigestion. As the meal passes off, and the blood becomes a little purified, the unpleasant feelings subside, leaving some measure of quiet and comfort in their place. But, instead of only two or three hours, six or eight, have been required for the removal of the burden. Two evils have resulted. The food, intended to be almost entirely converted into blood, has been digested only in part—it has chiefly fermented, and, consequently, for the quantity eaten, an insufficient portion has been concocted and fitted for the ultimate purposes of nutrition. Hence the reason, that some people, despite the quantity of food they take, lose flesh, or, at least, do not increase in bulk. In all such cases, as the greater portion of the aliment is lost, the sufferers would be doubly advantaged, by taking one-half their usual ration, could they be persuaded to endure the hunger of an unsatisfied repast; for, it generally happens, that there is no correspondence between the force of the appetite and the powers of digestion. Additionally upon the loss of the meal, we have the stomach irritated and deranged, and remote organs suffering by sympathy. Such things are always the consequences of irregular, or inefficient, digestion. It is a curious fact, in the physiology of this function, that, directly upon the introduction of food into the stomach, the organ commences to concoct, or chymify, it, and never rests until the process of chymification has been completed, or the unyielding material propelled into the intestines, or ejected by the mouth; whilst, if matters that are utterly indigestible be swallowed, as sand, coal, cherry-stones, &c., they give the stomach little comparative trouble, and are generally passed into the bowels without pain or inconvenience of any kind. Some chlorotic females will eat chalk, or coal, by the pound, and persist in the habit for weeks and months, without any manifest detriment; whereas, an indigestible kind of food will produce distressing nausea and spasm, which will last until the patient has been relieved by vomiting. Cherry and plum-stones have been ejected from the stomach many days, and even many weeks, after they had been swallowed, yet without having occasioned any trouble or torture during the time they were detained, or, indeed, without their detention having been suspected. Every moment, on the contrary, that indigestible food remains in the stomach, is a period of anxiety or torture—pain, nausea, and distressing eructations, continue until the offending matter has been expelled. We see, then, that for every meal, not properly and in due time digested, a corresponding degree of derangement will be produced in the alimentary organs. Repetitions of the unhealthy process tend to confirm the mischief, and the subject, at last, becomes permanently dyspeptic.

Various as are the circumstances which lead to indigestion, the respiration of an impure air is one of the most fertile and frequent of the whole. It is scarcely possible to find in warehouses, manufactories, and such like places, a workman or a clerk free from dyspepsia, or from one or other of its symptomatic maladies. Emetics, purgatives, and tonics furnish them with only palliative assistance—to cure them you must order change of air, and you will seldom find your hopes frustrated. The

reputation of "country quack-doctors," "water-doctors," "sea-side-doctors," and "bathing-place doctors," mainly rests on the salubrity of the places they live in, and the systematic out-door exercise to which they subject their patients. The exercise is only a part of the grand scheme of treatment, the chief object being to give the invalid as great an amount as possible of fresh air, for which purpose he is ordered to walk in the surrounding country. This recreation, of all others that are continuous, brings the greatest amount of muscle into play, and increases, to the greatest extent consistent with safety, the necessity for respiration and for the rapid oxygenation of the blood. In a corresponding degree is the exercise, under favourable circumstances, natural, depurative, and beneficial. Men who live for the best part of the year in London, breathing a smoky, impure atmosphere, eating rich food, drinking largely of wine, and having little bodily occupation, reasonably enough find themselves at last plethoric, dyspeptic, or gouty. Such men, after having tried blue pills and black draughts, quinine, calumba, and soda water, without any satisfactory relief of their liver complaints, dyspepsia, gout, or gravel, eventually betake themselves to the country, and consult some "eminent man." This said man may perhaps not be able to certify to the manner in which their previous habits and occupations have hurt them, viz. *that they have been in the daily practice of taking a greater amount of food into their stomachs than has been balanced by the oxygen that has entered their lungs*; but he judges instinctively from the bloated face, the furred tongue, the labouring pulse, and the oppressed breathing, that fresh air and exercise are needed, and he directly orders early rising, light food, little wine, and almost constant walking; thus reversing the previous state of things by giving the patient more oxygen than his aliment absolutely requires that he should take. Under this training, the whole system, bodily, and mental, becomes purified and refreshed. The consequences are marvelled at, and it is gravely wondered that London Physicians should have so long mistaken the complaint, or have not hit upon the remedies proper to it. People little think that if their country physician were to treat their plethoric diseases in town, his efforts would be miserable failures, and that in prescribing for them at a distance, his sovereign remedies are fresh air and exercise. It is said of a celebrated preacher, that when suffering from a serious illness, he was ordered by his medical attendant to abstain from his ministerial labours, to reside in the country, to take asses' milk, with other generous diet, and to have plenty of exercise, all which he faithfully attended to, but he could not resist the temptation to ask the additional advice of an old woman, who ordered a brown paper plaster to his back. He recovered, but entirely overlooked the benefit of his physician's treatment, in the absorbing notion that the brown paper plaster had cured him. So it is with the dyspeptics, who leave town to be treated by a country practitioner of celebrity. The dosing they have had at home has impressed them with the most serious apprehensions of their malady, but faith and fresh air work such wonders in them, that they cannot be persuaded but that the doctor's management has an inscrutable mystery at the bottom of it. They return home with the sins of their previous habits before their eyes, and yet relapse into them with all the simplicity of childhood, until a fresh accession of disease requires that they again be transferred, like nurslings, to a place of security. The duties of business, the obligations to friends, the respon-

sibilities to their families, and above all, the irresistible temptations of the table, render it next to impossible for the town physician to afford them any satisfactory service, for, as we have before said, you may relieve dyspepsia in unhealthy situations, but you will never cure it;—and so it is that, by the magic influence of air and exercise, the country practitioner acquires his celebrity and his wealth. By an attention, however, to a few of the leading customs of life, it is possible, in some measure, to avert the evils consequent upon the locality of residence and the nature of occupation. Eating and breathing are the two main preliminary sources of nutrition; and, accordingly, as they are conducted well or ill, will nutrition fail or be unnatural. They are functions which are necessarily in constant relation to each other; and, by a wise provision of nature, operate as a mutual check or encouragement. All things being equal, the more pure air a man breathes, the quicker and more healthy will be his digestion. It is for this reason that large-chested men eat more, and are better nourished by what they eat, than are narrow-chested men. The former, as a rule, are habitually cheerful, vigorous, courageous, and hungry at meal-times,—the latter are the reverse in all these particulars. If a man with a capacious chest, eat a sufficiency of good food, and take a requisite quantity of exercise in fresh air, he will increase in bulk, but this increase will be in *flesh*; if, on the contrary, he be equally well fed, and breathe a less salubrious air, he will become *fat*. So it is with inferior animals. Horses that are round or “barrel-chested,” are invariably more muscular and enduring than those of the opposite kind: scientific sportsmen are, in a great measure, guided in their opinion of a horse’s racing qualifications, by his girth just behind the shoulders: by this test, a well-known jockey foretold the reputation and prowess of the celebrated racer “Plenipotentiary,” almost from the period of his birth. Cattle-dealers and butchers, in like manner, judge by the chests and shoulders of cows and pigs, what amount of fat they are likely to gain in the process of feeding. All animals that have large lungs are remarkable for the vigour of their appetite, and for the facility with which they appropriate their nutriment; such animals will feed upon the coarsest hay and straw, whilst their less fortunately constructed companions are fattened by no kind of food. An amusing anecdote is related of a simpleton, who, in trying to sell his horse, told the intended purchaser that “*the animal’s eating was a mere nothing*.” This intelligence would, contrary to intention, have sufficed to ruin the prospect of sale, but that the buyer, with a rare discrimination, inferred from the capacity of the horse’s chest that the capacity of his appetite had been unwittingly misstated. He bought him on the hazard of an opinion, and had no reason to repent himself of his judgment.

Now, this size of chest, that we have been discoursing about, has no *necessary relation to constitutional vigour*, for, from one cause or other, it sometimes happens that people with large chests are anything but healthy or energetic;—hereditary disease, or local malformation, may modify or mar the working of a fabric, in itself the most perfect and useful that humanity can be blest with. But when, with a good chest, there are good constitutional stamina, the service which the chest performs, in aiding the functions of the other organs, is mainly, if not entirely, attributable to the amount of oxygen which it enables its possessor to be constantly receiving and appropriating to the purposes of his system. We shall give some proofs of this fact in another article.

MEDICAL MEETING AT LEEDS.

(From the Leeds Intelligencer of Dec. 21.)

A general meeting of the members of the Medical profession resident in the borough of Leeds, was held pursuant to public notice, at the Philosophical Hall, in this town, on Tuesday last, for the purpose of determining upon the form of a petition to be presented to the House of Commons,

on the subject of the proposed bill for the better regulation of medical practice throughout the United Kingdom, introduced into that house by Sir James Graham, Bart.

Samuel Smith, Esq., Senior Surgeon of the General Infirmary at Leeds, was called to the chair. Mr. S. in opening the proceedings of the day alluded to the resolutions which had been adopted at a previous meeting of the profession held at Leeds in September last, and then went on to inform the gentlemen present, that a deputation had waited upon the borough Members, Wm. Beckett, Esq., and Wm. Aldam, Esq. in accordance with one of those resolutions. He stated that the deputation had been very courteously received by both the Hon. Members, who not only listened with marked attention to the statements which they felt it to be their duty to make to them on various parts of the Bill, but manifested the greatest interest with reference to the result of this important measure.

Mr. T. P. Teale in moving the first resolution stated that the Committee appointed in Sept. last, had held several meetings for the purpose of carrying out the wishes of their medical brethren, and considered that the time would speedily arrive when it would be necessary to petition the legislature in reference to the Bill for Medical Reform lately introduced into Parliament. The Committee had, therefore, prepared a form of petition which he would now submit to the consideration of this meeting, and should it meet with their approval he would propose it for their adoption. Mr. T. then proceeded to read the following petition, and concluded by moving that the petition now read be presented to the House of Commons as expressive of the sentiments of this meeting.

Mr. Wilson seconded the motion.

“To the Honorable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

“The humble Petition of the Members of the Medical Profession, resident and practising within the Borough of Leeds, in the West-Riding of the County of York,

“Humbly Sheweth,—That your Petitioners are legally qualified Practitioners in Medicine.

“That they regard with high satisfaction the introduction into your Honorable House of “A Bill for the better regulation of Medical Practice throughout the United Kingdom.”

“That they consider the Bill as calculated to confer great benefit on the Profession, inasmuch as it proposes to establish a supreme Council which shall have power to control the various Licensing Colleges and Boards, and to enforce a high and uniform standard of education of all persons entering the Medical Profession.

“That in order to compose the distracted state of the Profession, arising from the relative position of its Members not being either perfectly understood or well defined, in consequence of the Licensing Colleges and Boards being so numerous and their requirements so diversified, your Petitioners, humbly pray, that, if your Honorable House should think fit to establish any artificial distinctions of professional rank, such distinctions shall be unequivocal, and, only attainable by further examination.

“That your Petitioners are of opinion that the proposed Bill will fail to attain this desirable object, unless the degree of “Licentiate in Medicine” be rendered a necessary preliminary to the degrees of Physician and Surgeon; in which case a Licentiate could not in fairness object to the higher degree contemplated by the Act being conferred on him who, by prolonged study and more profound acquirements, shall have qualified himself for and obtained the same.

“That your Petitioners further pray your Honorable House that the future Licentiates in Medicine may be placed in Honorable Connection with both the Colleges of Physicians and Surgeons.

“That, whilst they approve generally of the constitution of the proposed ‘Council of Health and Medical Education,’ they are of opinion that the Council would be rendered more satisfactory

to the profession if the interests of the contemplated Order of Licentiates in Medicine, and of the Physicians and Surgeons resident in the Provinces, were more directly represented in the Council.

“That your Petitioners lament to find that whilst all existing restrictions upon illegal practice are proposed to be withdrawn, the remedies substituted by the said bill are wholly insufficient to prohibit unregistered persons practising Medicine, and that therefore the system of quackery, so injurious to the fair claims of the duly qualified practitioner as well as dangerous to the public health, is likely rather to be perpetuated than discouraged or suppressed.

“That your Petitioners therefore humbly pray that in any bill which may be hereafter introduced into your Honorable House, in reference to the regulation of Medical Practice, provision may be made that none but persons duly registered, shall be allowed to practise Medicine for gain, and that all unregistered persons who shall offend in that respect shall be liable to summary punishment.

“That your Petitioners also hope that the wisdom of your Honorable House may be able to substitute some less objectionable source of revenue than the sale of Patent Medicines, as the imposition of such duty has an undoubted tendency indirectly to sanction quackery in one of its worst and most delusive forms.

“And your petitioners will ever pray &c.”

Mr. Garlick, in rising to move the second resolution, said, that however important it might be deemed to petition Parliament on the subject of the proposed Bill, he was of opinion, that it was of equal, or still greater importance, to memorialize the Right Hon. the Secretary of State for the Home Department, inasmuch as it was especially to him, that they must look for any modification in its provisions. He (Mr. G.) considered that the members of the medical profession owed a debt of gratitude to Sir James Graham, for the exertions he had made in their behalf, and the anxiety he had manifested for their improvement. He gave Sir James Graham full credit for honest intentions in all that he had done in this matter, and he could have no doubt that it was his sincere desire to benefit the profession, and elevate the character of its members. If he had committed any error, he believed it had arisen from his not having received that amount of precise information on some important points necessary to enable him to form a correct judgment. Mr. G. then moved, “that a Memorial, embodying the substance of the Petition now adopted, be presented to the Right Hon. the Secretary of State for the Home Department.”

Mr. Braithwaite, in seconding this proposition, said, that he entirely concurred in the sentiments expressed by Mr. Garlick.

The other resolutions (see our Advertising columns) were moved and seconded by Messrs. Price, Chorley, Dr. T. Smith, and Mr. Hall, and unanimously adopted.

Wm. Beckett, Esq., M.P., was requested to present the Petition to the House of Commons, and Wm. Aldam, Esq., to support the same.

A vote of thanks to the Chairman, for his able and impartial conduct, terminated the proceedings of the meeting.

GREAT CHEMICAL DISCOVERY.

MITSCHERLICH, MULLER, WOHLER, AND BUNSEN
DISCIPLES OF LIEBIG!!!

(To the Editor of the “Medical Times.”)

SIR,—In the *Lancet* for November 10th, page 231, there appeared a most ridiculous conclusion, after the enumeration of the papers read at the late meeting of the British Association for the Advancement of Science at York, which was as follows: “Thus it appears, that during the last twelve months not a single fact has been added to that department of the science in which we are more especially interested—namely, organic chemistry—that is worthy of publication in Great Britain.” How can the writer of the article in question know whether a single fact has or has not been added to the science of organic chemistry, in which we are more especially interested? If he

had only taken the trouble to read the *Athenæum*, he would have seen that *new facts were brought before the chemical section, some of which will produce no slight effect upon a few of the most prominent chemists of the day; and as to these facts not being worthy of publication in Great Britain, their discoverers have felt no little pride in seeing them appear in the first scientific journal of Europe.* The reason of the headings to the paper only appearing in the *Lancet* was, I suppose, owing to the writer's inability to comment upon anything chemical; and if his paper affords any trustworthy indication, it is apparent that the direction in which his efforts have been exerted, is towards improvements in the production of "commercial fibs," as the means of obtaining, by the shortest road and the easiest means, the end of his labours—money. The staunch supporter of the College of Chemistry then commits a more outrageous assertion than the preceding: he says, "Already the most distinguished disciples of Liebig are becoming the heads of numerous schools, wherein the means and methods devised at Giessen are brought into operation:—Müller, at Utrecht; Wöhler, at Göttingen; Redtenbacher, at Prague; Bunsen, at Marburg; Mitscherlich, at Berlin; Fresenius, at Eslangen, &c." Why did not the learned writer insert the name of Dumas? Mitscherlich a disciple of Liebig's!—Laughable. Müller, at Utrecht. I suppose the writer meant Mulder, as Müller happens to be in Berlin. Through which channel did he hear of Fresenius being at Eslangen?—when I last heard of this excellent chemist he was a *privat-docent* at Giessen. I should not, Mr. Editor, have noticed this absurd article, but as I was forwarding to you a list of some of the most distinguished chemists who had been disciples of Liebig, I thought it would be conferring a benefit upon the English public, by prefacing it with a confutation of such gross impositions as those contained in the *Lancet*. The annexed are the names of those chemists, now well known, who studied in Giessen from the year 1835 to 1843:—Thaulow, Demarcay, Gay Lussac Jun., Gregory, Turner, Thomson, Marignac, Kane, Regnault, Pelouze (jun.), Kopp, Will, Fresenius, Jacobi, Varrentrap, Zwenger, Hoffman, Böckman, Schiel, Ettling, Litton, Gerhardt, Redtenbacher, Woskrensky, Playfair, Ortigosa, Hofmann, Sobrero, Theyer, Schlosser, Schunck, Stenhouse, Schlossberger, Chodnew, Blyth, Bence Jones, Anderson, Rochleder, Bromels, Bubo, Posselt, Scherer, Schödler, &c. Hoping soon to communicate to you a more perfect list,

I remain, Sir,

Your most obedt. servant,

A FRIEND TO TRUTH.

MEDICAL POOR LAW RELIEF.

PARLIAMENTARY REVELATIONS.

[In now proceeding to fulfil a promise made some time since, we have thought it not amiss to commence with the evidence of one who mainly contributed to our getting the Committee of Enquiry, and who gave himself no little labour in collecting and marshalling into order the evidence that was to be offered—we mean Mr. Guthrie. His evidence, so well worthy the attention of the Profession, will be followed by notices of the testimony given by Sir B. Brodie, Mr. Keate, Dr. Toogood, Mr. Ceely, and others.]—Ed.

GEORGE JAMES GUTHRIE, Esq., F.R.S., called in, and Examined.

CHAIRMAN, (LORD ASHLEY).—You have been President of the Royal College of Surgeons?—I have.

Since when have you taken any particular interest in the treatment of the sick poor?—Since the year 1834. I was for the first time President in 1833, and in consequence of the representations that were made by members of the profession to the College of a great number of persons who were unqualified to practise surgery being employed, I moved in the council that an address should be sent to the then Secretary of State, Lord John Russell, upon the subject, with the view of obtaining from him some direction that persons not qualified to practise surgery should cease to be employed in unions. The motion was carried. This is the memorial, which was addressed to Lord John Russell by the council of the College at that time.

[The same was delivered in and is as follows.]

To the Right Honourable the Lord John Russell, His Majesty's Principal Secretary of State for the Home Department.

The Memorial of the President, Vice-Presidents, and Council of the Royal College of Surgeons in London, respectfully sheweth,—

That several members of the College have complained to your memorialists, that under the orders and regulations issued by the Poor Law Commissioners persons have been appointed to the surgical charge of the sick poor who are not duly qualified to practise surgery.

That such appointments are injurious to the members of the three Royal Colleges of Surgeons in the United Kingdom, and manifestly dangerous to the poor.

That as the Society of Apothecaries of London are not authorized to examine their licentiates as to their proficiency in the art and science of surgery, such licentiates cannot be regarded as qualified to judge of the operations and other ministrations of surgery, on the skilful performance of which human life imminently depends.

That by an Act of the 4th of his late Majesty, cap. 64, relating to gaols and houses of correction, it is required that the surgeon to each of such gaols and houses of correction should be a member of one of the Royal Colleges of Surgeons.

That your memorialists cannot but believe his Majesty's Government feels as much, or greater interest for the poor as for criminals; and respectfully, but earnestly, request that it be an instruction to the Poor Law Commissioners to adopt the principle of the said Act in the future appointments to the care of the sick poor of the several parishes or unions in England and Wales.

(signed) JOHN G. ANDREWS, President.

ASTLEY COOPER,

ANTHONY CARLISLE,

Vice-Presidents.

29th day of July, 1835.

Mr. GUTHRIE.—Lord John Russell referred the matter to Mr. Frankland Lewis, who was then a Commissioner, and the answer given to us was by no means satisfactory; in consequence of which, the council, seeing that there was very little to be done in that manner, and being aware that Mr. Frankland Lewis placed every confidence in me, both personally and professionally, requested me to endeavour to obtain from him, if I could, by personal representation, that which we found we were not likely to get by any suggestions that we might offer to his Majesty's Government. I should wish, however, now to say, that although Lord John Russell at that time did not interfere upon this point, that when I waited upon him, to request his support, in case this question should be discussed before Parliament, he did, in the handsomest possible way, say, that he thought every attention ought to be paid to the wants of the sick poor, and therefore, he should support any inquiry into the subject; and I must also say, that Mr. Frankland Lewis would not disagree with me, I believe, upon any point I shall now recommend for the amelioration of the sick poor. When I became President of the College, for the second time, in the year 1843 (as the office goes among the 10 examiners), I thought it would be right, as many members, who were poor law surgeons, were pressing the Council to do something for them, and they seemed to think that persons in our situation did not take any interest in what befell the poorer members of the profession, to endeavour to get some of those grievances removed. I requested the surgeons of the London district to meet me at the college, to state their own grievances, so that I might make myself thoroughly acquainted with them, and be enabled to make such representations to the authorities as I thought might be beneficial towards the removal of them. In consequence of this I saw Mr. George Lewis, who went into the subject very fully with me on every point. The result of which was the medical order of the 12th of March, 1842. That medical order is a matter that I would, with your permission, speak about by and-by; I would merely now say, that by that order medical men were to be paid for their extra services, which was highly satisfactory to the profession at large, removing so far a part of the grievances of which they complained. Two points then remained: one was to improve the payment for the ordinary services of the medical men, with reference to all the districts, whether rural or town districts; because a system which might be proper for a town is sometimes not proper for the country. The other point was, to arrange or to fix a payment for the attendance on the union houses throughout the country. These were points of importance, that required settlement at the same time the medical order was issued; because the medical order cannot be fairly and duly enforced, as far as regards the medical profession, unless these two points are settled; for instance, the Committee are aware that midwifery was ordered to be paid for expressly in the medical order of the 12th of March; but many of the Boards of Guardians deducted the amount from the salaries they paid, consequently the medical order became perfectly useless. To prevent this, I wished Mr. Lewis to make an arrangement by which a sum might be paid for ordinary services that would be thought fair throughout the country. At present one man gets 1s. a case, another 2s., another 3s., another 12s.; at this moment in the north of England, at Easington, in the county of Durham, 12s. is paid for a case. In the same manner some districts pay a penny a head upon the population, others pay a farthing a head: Glossop pays a farthing a head upon the population, and in Essex 6d. is paid per head. It became then desirable to fix a sum below which no district should go in paying their surgeon. There was no objection to any district paying as much as they pleased, but that none should pay lower than a certain sum. In the same manner it was desirable to fix a sum for the union-house, because it was found that in some workhouses the payment was very inadequate. I believe the surgeon of Newbury workhouse attends 400 sick persons a year, travels four or six miles a day, and gets £40.; in fact, after finding the drugs, he gets little or nothing for the labour he undergoes. In Chelmsford and Dunmow, in Essex, they pay remarkably well. Mr. Lewis, who has always been disposed to do everything he could for the benefit of the medical profession (which I have invariably stated, although I am not always believed), said that he was willing to pay as far as he could, and that he would grant one-third more money than was then given to the medical profession throughout the

country. The sum then given was £150,000. The medical order I had calculated to give one-fifth of that sum; which was a boon to the profession of £30,000 in the year; which made it £180,000. I stated that, from my calculations, the proper sum to pay throughout the whole country would be £300,000, which was £120,000 more than was paid, including the medical order. I believe this to be a low calculation, for I had consulted, as to the metropolitan districts, the greater part of the gentlemen attending the poor, and I have had a very large correspondence with almost every union in the country. Having undertaken the matter, I was determined it should not fail for want of attention or expense on my part, and I thought myself justified in making that statement. The Provincial Medical Association, a large body which includes a great number of country surgeons, in publication of theirs, entitled "Documents relating to the Administration of Medical Relief," claim £350,000. I merely mention this to show, that in the estimate I made have endeavoured to go as low as it was possible to do, providing for the care which ought to be bestowed upon the sick poor. Mr. Lewis felt that he could not give me this £120,000, but he very handsomely proposed that we should see the Secretary of State. I met him at the office of the Secretary of State, where I had the honour of talking the matter over thoroughly with Sir James Graham, and he was pleased to view the matter in the same light as myself; he did not think the £120,000 that I wanted too much, and Mr. George Lewis laid a calculation before him, showing that the total amount to be paid would be £300,000. I was induced to believe that the Secretary of State would be pleased to take such steps, in his Bill before Parliament, as would give this £120,000 for the benefit of the sick poor, and when the Bill was preparing to come before Parliament, in 1843, I wrote to the Under Secretary of State, Mr. Manners Sutton (who, I must also say, is extremely kind to me upon all occasions), to say that I had such expectations, and that I hoped the Secretary of State would not forget the concession which he had been pleased to make in favour of the sick poor of £120,000; and I received an answer from Mr. M. Sutton, saying that the Secretary of State did not think it expedient to enter into the matter upon the present occasion, but that the Secretary of State would see me, if I wished. No one could be more gracious than Sir James Graham, but if he would not grant the money, there was no use in my troubling him upon the subject. Nevertheless I entertained the belief that it was not disagreeable to him to grant the money, nor to the Poor Law Commissioners; but the difficulty arose in what manner it was to be obtained. There are so many ways in which one fancies he learns a thing, that I cannot further explain the way in which I gained this belief, except that I have it. It struck me that it might possibly be, that if the proposal came through Parliament instead of coming through either of these two functionaries it might be a less objectionable way of putting things upon a proper footing. In order to make gentlemen understand the subject, the only way is to give a fair explanation of it, and I, therefore, wrote this pamphlet, which is called "Facts and Observations," &c. It was not for sale, because I did not think it worthy of being sold, but I distributed it among a great many persons, Members of Parliament, and others. I found that all the Peers and Members of Parliament I had the honour of knowing, and all the gentlemen, and all the ladies, everybody, in fact, approved of what I had written and told me that what I wanted was quite right, and ought to be done; and that they were sure, if my suggestion came under the consideration of Parliament, they would be adopted. Under these circumstances, it became necessary to find some one who would take the trouble of doing it. I made my application to your Chairman, and was received with the kindness which is natural to him. The matter was brought by him before Parliament, and is now before this Committee.

(To be continued.)

SMALLPOX.—From the returns of the Smallpox Hospital for the past month of November, it appears, that the epidemic continues to increase. The admission of patients during that period, was 77, making a total of 573 patients received this year into this institution, which not only relieves the metropolis from so dreadful a contagion by the reception of patients, but diminishes the spread of the malady by means of vaccination. To insure this operation being performed in a safe and efficient manner, the governors have lately erected, at considerable cost, a separate building for the purpose. The hospital also furnishes, gratuitously, to medical practitioners in any part of England or foreign parts, a supply of vaccine lymph, such as could be obtained at no other establishment. The number of smallpox patients in the hospital during the month of November, was .. 116

Discharged cured	59
Died	19

Remaining 39

Total during the year	573
Patients vaccinated this year	3,876
Supplies of lymph to the medical profession in England and foreign parts	2,019

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SUMMARY.

JAN. 4.

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THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

The forms of Insanity.

The lesions of the brain present themselves under three forms distinct from each other: the state of exaltation, or the high state, the state of depression, or the low state, and that of abolition, partial or general.

1.—In the state of exaltation, are comprehended: 1, acute delirium; 2, mania, or maniacal furor; 3, monomanias of the ideas, which we separate from monomanias of the propensities; and 4, cerebral hallucinations, which we also separate from illusions of the senses.

2.—To the state of depression, correspond: 1, chronic delirium (melancholia and lypemania); 2, stupor, or cerebral œdema; and 3, common demency.

3.—The state of abolition, more or less complete, comprehends imbecility and idiotcy.

We see then that these lesions alone embrace almost the entire of mental alienations: in this treatise, however, they form but a part, because the diseases of the propensities, and of the instincts, the lesions of motility, and those of the senses and sensibility, at last assume their proper place.

I.

LESIONS OF THE INTELLECT, IN THE STATE OF EXALTATION.

1, ACUTE DELIRIUM.

In a physiological point of view, acute delirium differs only from the other derangements of the cerebral faculties, in the shortness of its duration; it may present all the varieties of insanity, only in a very limited space of time—a few hours, or a few days. But that which distinguishes it the most, is that it is most frequently accompanied by strong febrile excitement, arising from some phlegmasia more or less remote from the brain itself. This is the definition most generally admitted by pathologists.

In our view, also, acute delirium is merely a transient disorder of the intellectual functions, direct, or sympathetic, but serious on account of its indicating an unfavourable predisposition in the person so attacked.

Some have thought right to admit several varieties of delirium: that which Dupuytren first described under the name of nervous delirium, deserves in many respects our attention. "If," says he, in his Clinique Chirurgicale, "in the evening, or next day, or on the second day after a fracture, a luxation, an attempt at suicide, or a slight operation, the patient appears unnaturally gay, if he be

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loquacious, make short answers, if the eye be brilliant, his movements quick and involuntary, if he boast of a courage and resolution which he no longer requires, be on your guard; let him be kept in the most complete repose, preserve him from light, noise, or improper visits. It may still be possible to stop the progress of the nervous excitement. In spite of these precautions, however, the mischief may burst forth. But sometimes the attack, marked by irregular movements, gestures, or incoherent observations, comes on suddenly and unexpectedly in persons that seemed to be going on favourably, exhibiting in this case the most singular confusion as to ideas, places, persons, and things. A prey to sleeplessness, they are under the impression of some fixed idea, which most commonly bears some relation to their profession, passions, tastes, or age. They are in a state of continual restlessness. The upper part of the body is covered with profuse perspiration, the eyes become brilliant and injected, the face flushed, and they utter with extraordinary volubility menaces and vociferations. Their insensibility is sometimes so great, that instances occur of patients, with comminuted fractures of the lower extremities, tearing off their bandages and splints, and trying to walk with their broken limbs, without betraying the slightest feeling of pain, and of others who, with broken ribs, sing and dance without showing the slightest sign of suffering; patients, in short, who had been operated on for hernia, have introduced their fingers into the wounds, and seemed in the coolest manner to amuse themselves in pulling out their intestines, as if they were manœuvring on a dead body."

In this description, so striking for its truth, we might fancy we were reading an account of all the symptoms of a sudden attack of the most violent mania, or that we had before us those poor creatures that are brought from day to day into the wards of Bicêtre and the Salpêtrière. So true it is, that in the superacute state all the lesions of the brain have a close analogy to each other; yet, Dupuytren imagined, that he was describing a lesion that had no relation to the diseases of the brain—a nervous delirium as he was forced to name it in his day, while, in reality, only sketching the most characteristic symptoms of the commencement of a superacute inflammation of the surface of the brain, of a rapid cerebritis, progressing to a fatal termination, and, in most cases, without passing through its ordinary stages. In regard to diagnosis, the points mentioned by Dupuytren are of great utility; they shew us, that, whatever be the cause of the so called nervous delirium, whether it arise from a physical injury, or from intellectual or moral distress, its origin will be found in the extremities of the nerves, or in the brain itself: its chief phenomena presenting themselves almost always under the same form, always characterized by alterations, more or less profound, of the nervous centres, and which form sufficiently indicates the veritable seat and nature of this delirium. Under the name of nervous delirium, Dupuytren, therefore, only described the first stage of that super-

acute inflammation of the brain, which so often follows great surgical operations, and sometimes even the slightest wounds.

Acute sympathetic delirium is very frequent; and few diseases, acute or chronic, terminate fatally, without presenting this symptom; it is a last kindness of nature to cover the fatal end, as with a veil. The inflammation of serous membranes—the use of which in health is to facilitate the action of the organs—soon gives rise to symptoms of delirium of the most serious kind; and so it is with inflammation of the alimentary canal, the heart, or the pericardium; that of the lungs appears to have less influence on the brain.

In the progress of chronic diseases, the intellect is but little disturbed, except in moments of paroxysm, or when they reach their termination. Persons attacked with cancer, dropsy, scrofula, caries, abscess, and marasm, enjoy their entire intellectual power to the very moment of dissolution; those who die of phthisis seem to fall asleep in the midst of the most cheering illusions. As the fatal termination approaches, the whole economy seems to sink into an insensible exhaustion, and the brain, as well as the other organs, seems gradually to cease its functions.

Amongst the forms of transient delirium, we should remark that which arises from the introduction into the stomach of certain substances, such, more especially, as alcoholic liquors, opium, tobacco, belladonna, and a variety of others, more or less active. Alcoholic delirium, or drunkenness, presents several degrees, beginning with slight excitement, and ending in the total loss of consciousness. The first degree is marked by a general feeling of warmth and comfort, an intellectual superexcitation, which renders the ideas more rapid, the conceptions more vivid, the expressions more fluent and abundant, and which imparts greater energy to the action of the muscles. But, when the libations are prolonged, the phenomena assume a less favorable aspect, the brain becomes congested with blood, the face flushed, the eyes brilliant, the senses begin to perceive objects but imperfectly, the ideas and recollections become confused, utterance is difficult and thick, and the tongue seems as if paralyzed. Reason and consciousness disappear, and the individual abandons himself to acts the most irrational, and opposite to his natural disposition; he betrays involuntarily his secrets, propensities, and instincts; nay, he takes a pleasure, just as the insane do, in revealing them. The second stage of drunkenness is accompanied with a vivid acceleration of the pulse, strong throbbings of the temporal arteries, and a commencement of muscular inertness, which causes the legs to bend, and renders the words unintelligible; this is the stage at which, generally, persons, not accustomed to this excess, vomit. The third stage presents the characters of several dangerous maladies, particularly those of general, confirmed, paralysis, and of typhus; the face is pale and livid, although the pulse retains its strength and fulness. After a few hours, half a day, or several days of an apoplectic sleep,

the individual awakes, suffering under general depression, with nausea, a dry mouth and loaded tongue; the countenance is stolid, and he seems to be labouring under a general stupor, which is simply the first degree of what is called *delirium tremens*; rest, abstinence, and cooling drinks suffice to disperse these phenomena.

The action of narcotics is no less active than that of alcohol. The people of Asia procure vivid enjoyments from the use of opium. Taken in large doses, it causes, as M. Flourens has proved, congestion of the hemispheres of the brain, and produces lethargic sleep; it but rarely causes convulsions and death. In our climate, it acts more as a stupefiant, than as an excitant of ideas or dreams. Belladonna, on the contrary, constantly gives rise to the most fantastic illusions of the senses, and this is explained by its special action on the optic tracts; the delirium is characterized by a sort of forced convulsive gaiety.

How do these substances act upon the brain? Is it directly by absorption, or indirectly, by acting on the stomach first, which in its turn would react on the brain? Both these explanations may be admitted, although daily experience leaves no doubt as to the direct and special action of certain substances, not on the brain only, but even on determinate parts of the encephalon.

In the different alterations of the brain that give rise to acute delirium, all the functions of the organ are more or less disturbed: the sensations, affections, judgment, and will, exalted at first, in the end become profoundly deranged, and partly extinguished. In adynamic fevers, at a certain stage, the delirium is low, accompanied with general enfeeblement of the hearing, sight, taste, and smell, and with stupor, somnolency, vertigo, and reveries. In phrenzy, which, according to our view, is a superacute inflammation of the periphery of the brain, the intellectual disorder is marked by general super-excitation; hence, the lesions of the imagination and memory; the vociferations, jovial songs, threats, quick answers, fits of anger, obstinate sleeplessness, or broken sleep disturbed by frightful dreams.

Acute delirium being, therefore, nothing but the effect of a serious affection, it is not surprising that it should be almost always marked by congestion of the brain. When it is not continuous, it only returns with the evening or night paroxysm; the circulation is then more active, the arteries throb strongly; the eyes are brilliant, injected, and sometimes are dry and dusty; the features, more or less decomposed, vary in their expression according to the thought passing in the patient's mind, and the character and stage of the disease. They are violently contracted and convulsive in furious delirium, expressing a degree of astonishment bordering on menace. In his moments of violence it may happen that, furiously excited by false ideas, he gets up, knocks himself against whatever is in his way, and becomes more and more exasperated till he drops down, and can no longer regain his bed without assistance.

In acute delirium, we observe a general reaction, which perverts almost all the organic functions: the perspiration is commonly suppressed, the skin is dry, arid, or sometimes covered with a cold sweat. The mouth is parched, and covered with a black crust: the pharynx and œsophagus being convulsed or paralyzed, deglutition is difficult or impossible; and we observe also, in spite of abstinence, that dark, fetid, loose stools are voided: the urinary organs, also, are amongst the first affected, and the paralysis of the bladder, the sphincters and of almost the whole muscular system of organic life, indicates sufficiently the great danger connected with the cause of such phenomena. Acute delirium, therefore, is always a dangerous symptom; it announces the approaching termination of chronic affections; in acute diseases, it denotes an unfavourable predisposition, a cerebral susceptibility, which sooner or later ends in acute or chronic cerebritis.

The treatment should be regulated according to the organic state which gives rise to it; if it be sympathetic, all our care should be bestowed on the primitively existing lesion of the organ: and, in this case, we must be reserved as regards the use of excitants, such as musk, ammonia, or cam-

phor, as they frequently aggravate the symptoms. When the irritation is direct, we should insist mainly on the employment of derivatives of every kind, and on some of the calmants, but, in spite of appearances, we must be very sparing of general blood-letting, which too frequently changes acute delirium into chronic mania.

CLINICAL LECTURES ON SURGERY, Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,

By CHARLES GARDNER GUTHRIE, Esq., Junior.*
January 1st, 1845.

In rejecting the operation by reclamation altogether, and particularly through the cornea, it may be, nevertheless, as well to describe Langenbeck's method of doing it.

The pupil having been previously dilated to its utmost extent by the application of belladonna, the patient is to be seated, and the eyelid secured in the usual way; the small curved needle, held in the manner of a writing pen, is now to be introduced at the middle of the lower half of the cornea, the concave part being upwards, the convex downwards, and pushed quickly but steadily through the anterior chamber, until it touches the lens. This part of the operation will be assisted, and the point of the instrument more readily and certainly introduced at the precise spot intended, if the operator fixes the eye with the fore-finger of the left hand, immediately below this part, so as to be able to allow the needle to pass along, and to be supported by the nail in its passage into and through the cornea. The convex part of the needle, which is turned towards the cataract, is now to be passed upwards, and placed against its upper edge and face, when the handle is to be raised so as to cause the point to pass backwards and downwards, carrying with it the cataract, which is in this manner reclined; the lower edge being forwards, the upper backwards, the anterior surface upwards, the posterior downwards. If the opaque lens should not be out of sight, it is to be depressed by lowering the point of the instrument; which should be kept steadily upon it for the space of a minute, and then gently raised, when, if the lens should not follow, it is to be withdrawn, and the eye closed, when the operation is completed. If the lens should rise and follow the needle into the axis of vision, the same proceeding for its depression must be repeated, under the same circumstances as in reclination or depression behind the cornea; but if it be observed, that in consequence of the softness of the lens, the point of the instrument has sunk into it, a rotary motion must be given to it, between the finger and thumb, to extricate it previously to depressing the handle of the instrument, which must be repeated until it is effected, and the lens remains reclined, although it will not always be depressed so deeply as not to be visible when the pupil is dilated. This operation is evidently adapted for hard cataracts only; but if a mistake should have been made, and the cataract be found to be so soft, as to allow the needle to pass through it, the capsule must be torn in every direction, and as much of the substance of the lens brought forward into the anterior chamber as can be effected; the remainder will be removed by absorption, but in such a case, a second operation will in all probability be necessary. The pupil must be kept dilated, in all these cases of depression or reclination, until every sign of inflammation has disappeared; and, although an irregularity of it may sometimes take place as a consequence, it will be attended by a moderate degree of dilatation, whilst the same quantity of inflammation, in an undilated state of the pupil, would cause as great an irregularity with a corresponding degree of contraction. In performing this operation, as in that for puncturing or breaking up the lens, the keratonyxis, to be presently described, two great evils are to be avoided, the loss of the aqueous humour through the opening in the cornea, and pressure on the edge of the iris by the instrument, in

* This is the last Lecture by Mr. Guthrie, jun. The rest of the Course—which will not, we understand, be confined to Ophthalmic Surgery, will be delivered by Mr. Guthrie, sen.

depressing the lens after it has been reclined. The first may be prevented by using an instrument properly made; the second will be best avoided by entering the needle at such a distance from the union of the cornea and the sclerotic, as will allow it to pass clear of the edge of the dilated pupil, the act of depressing the lens, and yet not so high up as to be in the axis of vision, when the pupil is restored to its natural state; for a small white spot, or cicatrix, usually remains, marking the place where the needle passed through the cornea.

The principal difficulties experienced in the operations have occurred, from the disposition of the lens to re-ascend after it has been depressed, and from the mischief to the neighbouring parts which is apt to ensue, if it should be improperly placed. The principal objects of all modern improvements have been to obviate these difficulties, and it is to be regretted, that they have not effectually succeeded in doing it.

The first of the operations by depression lately suggested, differs from the operation of Scarpa, in introducing the needle through the sclerotic coat, at the inferior and external part of the eye, a little more than an eighth of an inch from the cornea, the eye being turned upwards and inwards, and retained in that situation by the point of the fore-finger of the left hand when operating on the left eye. The needle, after penetrating the sclerotic and choroid coats, the insensible part of the retina, the hyaloid membrane, and the vitreous humour, is to be gently and carefully brought forwards, by turning the handle towards the temple, between the ciliary processes and the lower edge of the lens, until the flat convex part near the point is seen in front of the pupil, which should have been dilated by belladonna. The point of the needle, turned against the anterior part of the capsule of the lens, should now be made to scratch, or tear it in different parts, particularly in the centre, so as to prevent vision being impeded by an opaque capsule it should remain entire. The point of the needle should then be gently entered into the upper part of the lens, for a sufficient distance to give it a slight hold of it, so that on withdrawing the needle exactly in the same line, and in the same manner in which it entered, the lens may come down with it, and be placed on its face, with its posterior part upwards, at the inferior and outer part of the vitreous humour, close to the retina, without rupturing the hyaloid membrane, further than the opening, which has been made in it by the needle passing in and out; when it is presumed it will be scarcely, if at all, visible, if the pupil should remain dilated, which it rarely, or never does, long after the operation has been commenced. It was said by the late Mr. King, that it is sometimes unnecessary to puncture the lens with the needle, as it will frequently descend without it; an opinion upon which I place no reliance, knowing that it is only in particular cases that a lens will appear to descend of itself, and that it does so in all the different modes of operating. The needle is easily detached from the lens, by a rotatory motion just before it is withdrawn from the eye; but it should not be entirely withdrawn until it is seen whether the lens will re-descend or not. If it should do so, the needle, not having been withdrawn, must be re-advanced, and the lens again brought out of the axis of vision, and depressed.

In this operation, and in all others by displacement, whatever may be the method pursued, there are two points to be especially attended to, when the lens does not remain in the situation in which it is attempted to place it. They are, firstly, that the attempt at depression should be repeated until it can be seen that the lens will remain at some distance from the iris, although it may not be out of the axis of vision; and, secondly, that, under such circumstances, the pupil be kept fully dilated by belladonna, in order that if the lens should advance, it may not, if possible, rub against the iris, and give rise to that degree of inflammation which will, in all probability, be destructive to vision.

It has been presumed that a greater certainty will be obtained of placing the lens in its proper situation, by transfixing it in the first instance with the needle, by a rotatory motion; and, after

ns has been by it carried down to the place intended to remain in, the needle is to be yaged by a similar rotatory motion, which, it posed, can be accomplished in the generality tances without drawing the lens against the f the tunics of the eye, but which I am very inclined to doubt in those cases in which ns is hard. The peculiarities of the opera- recommended by Mr. Egerton, and detailed r. Morgan, consist in using an extremely traight, short needle, of the same thickness bout, cutting at the point, but not at the

It is to be entered just below the trans- diameter of the eye, at the distance of rather than a line from the junction of the sclerotic with the cornea. It is then to be carried, t slight inclination forwards, directly through tral substance of the cataract, completely xing the lens. This part of the operation es a good deal of management. The object oe to disturb the surrounding parts as little ssible, by transfixing the lens *in situ*; and t to be effected, not by pushing the needle at directly inwards, but by carefully drilling its through the opaque body, by rotating the e of the instrument as it is held between the b and fore-finger, while the point is at the time gently urged onwards. The dislocation epression of the lens must of necessity fol- the exact course which may be given to the of the instrument by which it has been im- ; and as the needle has been introduced t the transverse diameter of the eye, the lens e carried or pulled, instead of being pushed, wards into the vitreous humour. It is said oe of the advantages gained by transfixing ns, is, that the precise situation, where it is left after the needle is withdrawn, can be ctly ascertained. The course of the lens to ot should be so directed, that the anterior e of the lens passes hardly a line distant the corpus ciliare and retina, taking a curved o as it descends, corresponding with the con- curvatures of the interior of the globe, and it d be left as nearly as possible with its upper eference, or posterior face, a line below the e edge of the widely-dilated pupil. The dis- glement of the needle from the opaque lens, e it is withdrawn from the eye, is the prin- point to be attended to in the operation. It is ted to be done by drilling the needle *out* from epressed lens as it lies, without changing the tion of the handle of the instrument until it has e liberated in the same manner as it had been d *in*, while the lens was *in situ*; for, by ne- ng this precaution, the lens will follow the e of the instrument, and be either raised e, or forcibly dragged against the retina, as trument is drilled out.

ne directions thus given are not easy of execu- the lens will move with the instrument, what- maybe the nature of the rotatory motion given unless there is some point of *appui* or re- ace, and as the vitreous humour is not iently firm to offer this, it must necessarily und against the under part, or against the of the eye, in order to enable the instrument, h has thus been drilled through a hard lens, e rotated out—a difficulty, and a source of e in the operation, which, although it may e voided by dexterous hands, is very likely to e in those which are less experienced. The e difference in this operation by displacement, ose formerly preferred by Scarpa, Willberg, enbeck, and others, is, that less injury is done e middle part of the vitreous humour, which epon the depressed lens, preventing, perhaps, s continuity, and its weight, its easy ascent; ns is also placed on its flatter or anterior ead instead of, as formerly, on its posterior or convex surface; in which position it may e less disposed to ascend, or to irritate arts with which it may be placed in contact. r. Scott proposes to modify this operation, by eucing the needle through the sclerotic coat e usual place, and conveying it horizontally eads, into the margin of the lens, into which it e inserted, as far as it can be made to pene- without displacing it inwards. The front of eedle will then be firmly fixed on the lens,

which can be readily moved by it in any direction. By turning the needle half round, or forwards, the inferior margin of the lens will be displaced backwards, the superior edge will be turned to- wards the cornea, and appear in the pupil, when it is to be carried obliquely downwards and back- wards, by a corresponding motion of the needle. until it is presumed to be placed in its proper situation in the vitreous humour, immediately above, but not upon, the external layer of the hy- aloid membrane, above the retina, and at a suffi- cient distance from the iris, to prevent its rubbing against that part. The needle is then directed to be freely rotated, so as to disengage it from the lens, when it is to be withdrawn, great care being taken not to elevate the point in so doing, whereby the lens would also be elevated.

The lens spitted, as it were, on the point of the needle, cannot be extricated from it by the mere rotation of the instrument, however carefully and delicately it is done, unless it rests against some resisting part, and the objection to this operation is, on this account, somewhat stronger than the preceding method of Mr. Egerton's, and the anterior capsule is more likely to be left entire, giving rise to a secondary membranous cataract.

The operation by displacement which I usually adopt in persons of a very nervous disposition, or with sunken eyes, or very projecting orbits, is effected by a needle resembling Scarpa's. Of these, I have two kinds, both shorter than those commonly made; one, in which the curve at the extremity is sharper or greater, the point turning as directly backwards as is compatible with a reasonable facility of introduction, and intended for mem- branous, congenital, and milky or fluid cataracts. The other less curved at the point, but sufficiently so to admit of its readily penetrating for a short distance the substance of a hard lens, or to pass through a thickened capsule. The pupil being well dilated, the needle is to be introduced through the sclerotic coat, at the distance of from one to two lines, or the supposed extent of the insensible part of the retina, from the cornea, and a little below the horizontal line of the eye, the point being back- wards, the convex part towards the surgeon, the handle being turned backwards, in the direction of the temple, to be brought forwards, as the instru- ment pierces the coats of the eye, without which motion, a needle strongly curved at the point, cannot be readily entered. The point of the needle being in the vitreous humour, with its convexity towards the surgeon, it is to be brought forwards, in a gentle curve, descending a little as it advances, until it evidently disturbs the position of the under, or under and outer, edge of the lens, between which and the ciliary processes it should make its way, without wounding either, or displacing the lens, either forwards or upwards. The point of the in- strument being thus in front of the lens, and its capsule, although turned towards them, is to be directed upwards, so as to tear the capsule, if it can be readily done in two or three places, and, finally to be affixed to, rather than to penetrate the substance of the upper part of the face of the lens. This is to be done in a sufficient manner, however, to admit of its controlling the motions of the lens, and of forcing it to accompany the point of the needle in its removal from the axis of vision, which is to be effected by a corres- ponding, although retrograde, movement to that by which it entered, until the opaque lens, or cataract, shall have attained the place at which it is considered advisable it shall remain. At this moment, the handle of the instrument will be a little more raised than when the point was entered; the back part of the point attached to, or as slightly as possible inserted into the face of the lens, should rest on the inner surface of the hyaloid membrane, a layer of vitreous humour intervening, the rest of that substance pressing upon its then upper, and formerly posterior surface. Retained in this posi- tion for a minute, or until it would seem to be quite stationary, the iris appearing of its natural form, and without attachment to the capsule of the lens, which may or may not be displaced with it, the point of the needle is to be disentangled from the lens, by the gentlest rotatory motion, the point being pressed out forwards, or, if absolutely necessary, by turning the anterior edge of the de-

pressed lens downwards, against the insensible retina, at the origin of the ciliary processes, rather than backwards by its posterior edge, against the more nervous and sensible part of the retina behind. If the lens should ascend after the needle has been disengaged from it, and time should be given to see whether this will take place before the point of the needle is withdrawn, it must be replaced in its situation, but as it cannot be readily pierced in this, its floating position, the needle must now be placed upon it, and the lens must be carried a little further backwards, or more into the substance of the vitreous humour. A displaced lens will often float, as it were, in the vitreous humour, without doing any very essential mischief. It can rarely advance, and rest against the back part of the iris, without placing the eye in considerable jeopardy.

The operation being satisfactorily completed, the eye is to be covered, and defended from the light, to which it is to be gradually exposed, in a darkened room, at the end of three or four days; the diet should be of the lightest kind; quietude should be carefully enjoined, and inflammation must be prevented.

The accidents and difficulties which await and are encountered in the performance of the operation for cataract by displacement, are numerous. It is an operation intended only for hard cataracts; but an inexperienced surgeon may readily make a mistake, and attempt to displace a lens, through which the needle passes in every direction, without moving it from its situation; under these circum- stances, it becomes an operation of a different nature, in which the soft lens must be separated into many portions, the greater part of which should, if possible, be pushed into the anterior chamber of the aqueous humour, in front of the iris, the pupil of which must be kept well dilated, as in the operation for soft and membranous cata- racts by division, to be presently described.

In other cases, and particularly where a flat needle has been used, the lens turns round upon it, or will not remain depressed, and presses for- wards into the pupil, in a manner which, to an experienced operator, indicates the certainty of in- flammation of that part, great misery to the patient, and the probable loss of sight. The lens, under these circumstances, should be pushed through the pupil into the anterior chamber, and at once extracted, through an opening in the cornea—an operation I shall presently notice as the "compound operation by displacement and extraction."

When the iris adheres in any way to the cap- sule of the lens, the operation to be done is no longer the simple one of displacement. These cases require great care, and I shall hereafter notice them. A membranous cataract, or a sili- quose, or hardened capsule, containing a diminished lens, is sometimes mistaken by inexperienced per- sons for a hard cataract, and the operation by displacement, when attempted, does not succeed, the opaque substance re-ascending, immediately after each trial, so as to obtain the name of an *elastic* cataract. It will be treated of under the head of "secondary or membranous cataracts."

A little ecchymosis under the conjunctiva sometimes takes place, but is of no consequence. A slight protrusion of the vitreous humour will subside, and if a small fungous spot should spring from the wound, it will disappear under the use of the nitrate of silver in solution or in substance. An effusion of blood into the chamber of the eye has been much talked of, but very rarely happens, and need not be dreaded, or scarcely thought of. If it should occur, the blood will be absorbed, and if to such extent as to fill the anterior chamber, giving rise to pain, or other distressing sensations, it may be evacuated through a small opening in the cornea.

Vomiting, of a continued and distressing nature, is a frequent consequence of this operation, and has been generally attributed to some injury greater than is commonly committed on the retina, or ciliary processes. It is always a disagreeable symptom, and should be arrested, if possible, by opium given, and repeated if necessary, in doses sufficient to effect this object; by opiate enemata; where the stomach is obnoxious to that remedy, by bleeding, and such other means as are known

to allay this state of irritation; when it can be obviated early, it may not be followed by any bad consequences; when it is of longer continuance, it is usually accompanied by amaurosis, or an acute attack of inflammation of the internal parts of the eye; or if this immediate accident should not occur, chronic inflammation frequently occurs at a later period, and destroys that vision which has been partially recovered.

When acute inflammation supervenes, pain comes on, generally during the night, in the eye, around the orbit, over the brow, and even extends to the temple and side of the head; the pink colour of the vessels of the sclerotica marks the internal inflammation; the pupil contracts, the iris changes colour, vision becomes indistinct, if it had been restored, and is soon lost; lymph is thrown out, the pupil becomes closed, and suppuration of the ball may ensue, unless active measures are resorted to, for the suppression of the inflammation, which can rarely be entirely removed, until an almost irrecoverable mischief has occurred. The means to be adopted in such cases are, bleeding, both general and local, opium and mercury, in repeated doses, until some ease is obtained, and the mouth becomes sore; and as soon as the subsidence of the inflammation will permit, belladonna, or atropine, should be applied to dilate the pupil.

Chronic inflammation, it is to be regretted, is a too frequent consequence of displacement of the lens. It affects the retina, the hyaloid membrane, the choroid coat, and the iris; the cornea even becomes hazy, and the sclerotica is filled with yellowish-pink vessels, which become more and more distinct, tortuous, and dark-coloured. The iris changes colour; the pupil contracts; vision is eventually lost, whilst the patient is distressed by the recurrence of pain, and frequently by a constant, although irregular, watering of the eye, accompanied oftentimes by great intolerance of light.

In other instances, the progress of disease is slower, and amaurosis may occur without vomiting, and with little pain. The retina has been injured, and altered in its structure, the vitreous humour loses its consistence, the eye becomes soft, and the sclerotic coat is pervaded by a slight yellowish blush of inflammation; the pupil is irregularly dilated and hazy, the blood vessels become more distended, tortuous, and at last varicose. Sometimes the cornea shrinks and flattens; with the general diminution of the eye, the iris becomes corrugated, and convex, or thin and immovable, or it retains a vibratory motion dependant on the dissolution of the vitreous humour, when the pupil has not closed.

In all these cases, the only hope of relief depends upon the possibility of removing the lens, or irritating cause, from the position in which it has been left, and the sooner it is done the better, after the first inflammatory symptoms have, in part, subsided, for it is useless to wait for their entire removal. Mr. Guthrie was led to this treatment by the following case, which occurred to him more than twenty years ago, and is related in the second edition of his work, published 1827.

"Michael Moody, 64 years old, applied for a well-formed hard cataract of the right eye, and a commencing opacity of the lens of the left. The eyes being sunken, I decided on operating by depression, which was accomplished apparently with success. The subsequent inflammation did not subside at the usual period, but increased, and was accompanied by pain around the orbit, in the forehead, and side of the head: the sclerotic coat showed signs of low irritative inflammation, the iris slightly changed its colour, the pupil gradually contracted, and vision was again lost. I took a favourable opportunity of freedom from pain, to perform the operation for artificial pupil by division, which succeeded; the pupil under the influence of the belladonna became a large one, and I could see the depressed lens a little behind and below it; vision was again restored in part. The pain returned, however, with equal violence; he suffered several attacks of irritative inflammation, the cornea became muddy, and he was again deprived of sight. I now determined on removing the lens from its situation, which operation I effected with Scarpa's needle, and depressed the

lens further back, downwards and outwards, but out of sight. The pain ceased, the cornea cleared up, and he now sees very well with a cataract glass. In these and similar cases of pain, opium, and belladonna, applied round the orbit and on the side of the head, give great relief: and whenever an operation is followed by pain, warm fomentations containing these narcotics in considerable quantity should always be had recourse to, in combination with the treatment already described.

Mr. Guthrie has performed the same operation in several other cases with, and without, success, the lens having been removed without sight being restored. It is indeed very difficult to fish up the lens as it were from its abode, when the pupil is small and it cannot be seen. It is also an acknowledged fact, that the removal of the offending cause in so delicate a part as the retina, cannot be sufficient to enable the injured part to recover itself, and more particularly if any considerable time has been allowed to elapse, after the nature of the evil has become manifest.

It often happens, after the operation of displacement, that sight is impaired by an apparently oscillatory motion of the lens, which seems to be continually moving in its position, without actually reascending so as to be observed. This may continue, and gradually impair the sight, until it becomes nearly useless. In other instances, the vitreous humour becomes dissolved without any other material change taking place in the eye, and the lens is seen floating about in it, with every motion of the head, and if the pupil should happen to be dilated, sometimes slipping through into the anterior chamber.

When a lens is depressed into the vitreous humor with its capsule, a very little change seems to take place in it even after a lapse of many years. In many cases, however, the lens and capsule are not in their ordinary state, the capsule being thicker, and the lens smaller, than usual. When a hard lens is depressed without its capsule, it undergoes some diminution in size, perhaps amounting to one third, but the central nucleus is rarely removed, even after the lapse of a great number of years. A hard lens of this kind has been known to re-ascend 30 years after it had been depressed, and I have known them myself do so after lying quiet for several years, requiring to be removed through an opening in the cornea, although, in some instances, I have seen them again depressed with success.

On the compound operation, by displacement and extraction.

This operation consists in placing the opaque lens or cataract by the needle introduced through the sclerotic coat into the anterior chamber of the eye, before the iris, the pupil of which has been previously dilated to its utmost extent by belladonna or atropine, from which situation it is to be removed by a hook after a section or incision of the cornea has been made of sufficient size to admit of the passage of the lens through it.

It is an operation which has fallen into disuse, and deservedly so, being far inferior to that by extraction, when the surgeon is at liberty to select which he pleases. It is, sometimes, necessary, when the lens has been accidentally dislocated or depressed, and has ascended, or merely passed forwards into the anterior chamber of the aqueous humor before the iris, and owes its origin to an accident of this kind, instances of which have been recorded by St. Yves, Geze, Gibson, &c. The late Sir W. Adams advocated this mode of proceeding, Mr. Travers commented upon it, and Mr. Guthrie entered fully into it in his work on the operative surgery of the eye. It is an operation which should only be done, when from some accident in the operation by depression, or from an error in attempting to divide the lens—an operation to be hereafter noticed, or from the hard lens having ascended after it had been depressed, and passed into the anterior chamber, thereby causing great irritation, and rendering its removal necessary.

You have lately had an opportunity in two cases, one of Mrs. —, the other of Mr. Cort, of seeing me open the cornea to remove a lens, which had been depressed, but which had re-

ascended and slipped through the pupil into the anterior chamber, causing so much irritation as to endanger the safety of the eye.

When, in attempting to displace or divide a lens for the purpose of its being removed by abstraction, it turns round, or gyrates upon the neck, cannot be divided, and will rarely admit of compression. Under these circumstances, it must be brought forwards by the flat part of the needle from behind, into the anterior chamber, and moved through a section made in the side of the cornea, sufficiently large to admit of the lens being used in the operation of extraction being entered and passed on its side under the lens, where the point is to be turned upward, and fixed with sufficient firmness to admit of the hook and lens being drawn together through it. If the lens is large, it is not always easy to make this incision of sufficient size, and it should be done at the point by the common cornea knife. If the lens fills the anterior chamber, so as not to leave room for an ordinary knife, a double-edged triangular one should be used instead; it should be entered nearly parallel to the cornea than in the operation of extraction, then carried inwards, under the lens, rather above it, for I have several times seen the lens, when touched by the point of the knife, slip back through the pupil, and descend into the vitreous humour, defeating thereby the attempt for its removal. This is so much to be feared, that I never if I can avoid it remove the lens until after it has been extracted. In cases in which the vitreous humour is dissolved, and the lens floats about, and slips into the anterior chamber for a day or two, and passes back again, each time so much suffering that the patient is desirous of having it removed. I always introduce first a very fine needle for the sole purpose of piercing and passing the lens into the anterior chamber, and of keeping it steadily there, fixed by the hook, by which it is to be removed through the opening made in the cornea. A double or compound operation is often followed by great, but not uncontrollable, inflammation; mischief is only done, when the incision in the cornea is not made sufficiently large in the first instance, and the opening requires to be enlarged by the introduction of blunt-pointed knives, usually cut with difficulty. It is the repeated introduction of knives and hooks, that does the mischief, by bruising the parts, and giving rise to inflammation of the cornea, which may pass from necessity into the ulcerative stage, and is attended sometimes by chemosis, and inflammation of the sclerotic coat.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE

By C. J. B. WILLIAMS, M.D., F.R.S.
Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We will here treat of *diseases of the kidney*. The kidney is a very important organ in relation to the alimentary system, as being the great organ of secretion of urine. This excretory apparatus, as it were isolated from other organs, enables us to analyse and to examine its physiological relations apart from them, more distinctly, perhaps, than we could do in respect to the liver; however, there is a general analogy between the diseases of the liver and the kidney, which it is well to bear in mind, both being great excretory organs, and both constituted by sets of vessels somewhat similarly distributed; moreover, the effects of disease in both, are not only found in their own structure, but also having very important relations to the whole system, relations more particularly connected with changes in the purity of the blood.

Inflammation of the kidneys is of three kinds:—first, there are two kinds of membranous inflammation;—inflammation of the membrane covering the outside, and of the membrane lining the interior. The affection of the external membrane is called *peri-nephritis*—being an inflammation of the outer or peritoneal covering of the kidney; the other inflammation of the lining membrane

involves the uriniferous tubes, and is a species of catarrhal inflammation, and like inflammations of mucous surfaces, generally, is accompanied by products of a muco-purulent nature. The disease frequently extends itself to other parts of the urinary apparatus, just as we find to be the case in bronchitis, involving the whole structure of the air tubes; so does this catarrhal inflammation of the lining membrane of the ureters extend itself though the whole course of the uriniferous passages. The third variety of inflammation of the kidneys, is nephritis, or inflammation of the parenchymatous tissue, the vascular portion which lies between the external serous membrane and the internal mucous membrane. This is a parenchymatous inflammation, corresponding with pneumonia in the lungs, with other deep seated inflammations. Now, nephritis, or inflammation of the peritoneal lining of the kidney, may occur merely as a part of peritonitis, but, at other times, it is a part of nephritis proper, or inflammation of the substance of the kidney. But the first species of inflammation of the kidney, to which I shall direct attention, is that affecting the mucous membrane lining the kidney, and which may extend along the whole length of the uriniferous tubes. This catarrhal or mucous inflammation begins in various parts of the urinary apparatus. Sometimes it begins in the kidney, and travels downwards to the urinary bladder; on the other hand, it may begin in the urinary bladder, and travel upwards to the kidney. Its extension is to travel and spread itself, and the symptoms accordingly vary. When the kidney is affected, there is usually more or less pain in the loins, increased on pressure over the flanks, or over the back. This pain extends down to the bladder, more on one side than on the other. The kidney is very often the seat of acute pain. There is more or less fever, accompanied by frequent shivering fits, sometimes very severe. There is also nausea and vomiting, more so than in most other parenchymatous inflammations. The urine, at first, is commonly scanty, and high coloured; then it becomes mixed, or tinged with mucus, and bloody particles may be seen floating in it, but soon this inflammation shows one of its distinctive features, and the urine becomes loaded with mucus and purulent matter. There are numerous flakes or particles of pus to be seen floating in the liquid, and presenting a greenish yellow colour; and, besides this, at the bottom of the glass, we find always a quantity of ropy, slimy matter, so that, in pouring it from one vessel to another, this falls down in ropy threads. This matter is mucus, secreted in increased quantity by the lining membrane of the parts. As the disease shows itself in the urine, there are the early symptoms of increasing affection of the kidney itself; there is dysuria, or a frequent and painful desire to make water, which becomes, as the complaint goes on, more and more urgent, so that at last, the patient is obliged every few minutes to attempt to evacuate the bladder, which he does, with great difficulty, accompanied by extending pain in the region of the bladder, often extending, likewise, to the end of the penis; there is tenesmus, or severe straining at stool, and the attempt to make water is often fruitless. This obstruction to the excretion, and evacuation of the bladder, appears to proceed partly from mucus blocking up the passages, but in a much higher degree from the extension of the catarrhal inflammation to the bladder itself, and especially to the neck, and commonly it becomes more and more urgent as the disease goes on. This violent dysuria increases the pain in the loins, and the general symptoms of irritation are greatly augmented. Now, just observe the comparison between this and catarrhal inflammations of other parts. Remember that, in pulmonary catarrh, it may be inflammation of the extreme bronchi, but much cough, but, as it extends itself to the lungs, then cough comes on; and this strangury, or pain of the bladder, may be compared to the state. There is a kind of straining in expelling the urine, and a painful irritation; the same thing is observed in dysentery. As the disease progresses, symptoms of peritoneal inflammation

may be developed, the kidneys discharging the ropy matter, but without the same urgent desire to make water. This may subside after large quantities of muco-purulent matter have passed, and then the urine becomes somewhat clearer. The chronic affection, when thus established, is apt to linger for some time in the bladder, and here is another analogy between it and bronchitis. Bronchitis, beginning in the upper air tubes, rarely continues there for a long time; in fact, it cannot remain long in the acute state, compatibly with life; but cough and expectoration will linger for some time. This inflammation of the membrane, lining the kidney, may extend to the kidney itself, and constitute the other variety of nephritis, or it may even lead to another result—obstruction and obliteration of the ureters (perhaps only temporary) by the deposition of plastic matter: this will lead to an accumulation of purulent matter behind the obstruction, and which is frequently deposited into a kind of sac, and has not uncommonly been taken for abscess of the kidney. The kidney may thus be distended to a great amount, and form a sort of sac, like an abscess, causing pain on pressure, and fluctuation in the region of the loins and the flanks; these purulent collections have been known to open in various directions: in the intestines, and often outwards, or on to the peritoneum. Such are the serious results which have been connected with obstruction to the flow of urine. On examination after death, there may be found a diffused redness of the mucous membrane of the pelvis of the kidney, as well as of the ureter and of the bladder, in the early stage, but perhaps this will not be very considerable. The pelvis of the kidney is generally found filled with pus, extending into the uriniferous tubes: the cortical substance of the kidney may not be so much affected by this disease, but there may be increased vascularity as the disease extends. There are often found, in connexion with this state, calculi in the ureters or the pelvis of the kidney.

Nephritis, inflammation of the parenchyma of the kidney, is accompanied usually with greater pain, rigors, marked nausea and vomiting, and more distressing constitutional symptoms; the tongue is usually, at first, much furred, but afterwards becomes brown and often dry; there is great prostration of strength and anxiety, with marked depression and restlessness. The urine, in this case, exhibits quite different appearances from those of the former disease, and is generally scanty and high coloured; sometimes it may be bloody for a short period; generally there is albumen in it, as shown by nitric acid, but no pus. In the worst cases of deep seated nephritis, the urine becomes suppressed; in all cases it is very high coloured. When the disease attacks one kidney, the sympathetic effect disturbs and deranges the functions of the other kidney also; and it is in consequence of this diminution in the secretion of the urine, and the retention of excrementitious matters in the system, that the violent constitutional symptoms are produced. There are frequent rigors, like those occurring when the system is greatly depressed by some injurious influence. There is a dark brown fur on the tongue, with peculiarly distressing nausea, and vomiting, and then comes on the sensorial disturbance, delirium, and insensibility, passing into coma, and frequently into convulsions: persons, under these circumstances, get worse and worse, and, in the course of a few days, sink under the effects of the disease. Another distinction between this affection and the former, is, that there is no dysuria. You will find it stated by some writers, that there is dysuria in nephritis, but it is not a common accompaniment of parenchymatous inflammation. Remember, that parenchymatous inflammation, as well as other inflammations, may be often superadded to older disease; but when it occurs spontaneously, and independently of such a state, there is no dysuria. There may be suppression of the urine, but none of those difficult and distressing symptoms, that occur during its discharge in the mucous inflammation. I may mention that the fever is remarkably intermittent in its character, shivering fits coming on, and then being succeeded by hot and sweating stages. The pain is also intermittent, occurring

in very severe paroxysms, usually more intense and more confined to the region of the kidney than in the former disease, and this may occur even where the case is not dependant on calculi. However, inflammation of the mucous lining sometimes follows cortical nephritis, but not so frequently as we find the latter to be developed as a consequence of the former. On the post mortem examination of persons, who have died of this disease, the kidneys are found, in the early stage, very red and soft, the redness seeming to be an exaggeration of the vivid colour of the cortical substance, which, as the disease goes on, becomes quite of a pulpy character, and ultimately may pass into a state of suppuration. The tendency of this disease is to the deposition of lymph, and to suppuration, which is usually in points, in various directions, and does not commonly go on to the formation of abscess. The kidney has, in some cases, been found to be quite gangrenous.

The causes of both these forms of inflammation may be the same. The mucous inflammation is the more common form, and results from the causes I am going to mention:—cold, particularly applied to persons whose kidneys are much excited and irritated by alcoholic drinks; blows and strains in the loins; the deposition of lithic-acid calculi is also a common cause of inflammation, and chronic degeneration of the kidney. This occurs under unfavourable conditions of the constitution. Recovery from acute inflammation has rarely happened, when it has supervened on chronic degeneration. Various diseases, that prevent the excretion of the urine into the ureters or the bladder, or affections of the spinal marrow, or the different circumstances that cause accumulation of urine in the urinary passages, proving a source of irritation to the kidney, may cause inflammation both of its lining membrane and of its proper substance, and these are among the worst forms of inflammation. Gout and rheumatism have been observed to produce inflammation of the kidney, commonly in the cortical part. Mucous inflammation is sometimes produced by a calculus passing along the ureter and bladder, and in some few instances, it has been produced by a kind of worm, —the *strongylus gigas*. Now, comparing the two affections, we must consider nephritis, or deep seated inflammation, even more dangerous than the other. The deep seated inflammations are more serious, in proportion to the diminution of the power of secreting the urine; stupor, delirium, and typhoid symptoms are all extremely bad omens; and most of all, when they supervene on old standing disease of the kidneys or of the bladder, they generally announce a fatal termination.

The treatment of this disease is essentially antiphlogistic in both varieties, but most so in nephritis; and the earlier it is used, the more successful is the result, just as in pneumonia, or parenchymatous inflammation of the lungs. The measures useful, are, generally, blood-letting, cupping from the loins more particularly, and the usual internal antiphlogistics—tartar emetic, in doses as strong as the stomach can bear, though nausea will often interfere with its administration. Calomel and opium are useful. In the mucous inflammation, it is seldom necessary to employ venesection to any extent, but cupping is often requisite in plethoric subjects, particularly where there is great pain in the loins. Cupping at the loins should be repeated again and again. There is not the same prospect of removing this form of inflammation at once, as in parenchymatous inflammation, and for this reason: that, in all catarrhal inflammations, there is a tendency for them to run their course, and relieve themselves by mucous secretion; therefore, the period for depletion is rather limited. It may be resorted to, where the symptoms are very aggravated, but it will not remove the inflammation altogether. Purgative medicines are useful, but they must not be of an irritating kind. It is necessary to avoid such purgatives as have a strong diuretic action, such as the more irritating salines: salts, and also rhubarb, &c. The best remedies are castor-oil, and sometimes croton oil, where necessary, and calomel given so as to produce its proper effect. The most distressing symptoms are pain and dysuria, and, to give relief to these, hot fomentations, a warm bath, and dry heat

applied to the hypogastric region and the loins, are useful from time to time; narcotics, also, frequently varied, as belladonna, conium, and hydrocyanic acid, will be found valuable; and opium or morphia must be given freely, so as to relieve the intensity, and more urgent character, of these symptoms. They may be applied by injection, per anum. Laudanum, or some analogous preparation of opium, is sometimes of great avail. Some have proposed to inject the bladder, but this has very little efficacy. Friction in the neighbourhood of the part sometimes gives relief. Now, inasmuch as these affections of the bladder and the kidneys are often connected with calculus; where there is reason to suspect this condition, as, for instance, where calculi have been passed before; and where there is pain, first of all, apparently in the kidney, constituting nephralgia, and afterwards inflammation comes on; it is useful to have recourse from time to time, under these circumstances, to full doses of opium; narcotics should be given freely, inasmuch as the irritation is here evidently dependant on a mechanical cause. It is useful, under these circumstances, to keep the urine in as little irritating a state as possible. In various irritations of the kidney, the tendency of the urine is to become acid, but this acidity is often counteracted to a certain extent by the alkaline character of the mucus or pus, which is frequently present in large quantities. If the urine be acid, it is useful to give alkaline remedies: very dilute solutions of alkalies and mucilaginous drinks. The use of these remedies is very marked, where the disease is connected with the lithic acid diathesis. The diet must not be stimulating; milky or mucilaginous drinks should be the chief articles of food. If there is weakness and very great exhaustion, both from the action of the remedies and from the disease, it is necessary to give more strengthening diet. It is of great consequence, in the treatment of catarrhal affections, to keep the surface well covered, as the cold drives the blood inwards to the kidneys, and produces aggravation of the symptoms; therefore, the patient should be clothed in flannel from head to foot, and exposure of the person should be prevented as much as possible. This disease is very apt to assume the chronic form. Chronic mucous inflammation may occur as a primary affection, in consequence of considerable irritation of the bladder, more particularly as a result of stricture of the urethra, or other circumstances causing difficulty in the passage of the water from the urinary organs. In these cases, there is usually much strangury and dysuria, with a frequent desire to void the bladder, when there is no necessity, and the urine presents more or less blood in it. The patient is liable to exacerbations, from exposure to cold, or slight errors of diet. It is a very troublesome affection, and may continue obstinate for months or years. Where the affection exists long, the violent action of the bladder, and the frequent desire to make water, will cause hypertrophy of this organ.

The treatment of the chronic form is generally moderately antiphlogistic. Leeches to the perineum, or the anus, may give relief; and counter-irritation at the lower part of the back is occasionally beneficial. It is advisable not to use blisters, because the cantharides are apt to irritate the bladder. Fomentations over the hypogastric region, and the loins, are useful. Warm clothing and warm plaisters produce a similar effect, and may be employed. The bowels should be kept carefully open by mild aperient medicines, mercury and blue pill combined with conium and hyoscyamus, and other gentle aperients, such as: castor-oil, sulphur, aloes, mixed with soap, and combined with conium. Some medicines seem to act as a sort of astringent on the membrane of the bladder. These should be varied, from time to time, where the mucous discharge is profuse, as they are apt to lose their effect. Various narcotics, as conium, stramonium, and the preparations of morphia, are useful. In such cases, where there is no fever, and but little pain or tenderness, benefit has often arisen from the use of copaiba, or turpentine, in small doses. The muriated tincture of iron is, also, at times useful. It is of the greatest consequence to see that the urine be regularly passed,

and it is necessary to examine the hypogastric region, to observe whether there is any distention of the bladder. The mucus acts as a sort of ferment, and becomes ammoniacal, and, moreover, predisposes to the deposit of calculi. The diet should be demulcent, and stimulating liquors should be avoided.

Chronic Nephritis, or inflammation of the cortical substance of the kidneys, sometimes arises in a very obscure way. It is observed to be attended with dull pain, and weakness in the loins, with tenderness on pressure. The patient lies on his back, with the legs drawn upwards, towards the abdomen. There is not much fever in chronic nephritis, but there is a gradual loss of strength. Sometimes, too, there is a turbid state of the urine, exhibiting some of the characters of albuminuria; but it is usually scanty in quantity. The turbidity is owing to the deposition of the phosphates, and may be cleared by the addition of nitric acid. This state of the urine may occur independently of chronic inflammation. It may be found in connection with certain diseases of the spine; the connection is not at all clear. Alkaline secretion in the urine, with the deposition of phosphates, is met with after injuries of the back and spine, where there has been no state of nephritis actually produced. It seems to impair some how or other the function of the kidney. It is said to occur in connection with a cachectic state of the whole system. Chronic nephritis is apt to occur, in long standing disease of the bladder, ureter, &c. The disease may prove fatal slowly, by the gradual wasting and decay of the system; but more commonly, there is a gradual increase of the urinary disease, and at last acute nephritis supervenes; or else the secretion of the urine becomes suppressed, from some other cause. On the *post-mortem* examination, the kidneys are found indurated, hard, paler than natural, but perhaps not much shrunk in size. The treatment of this chronic nephritis is antiphlogistic, with counter-irritation to the loins; and the use of opium has been supposed to be advantageous. Stimulating liquors should be avoided.

Cystitis, or inflammation of the various coats of the bladder, may arise from retention of the urine, or perhaps from old standing disease becoming aggravated. There may be severe pain in the hypogastric region, with extreme tenderness; the pulse is frequent at first, and firm, but rapidly becomes sinking; there is constant and troublesome thirst, and, perhaps, a loss of power in passing the water, and in controlling its passage. There are found, after death, symptoms of inflammation in all the coats of the bladder. Sometimes the tenderness and inflammation extend to the peritonium, and frequently there is a degree of peritonitis accompanying it. If it continue long, it produces ulceration. The treatment, in the first instance, is antiphlogistic: free leeching on the hypogastric region, followed by fomentations, and carefully drawing off the water. Injection of a little warm water and milk into the bladder is sometimes useful. Occasionally, under these circumstances, the bladder loses its power of contractility. It is of the greatest consequence to feel the hypogastric region, to see that there is no accumulation of urine in the bladder.

CASE OF MAMMARY CYST, CONTAINING MILK, WITH REMARKS ON THIS DISEASE.

By A. J. JOBERT DE LAMBALLE, D.M.P., M.A.M.,
Officer of the Legion of Honour, consulting
Surgeon to his Majesty the King of the French,
Chief Surgeon to the Hospital St. Louis, &c.

The case, related in my former paper (see No. 275 of *Medical Times*), furnishes me with an opportunity of referring to those published by other authors, which, however, are but few in number. This is the more important, as several writers appear to have confounded this disease with other lesions, which, to a certain extent only, are similar. I will commence by the analysis of a lecture of Sir B. Brodie, lately published in the "*Medical Times*," (vol. x. p. 163). Now, it is

easy to perceive, that the description, given by the English author, very closely resembles that of a lacteal cyst.

Sir B. Brodie considers, that this species of cyst is a local affection; that it does not depend on a morbid state of the constitution, and is not susceptible of cancerous degeneration; moreover, it differs from ordinary serous cysts, and is not formed by hydatids, which are to be met with in various other parts of the body. This disease, which Sir B. Brodie directs the attention of surgeons, does not occur in hospital, and but rarely in private, practice; it presents itself under the following symptoms: tumours of different sizes, filled with a fluid, sometimes straw-coloured or yellow, at others greenish or black, coagulated by heat, or on the addition of nitric acid; in our colleague's opinion, is serum, containing more or less colouring matter. At an advanced stage of the disease, a solid substance is sometimes found in the interior of the cyst, which appears to have been secreted at the same time as the serum. This substance, in one of the cases related by Sir B. Brodie, seemed to be formed of layers of organized fibrin; in another, after a puncture was made, a certain quantity of liquid was escaped. A tumour was laid open with a lancet, and a fibrous excrescence, partly filling up the cavity of the cyst, was discovered; amputation was, therefore, resorted to, and, on the anatomical preparation thus obtained, some of the excrescences were found to be attached by a narrow pedicle: others by broad bases; some looked like recently effused albumen, others like slightly organized fibrin, some like fatty tumours, and others similar to cerebral tissue. These solid masses, in general, were situated in the interior of the cyst, though sometimes they were met with on the outside.

These cysts, according to Sir B. Brodie, are formed by the dilatation of the galactophori, he states, as a proof of this, the escape of serum from the nipple, the possibility of emptying the cyst by pressure, and of making a bristle pass into the cavity of the cyst, by one of the tubes. They chiefly occur in single women, and in those who have borne no children; this rule is without exceptions. There may be one or several cysts; in the latter case, the tumour is generally formed of one large, and several small ones; sometimes, the breast is full of them; when punctured in the first stage, all the liquid escapes, and there exist no perceptible remains of the tumour, which fact proves the cyst to be very thin. They are not painful, and develop themselves frequently without the patient knowing it, until some accidental circumstance indicates their existence; they do not affect the axillary glands, and remain stationary for many years. In general, they do not give rise to ulceration of the skin; this latter, however, sometimes bursts, when the tumour is highly distended, and a large quantity of fluid will be discharged, leaving an ulcer of unhealthy character.

Although this affection is not carcinomatous, still it ought to be removed, because, if allowed to remain, the local irritation will destroy the life of the patient, and, when removed, it will return. The first stage of this affection, it may sometimes be cured without operation, and Sir B. Brodie states, having succeeded in ten or twelve cases of discutients. When the disease is in an advanced stage, the operation is the only resource, to prevent a relapse the breast must be removed entirely, it being very possible to leave some portions, which may render a second operation necessary.

The lacteal tumours, or butyrous, as some authors term them, are but little known, and sufficient to cast a *coup d'œil* over the works which they are described, to perceive that their nature, and the mode of formation, of milk cysts have not been rightly appreciated. Some authors have even gone so far as to deny the possibility of the dilatation of the lactiferous ducts, and of their having only acknowledged them within certain limits. Dr. Nelaton (*These sur les tumeurs de la mammelle*) states that, supposing the galactophori susceptible of being dilated, it could not be to a very considerable extent; and that these cysts

attain the size of an orange, as in the case of Sir A. Cooper, or of an egg, as in the case of Dupuytren. In this respect, distinguished colleague partakes of the opinion expressed by Boyer: that the tumour is formed by effusion of milk, consecutive to the rupture of one or more of the lactiferous ducts. From the most detailed, it may, however, be asserted that the dilatation of the galactophori is not only local, but likewise may be carried to an extraordinary extent. Sir A. Cooper thought that this took place in a manner similar to that observed in the Warthonian canal, in ranula; and his opinion proves to be exact. Boyer quotes a case taken from an Italian work published by Lacerda, and thinks that the tumour (in my case, a cyst), was an effusion of milk in the tissue of the mamma. A brief analysis of this case may be interesting. A peasant woman, twenty years old, strong and hale, mammae considerably enlarged, perceived, ten days after her second confinement, a tumour in the left axilla, which grew on without any pain or inflammation. It did not prevent the woman giving the breast to her infant, and she even did it oftener with the left side, in the hopes of causing the tumour to disappear. She was, however, deceived; on the contrary, the milk soon after ceased to flow, and from that moment the breast began to swell, increased so much, that, when sitting down, it rested on the left thigh; the skin was quite sound, the sub-cutaneous veins considerably dilated. The car was plunged into the tumour, and gave issue to a great quantity of unadulterated, pure, milk. Before removing the canula, after the subsidence of the swelling by the evacuation of the fluid, the operator incised the parietes vertically, to the extent of an inch, so as to be able to place a pledget of lint, in order to facilitate the egress of the blood, the serosity, and the milk, and to cause adhesive inflammation of the walls. This, however, did not suffice, and as the liquid accumulated afresh, a counter-opening was made, and a seton passed through the cavity, which permitted its contents to escape freely. The cure was obtained without a relapse. The liquid, analysed, was found to be milk, which had undergone no alteration from its sojourn in the

might add other facts, more or less analogous, to fill content myself by stating that milk may, at a certain time, become altered, and thus give rise to other lesions. Thus, Professor Velpeau related, in 1837, a mammary tumour of the size of two fists, which offered several considerable features, and was of the consistence of a fibrous cephaloid tumour, in an unsoftened state. The swelling was composed of a homogeneous, firm, concrete substance, perfectly like cheese, rather, partly dried, and which, under the microscope, was found to contain globules of milk. The disease relapsed, and its development was rapid, that, four months after the operation, several bosselated tumours existed, containing a mass mixed with a cheesy substance. Evidently, in this case, there was a milk-tumour complicated with an encephaloides, but nothing more can be concluded from the fact. It is not the first time that such complicated tumours have been observed, but yet no one has asserted that one may not give rise to the exclusion of the other. Besides, in probability, the tumour was not composed of a mass of milk, which was effused in the midst of an encephaloid tumour. Finally, as observed by Professor Velpeau, it is not uncommon to observe a rupture of the lactiferous ducts, followed by infiltration into the tissue of the mamma. From what precedes, it is evident that the galactophori may burst, and give rise to circumscript or diffused effusions of milk, and it is very certain that they may be dilated so as to form large cavities, in which the milk may be re-collected. The observations and anatomical descriptions, given, are irrefragable evidence of this fact; consequently, Boyer was right when he stated that these tumours were produced only by an effusion of milk in the tissue of the mammary gland.

Pathology.—This subject is sufficiently interesting and worthy of occupying our attention for a

short time. To what cause is this disease to be attributed? Supposing it known, in what way does the dilatation of the ducts take place? Does this development take place in the same manner in large and small ducts? Clinical observation, in the case related, showed that inflammation, slight it is true, preceded the tumour, and that the latter appeared after a first accouchement, and gradually increased in size. What here took place? Three opinions may be emitted:—1° There may be stagnation of the milk, produced by a contraction of one or more of the lactiferous ducts; 2° there may be coagulation of this liquid, or of some of its principles; 3° there may be obliteration of the galactophori, caused by ulceration and adhesive inflammation.

These three opinions may be admitted, for experience seems to demonstrate that they are the enunciation of facts, proved by pathological anatomy, and by the mode in which these cysts are formed. Practitioners have daily opportunities of observing retention of milk from ulcerations, engorgements of the mammae, or inflammation of the lactiferous ducts; and it is in these cases, that, on passing the hand over the surface of the breast, species of chords, produced by the distension of the galactophori, are to be felt. In the curious pathological preparation of the case, described in my former memoir, ulcerations were met with in several parts of the interior of the cyst.

Sir A. Cooper admitted that engorgements of milk were produced by chronic inflammation of the ducts, situated near the nipples, causing their obliteration for about an inch or more, and compared them very justly to what takes place in ranula. Doubtless, inflammation is the most frequent cause, but it is, also, more than probable that the disease may be produced by the coagulation of the milk, and this opinion is founded on facts, since I have seen coagulated milk in the galactophori. To resume: the causes which produce dilatation, and subsequently the formation of these cysts, are: compression of the lactiferous ducts; inflammation; coagulation of the milk; contraction and obliteration of the galactophori;—all obstacles to the free egress of the milk. Finally, as to the development of the smaller ducts, it may be explained by the presence of the valves, which, as the milk accumulates, are closed so as to obliterate the orifice, and prevent the lacteal circulation.

Treatment.—What ought to have been done in the present case? Ought I to have contented myself with evacuating the liquid contained in the cyst by tapping? At first, I thought of performing a preparatory puncture, but I could not suppose, for an instant, that a radical cure would thus be obtained, since the liquid, continuing to be secreted, would soon accumulate and reproduce the tumour as before. Had the cyst been smaller, and were it possible to discover the obliterated canals, an aqueous injection might have been made by the nipple, so as to remove the obstruction of the ducts. But, not only the difficulties enumerated, but, likewise, the presence of ulcerations in the interior of the cyst, were sufficient to prevent our having recourse to this method; consequently, other means were requisite, namely, obliteration of the cyst and extirpation.

Obliteration of the Cyst.—This may be attained by the seton, and by injection. (A) *Seton:* In a remarkable case, recorded in this memoir, it succeeded; but would such have been the result in the present instance? This is very doubtful, on account of the size of the cyst; moreover, it would have been dangerous to expose the patient to the consecutive accidents, such as: intense mammitis, and serious erysipelas, the latter being at the time prevalent, under an epidemic form, in the hospital. Again, not merely one, but three setons would here have been requisite, and even if the obliteration of the three cysts had been the result, still a relapse might be feared on account of the dilatation of the smaller ducts. (B) *Irritating injections:* These could not be here employed, being highly dangerous, from the size of the cyst; and examination of the part, after extirpation, proved how correct this opinion was, for the valves would effectively have prevented the liquid from penetrating into the ducts, and, therefore, the obliteration

would have been but partial, and limited to the cyst. Moreover, several injections would have been needful, which might have produced diffused inflammation from the passage of the liquid through the ulcerations, and, also, because, in some places, the valves would have been sufficiently strong to prevent its penetration as far as the *cul-de-sac*, formed by the ducts in the granulations.

These considerations made me conclude, that extirpation was surer, and less dangerous, and ought to be performed. Nothing need be added to what has already been stated, as to the mode of operating; all I will say is, that were I to perform it again, I would not unite the wound immediately by the suture, as the union by first intention is impossible, on account of the milk which exudes from different parts of the gland; and, secondly, because, to obtain a radical cure, the obliteration of the lactiferous ducts must be produced by inflammation and suppuration.

Finally, it may be asked, could it not have been possible to have prevented the development of this disease? To this, it is difficult to give a positive answer. Still, I think, that it might be done, by avoiding every cause by which pressure may be exercised on the breast, and all sources of irritation; by combatting the ulcerations, as soon as they appear; and by diminishing the quantity of milk, by an appropriate regimen, and purgatives.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

S. W., æt. 42.—July 31, 1843.—I was called to this patient about two months ago, but did not take notes of her case at the time. She had irregular menstruation, albuminous leucorrhœa, much gastric derangement, general lassitude, aching limbs, especially the legs, to such a degree, towards evening, as to prevent her sitting down for any length of time, the muscles feeling as if they became rigid and contracted; hæmorrhoidal congestion, with heat and throbbing: she has distinct uterine flatulence. Has twice had rheumatic fever, viz., at the age of 25 and 28. These symptoms were relieved for the time by a brisk mercurial purge, and then by liquor potassæ, and iodide of potassium, with sarsaparilla.

The above symptoms have returned. She has copious and constant eructation, and borborygmi. The evacuations are slimy; the urine very scanty, and high-coloured; the leucorrhœa and uterine flatulence continue; complains of great irritation and prickling in the mouth and throat, the throat being very husky.

Urine, passed at night, acid, yellow, with a rose-white sediment of lithate of ammonia; sp. gr. 1037; forming a solid crystalline mass, with nitric acid, and throwing down an immense quantity of mixed phosphates by ammonia.

R. Ext. colchici acet. gr. ij.; ext. lupuli gr. vj. M. ft. pil. ij.; h. s. s.

R. Potassæ carb. gr. x.; potassæ nitrat. gr. v.; sp. ætheris nitr. ʒss.; aq. menth. pip. ʒiiss.—M. ft. haustus bis die sumendus.

Let her take a teaspoonful of carbonate of magnes. and of common salt, every morning, in a tumbler of water.

Aug. 4th.—Feels better; less flatulence; urine clearer, and more copious. She complains of a sensation of burning heat in the bowels, coming on irregularly, and seemingly connected with the presence of flatus in them; these flushings extend to the trunk generally; less uterine flatulence; evacuations scanty and frequent.

Rep. pil. colchici omni mane.—Contin. mist.

R. Pil. hydrarg. ext. hyoscyami, aa gr. v.—M. ft. pil. ij. h. s. per quatuor noctes sumendæ.

9th.—The flushing heats are still very intense; there is great heat and throbbing of rectum when the feces are passing; evacuations watery and yeasty. She has a yellow-coloured discharge, but no uterine flatus; less congestion and swelling of the vagina; much intestinal flatulence; the burning heats do not appear to accompany the movement or

expulsion of flatus so much as before; much pain of limbs.

Urine with a slight excess of urea; phosphates still very copious.

Rep. pil. colchici et mistura.

16th.—Less flatulence, and abdominal flushings: no uterine flatus until last night, when it came away suddenly, and with a distinct sound. Much rheumatic pain of limbs, which she relieved by active exercise, producing a profuse perspiration. Urine much more copious; motions dark and confined.

Urine, passed at night, yellow, acid, containing a large quantity of hexagonal scales and crystals of free lithic acid; sp. gr. 10.33. Phosphates rather copious.

R. Pil. hydrarg. gr. v.; extr. colchici acet. gr. ij.; extr. hyosc. gr. iij.—M. ft. pil. ij., h. s. s.

23rd.—Catamenia appeared on the 20th, and barely lasted three days, attended with much pain of abdomen and hips, much inward flushing, great intestinal, but no uterine, flatulence. The bowels were obstinately costive shortly before the discharge; at present, they are irritable, and the evacuations scanty. Much pain of limbs, and rheumatic pain of head: every draught of cold air seems to bring on pain and inward burning.

Urine, passed at night, orange-yellow, acid; sp. gr. 10.33; copious excess of urea; red lithic sand; phosphates natural.

R. Ext. colchici acet. gr. ij.; pulv. ipecac. gr. i.; ext. hyosc. gr. v.—M. ft. pil. ij., h. s. s.—Rep. mist. ter die.

30th.—Complains much of the burning heats both of limbs and abdomen; they seem to be produced by every draught of air, and alternate with the rheumatic pains of limbs; no uterine flatus; bowels have been actively purged for a day or two; has passed more water; tongue clean, but red: says that she is getting very thin.

Urine, passed at night, slightly acid; sp. gr. 10.26; no excess of urea; phosphates copious.

R. Potassii iodidi gr. iij.; ext. lupuli gr. v.—M. ft. pil. ij.; om. nocte sumendæ.—Pt. mistura.

Sept. 6th.—Feels better, but still complains of burning heats coming on with any draught of air; pains of limbs less severe; no uterine flatus; tongue less red; urine rather more copious: bowels more healthy; no feeling of bearing down, or vaginal congestion.

Urine, passed at night, yellow, acid; sp. gr. 10.36; urea forms a solid crystalline mass with nitric acid; crystals of free lithic acid.—Pt.

The connection between the rheumatic, or rheumatic-gouty diathesis, and those peculiar symptoms, especially in the uterine system, which I have associated with it, is remarkably well shewn in this case. The circumstance of her having twice suffered from rheumatic fever, the severe aching of the limbs, and rigidity of the muscles on remaining at rest for a time, indicate the presence of this diathesis. In addition to these symptoms, there was uterine flatulence, continued accumulation of gas in the stomach and intestines, much irritable congestion of the mucous membrane lining the throat and fauces, and the same state of congestive swelling and flushings in the vagina, which I have already shown to exist in cases of this character; a similar condition existed also in the rectum. The urine was scanty and of very high specific gravity, immensely loaded with saline ingredients, but more particularly with urea, which existed in excess to a remarkable degree. This state is very frequently connected with hæmorrhoidal congestion, which, in such cases, is probably nothing more than a gorged condition of the mucous membrane of the rectum, analogous to that peculiar swollen and turgid state of the vagina, which I have already so frequently alluded to.

We seldom meet with hæmorrhoidal congestion, without excess of lithic acid, lithate of ammonia, or of urea in the urine; and this fact seems to show, that hæmorrhoidal congestion is frequently merely a symptom, the result of mal-assimilation of the albuminous and gelatinous principles. In some cases, there is distinct evidence of this condition localising itself in some higher part of the

intestinal canal, not unfrequently about the sigmoid flexure of the colon. The patient complains of frequent attacks of burning heat in this part of the abdomen, attended with much flatulence, which, by distending the congested bowel, produces considerable irritation, and, when the fæces pass, even severe suffering. The violent flushing, and sense of heat in the bowels, which she complained of, in connection with the presence of flatulence in them, illustrate what I have now stated, and seem to prove still further the fact which I have endeavoured to establish, viz.: that, in case of mal-assimilation of the albuminous or gelatinous principles, the mucous membranes are particularly liable to migratory or metastatic attacks of congestion, of a peculiar character, which are not only accompanied by an increased secretion of mucus, but also, usually, and perhaps always, by the disengagement of more or less gas, probably nitrogen, from their surface.

The patient, whose case I have just recorded, was placed under peculiarly unfavourable circumstances to her recovery. She was a cook, living in a cold damp kitchen; seldom going out of the house, and, probably, never taking active exercise in the open air.

In looking over the report of treatment, I was inclined to ask, why I had not given her a longer course of active mercurial purges; but she had lost strength and flesh to a considerable extent, and I did not feel justified in continuing such treatment. I, therefore, ordered her to take the mixture of bicarbonate and nitrate of potash, after two of her chief meals in the day, as recommended by Dr. Prout, some acetous extract of colchicum at night, and a dose of carbonate of magnesia and common salt in the morning: washing it down with repeated sips of cold water afterwards, while she was dressing. In many of these cases, the muriate of soda has an excellent effect, not merely as an aperient, but by producing a feeling of ease and lightness, which contrasts strongly with the aching lassitude which the patient had previously experienced. The excess of urea, which had existed to so remarkable an extent, gradually diminished, and ultimately disappeared. She then went into the country, where her health improved considerably, but I understand that she relapsed much after her return to town.

Mrs. P., æt. 31, mother of five children; delicate.

May, 14th. 1844.—Complains of much pain in the pelvis, partly of a bearing down, and partly of a lancinating character; the latter increased severely by sitting down suddenly upon a hard seat, or by the passage of solid fæces. Much hæmorrhoidal congestion; albuminous leucorrhœa. Complains of rheumatic pains in all her limbs, and of sudden paroxysms of heat and throbbing in the pelvis, with sensation of much congestion, and the occasional but distinct escape of flatus from the vagina. She is also subject to sudden attacks of pain in the lower part of the sacrum and coccyx, during which the bone appears swollen and intensely tender. Liver torpid; bowels irregular; appetite feeble.

Complains of a solid and painful tumour on the right side, between the hypochondrium and hypogastrium, which is moveable and about the size of a hen's egg. It does not appear to be connected with the liver, and is too high for the ovary; this tumour of the side is always more painful shortly before a menstrual period, and better when it is just over. She has only noticed it recently, but considers herself larger on the right side of the abdomen than upon the left.

Examination per Vaginam.—Os uteri soft; cervix swollen and intensely painful to the touch, with arteries throbbing upon its surface. The upper part of the cervix is hard.

R. Extract. taraxaci, cochl. min. $\frac{1}{2}$ omni nocte ex laete. R. Acidi nitric. dil., tinct. hyoscyami, aa. ζ ij., syrupi aurant. ζ ss., infus. gentianæ co., ζ vij. M. ft. mistura cujus sumat. cochl. magna ij ter die. R. Magnesiae carb. cochl. min. j. o. m. Lotio plumbi; hirudines vj. ano.

17th.—Leeches bled well, with much relief to local symptoms. The lancinating pains ceased, as also the pain on passing fæces. Still suffers from the other symptoms of rheumatic-gouty congestion.

Rep. taraxacum. Sumat misturam solum paulo ante prandium. R. Tincturæ guaiaci moniatæ, cochl. med. ij bis die. Rep. magnes.

25th.—Feels and looks brighter and better, has still much uterine congestion. Urine depositing a considerable quantity of red lithic sediment.

Rep. taraxacum et magnesiae carb.

R. Liq. potassæ, m. x., potassæ iodidi gr. ij., coct. sarzæ co. ζ iss. M. Ft. haust. ter die sumendus.

26th.—On taking the iodine mixture, she was seized with drowsiness and sense of fulness of head, and as if her hands and arms were swollen; the tongue coated; breath offensive, with a metallic taste in the mouth. Urine, sp. gr. 10.26, excess of urea.

Hirudines vi. ano.; omit. mist. potassii iod. sarzæ.

Sumat. extracti taraxaci cochl. min. $\frac{1}{2}$ ter die.

28th. Leeches bled well, and relieved the lancinating pains and symptoms of pelvic congestion. Evacuations either very dark or very light, with a metallic taste in mouth.

R. Pil. hydrarg., ext. hyoscyami, aa. gr. v. o.

R. Ferri iodureti gr. i. Ext. lupuli gr. iv. M. ft. pil. i. semel in die cum taraxaco sumend.

Let her use copious sponging, with warm water and friction, with a salt towel every morning. Let her drink a tumbler of spring-water every morning whilst dressing.

June 1st.—The first dose of the ferri iodureti disagreed with her. She has lancinating pains, but the catamenial period is at hand. In other respects she is better, and feels much refreshed by her morning's sponging and rubbing.

R. Acidi hydrochlor. dil., acidi nitrici dil., aa. ζ ij., tinct. hyoscyami ζ ij., syrupi aurant. ζ ss., infus. gentianæ co. ζ vij., M. Ft. mistura cujus sumat cochl. mag. ij. ter die. Rep. taraxacum omni nocte.

R. Decoct. papaveris pro lotione.

7th.—Catamenia have not appeared. Symptoms of uterine congestion are better, and she feels improved, the leucorrhœal discharge is less, she still has lancinating pains now and then. A tumour in the right hypogast. and hypochond. painful; it is hard but moveable. I cannot trace it to the liver, but it may be felt deep backwards as if from the kidney. Is going to Hastings; her keep early hours. Rep. taraxacum.

R. Acidi nitrici dil. ζ ij., decoct. sarzæ co. ζ vij. M. Ft. mistura cujus sumat cochl. mag. ij. die. Let her drink a tumbler of sea-water every day.

8th.—She staid only a week or ten days at Hastings, during which the improvement in her health was most remarkable. On her return again examined the tumour, which she considered has increased in size, and is more troublesome. After a very careful examination, I have come to the conclusion that it is produced by a portion of intestine which has become sacculated and filled with scybala.

R. Liq. potassæ fl. ζ iv., extracti taraxaci ζ ss., decocti sarzæ, co. ζ vij. M. ft. mist. cujus sumat cochl. magn. ij. ter die.

July 23rd.—Symptoms threatening abortion appeared this morning, and, before I reached her, a fetus of about eleven weeks had been expelled. Much tenderness of whole abdomen, especially over the uterus; severe after-pains. Pulse 120, face very much flushed.

Let the uterus be well washed out with warm water; let her take a mild saline at short intervals, and have a large enema at night.

August 1st.—Very much improved in health. States that shortly after taking the liquor potassæ et tarax., she observed the tumour in the right side to become softer, and immediately after the abortion, a quantity of hard lumps passed from the bowels, which she compares to hard knots of oak in appearance, and the tumour disappeared forthwith, after having been there for two years. She now feels perfectly easy, and free from all pain, which had never entirely quitted her.

December 13th.—Is again complaining of the same uterine derangements as before. The tumour

the right side is as large as ever; but now it is higher up, and quite in the right hypochondrium. Acidi nitrici dil. m. xv. decoct. sarzæ co. M. ft. haust. ter die sumend. R Sodæ potass-5ii. om. mane ex aqua.

After having a large enema (3 pints) of warm water, while she lies supine with the hips raised, the shoulders low.

Dec. 20. Feels better. States that she could not feel the enema pass the sigmoid flexure, when flow along the descending portion of the colon to the transverse arch. It brought away a quantity of the same scybalous matter observed on the 1st, with much relief, and diminution in the size and hardness of the tumour.—Pt.

Although the commencement of this patient's illness prevented my observing her, during a crucial period, I may nevertheless place this under the head of dysmenorrhœa, as she had bled severely at these periods with exsudations. This is a well marked case of rheumatic-gouty affection of the uterine system nearly amounting to chronic inflammation. The bearing down, and increasing pain in the pelvis, increased by the weight of solid fæces, and by suddenly sitting down on a hard seat, betoken inflammatory action of the os and cervix uteri; the swollen and painful condition of the cervix, with arteries throbbing upon its surface, confirm this view.—The rheumatic pains in the limbs, and uterine flatulence, indicate also the character of the affection.

Consider the attack of pain and swelling of the lower part of the sacrum, or at best of the soft parts immediately surrounding it, to have been also depending on this cause.

The effects of the leeches applied to the anus, in relieving the symptoms of uterine congestion, were striking, and a favorable improvement took place under the use of guaiacum. I then attempted to give her the iodide of potassium in sarsaparilla, entirely without success, as I found that she could bear no form or dose of iodine whatever, but its producing symptoms akin to those of strychnine. The leeches were again applied, and, after one more fruitless attempt to make the system bear a preparation of iodine, I was compelled to return to the use of an alterative tonic mixture, the taraxacum at night. The general health continued to improve, and about this time she became pregnant. She now, at my request, went to the country for a short time, and although her stay, which was much shorter than I intended, yet her improvement was most striking and satisfactory. The immediate change, which followed her removal from home, first made me suspect the nature of the disease on which her complaints depended, and my consideration convince me, that the situation in which she lives, viz. a flat, low, clayey district, and in the immediate neighbourhood of a large town, has much to do with her state of health.

The tumour in the right hypochondrium was a source of much puzzle to me at first; and it was not until after the most careful and repeated examination, that I came to what proved a correct diagnosis. For some time (see June 7), I felt inclined to view it as a swelling connected with the right ovary; but further examination proved this opinion to be incorrect.

I think that enemata, in the extent to which they are ordinarily administered, are rarely of any use than merely to clear out the lower portion of the rectum. It is seldom that an enema exceeds a pint in quantity, and yet if we wish to produce a copious and thorough evacuation of the large intestines, a much greater quantity is required. I think that we seldom succeed in passing the sigmoid flexure with less than a quart of fluid, and, if thrown up gradually, can be borne without any inconvenience. The effects are very different; for not only are the solid contents of the rectum discharged, but, after a short interval, copious evacuations follow, as if they had been the result of a smart laxative. In the present case, there can be no doubt, that it actually passed along the transverse arch of the colon to the right hypochondrium, not merely from the quantity which was thrown up (nearly 4 pints), but also from the alteration in the size and hardness of the tumour, and the appearance of those peculiar scy-

balous evacuations, which had been noticed on a similar occasion before.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c.

Pus has been repeatedly analysed. According to Chevallier, (1) it consists, in its healthy state,—of water; albumen; fatty matter; muriates of potash and soda; ammonia, a trace; sulphates, a trace; and gelatine.

The analysis of Home appears to prove, "that pus is composed of the same materials with the blood and animal jelly; and so far they are similar, the same substances being produced from both." (2)

Shwiltgus analysed pus, and found it to contain albumen, extractive matter, a substance like adipocire, soda, muriate of soda, phosphate of lime, and other salts. (3)

Dr. Pearson experimented largely upon pus, and concluded that it consists of three distinct substances, viz. :—

1. An animal oxide, which, among other properties, is distinguished by its being white, opaque, smooth, of the form of fine curdy particles in water; not dissoluble in less than 1000 cold waters; not coagulable into one mass like the serum of the blood, by caloric, alcohol, &c.; only rendered more curdy by water of 160° to 170°; but readily diffusible.

2. A limpid fluid resembling serum of blood, in its impregnations, coagulability by caloric, alcohol, &c., in which the opaque oxide is diffusible but not dissoluble, and which is specifically lighter than that oxide.

3. Innumerable spherical particles, visible only by the microscope, in this opaque oxide, and in small number in the limpid fluid; not coagulable by any temperature to which hitherto exposed, and not destructible by many things which combine with or destroy the opaque oxide: and these globules are specifically heavier than water. (4)

Vogel states the following to be the constituents of pus :—

1. Pus corpuscles.
2. Serum, consisting of
 - I. Water,
 - II. Animal substances, viz.:
 - a. Fat,
 - b. Osmazome,
 - c. Albumen in solution.

3. Saline matters—Sulphates and hydrochlorates of lime, potash, soda, ammonia, and magnesia—constantly; phosphates, lactates, acetates, &c.—occasionally.

4. Silica—Oxide of iron.

An analysis of pus by Martins furnished the following results :

1. Bases—Lime, potash, soda, magnesia, ammonia.
 2. Acids—Phosphoric, hydrochloric, lactic.
 3. Indifferent matters—Fat, albumen, osmazome, gelatine, water.
- According to Koch's analysis, pus consists of :
1. Water.
 2. A peculiar substance (*purium*) contained in the globules.
 3. Albumen.
 4. Mucus.
 5. Osmazome.

6. Chloride of sodium, phosphate of lime, carbonate of potash (soda?), sulphate of lime, carbonate of lime, phosphate of magnesia, oxide of iron, silica.

Pus, from the uterus of a mare, yielded, on analysis by Gobel :

Albumen 7.20

Uncoagulable gelatiniform matter 94
Sulphate, and lactate (?) of potash, muriate of soda, phosphate of lime, magnesia, protoxide of iron, silica 35
Water 91.33

Pus, from the frontal sinus of a mule, was found by Dumas to consist of :

Water 820.0
Albumen 165.0
Animal matter, soluble in alcohol and water, (osmazome?), phosphates, hydrochlorates, free lactic acid 12.5

M.M. Wilhelm and Martins submitted the pus of empyema to a careful analysis, and the following results were obtained :—

"It was destitute of smell, thick in its consistence, and of a dirty greenish-gray colour. 1. Litmus paper was slightly reddened.

2. When agitated with ether, the colour became darker, and the ether assumed a yellowish hue.

3. When mixed with absolute alcohol, many fine white flocks separated, which could not be again taken up by agitation. The alcoholic liquid gradually assumed a yellowish colour.

4. When dropped into water, it sank to the bottom, and by agitation it constituted a muddy liquid.

5. Being mixed with an excess of caustic ammonia, it was changed into a muddy liquid, from which white flocks were precipitated. The supernatant liquid was greenish-yellow.

6. An excess of acetic acid gave a muddy liquid having a peach blossom colour.

7. Nitric acid, added in excess, gave a muddy yellowish-green liquid.

8. When heated in a platinum spoon, it swelled very much. When evaporated to dryness, it left a black residue, and gave out a smell like that of burning flesh.

An ethereal solution of the pus thus answered to reagents.

1. Caustic ammonia threw down white flocks.
2. Nitric acid, no apparent change.
3. Chloride of platinum threw down yellowish flocks.

4. Acetate of silver, copious white flocks, redissolved by the addition of ammonia.

5. Chloride of gold threw down a yellowish precipitate.

6. Nitrated suboxide of mercury threw down an abundant yellowish-white precipitate in flocks.

7. Neutral persulphate of iron, a reddish-yellow precipitate.

8. Acetate of lead, a copious precipitate in white flocks.

9. Nitrate of barytes, a white precipitate.

10. Tincture of nut-galls, a very copious reddish-yellow precipitate.

11. Isinglass produced no change.

It was further found to contain lime, magnesia, potash, and soda, with phosphoric, muriatic, and lactic acids.

"The matter, not removed by the ether, contained fat, gelatine, and some albumen." (5.)

Wood evaporated 142 grains of pus to dryness. The residue weighed 20 grains. It had the following properties :—

	Grains.
5.56 grains } Soluble in alcohol	1.06
soluble in water. } Insoluble in alcohol ...	4.50
14.44 grains in- } Soluble in alcohol	1.55
soluble in water } Insoluble { grains. } Sol. in ether. 0.22	
alcohol. { 12.89 } Insol. in do. 12.67	
	20.00

The matter, separated by the alcohol from the aqueous extract, weighing 1.06 grains, was thus affected by reagents :—Corrosive sublimate produced a large white precipitate. Tincture of galls made the liquor cloudy; afterwards, large flocculi arose, of a tawny colour, which eventually deposited. Triacetate of lead produced a large, heavy, white precipitate. Nitrate of mercury, an abundant white turbidity. Nitrate of silver, a white sediment, which after some hours became violet coloured. Chloride of platinum, a fawn coloured turbidity. Sulphate of copper, a small

(5.) Gerber's General Anatomy.

- (1.) Journal de Pharmacie, Avr. 1819, p. 176.
- (2.) Dissertation on the Properties of Pus, p. 67.
- (3.) Pinel Nosograph. Philos., tom 2, p. 10.
- (4.) Philos. Trans. 1810, part 1, pp. 294-317.

blue precipitate. From these reactions he concluded, that the solution consisted of osmazome, with muriate of soda, and salts of potass.

That portion of the aqueous extract, not taken up by the alcohol, was next examined. Its weight was 4.50 grains. Part of it, only, formed a clear solution, there being a flocculent mass (albumen coagulated by the spirit); the fluid was first examined. Corrosive sublimate produced a slight turbidity. Infusion of galls, a very slight cloudiness. Triacetate of lead, an abundant white sediment. Nitrate of mercury, a slight cloudiness, succeeded by numerous flocculi. Nitrate of silver, and chloride of platinum, occasioned less sediment than was produced in the spirituous solution. Sulphate of copper produced no effect. It was hence inferred, that the albumen had been coagulated by the alcohol, and that there remained in solution some animal substance difficult to be defined; the reactions also proved that there was something present besides—*ptyalin*. (?) The mass had the tenacity of gluten; it was viscid, and could be drawn into threads. There were also the same salts as in the alcoholic solution.

The spirituous solution of the mass, which was insoluble in water (see table), was then examined. Corrosive sublimate produced a very slight turbidity. Tincture of galls, a sediment. Nitrate of mercury, an abundant white precipitate. This he regarded as oily matter, with traces of animal matters.

Finally, he inspected the substance which was insoluble both in alcohol and water (last in table.) It was a white, pulverulent, and insipid mass. When acted upon by ether, 0.22 of a grain were dissolved. This was not soluble in caustic potass, and it was inferred to be cholestérine.

To ascertain what proportion the albumen bore to the entire pus, Wood made a further analysis. He experimented upon 70 grains. This quantity was treated with cold distilled water, and, after agitation for some time, the fluid was filtered. The filtered liquid was limpid, and of a straw colour, and, when heated, many white flocks swam in a pellucid fluid. These were collected on a filter, and, after washing and drying, they weighed 1.75 grains. The liquor, having been evaporated, gave a residue of 2.19 grains; of which 0.75 grains were soluble in alcohol, and the remaining portion, 1.44 grains, were soluble only in water.

The original part, not soluble in water, which weighed 6.90 grains, gave a solution to spirit of wine which contained 0.82 grains. The residuum, subsequently treated with ether, gave 0.12 of a grain. There consequently remained a mass, weighing 5.96 grains.

When the residue, which was insoluble in ether, alcohol, and water, was placed in peroxide of hydrogen, a great quantity of oxygen was liberated.

The 70 grains of pus, therefore, contained:

Matter soluble in ether and insoluble in caustic potass (cholestérine).....	0.12
Matter soluble in alcohol (oily matter)	0.82
Matter soluble in cold alcohol and in water (osmazome, with various salts).....	0.75
Matter soluble in water, but insoluble in alcohol (albumen, (6) animal matter, and salts).....	3.19
Matter insoluble in ether, alcohol, and water (fibrous matter, iron, sulphur)	5.96

Dry mass from 70 grains of pus.. 10.84

In 100 parts of pus, taken from the knee of a man who had died of erysipelas, Wood found:

Matter soluble in ether (cholestérine)	3.57
Matter soluble in alcohol, and a small part soluble in water (oily matter and salts of soda and potass)	19.89
Matter soluble in cold water (muriate of soda and animal matter)	27.06
Matter soluble in boiling water, but not in warm water (matter like gluten).....	13.60

(6.) The observations of Wood, concerning the proportion of albumen in pus, do not correspond with those more lately made by M.M. Darcet and Conte, who agree that this fluid contains a small amount of fibrine compared with albumen. See Guy's Hospital Reports, Oct. 1843, p. 440.

Matter neither soluble in ether, alcohol, nor water (fibrous matter, albumen (?) phosphate of lime, &c.)..... 35.88

(7) 100.00

Güterboch analysed pus, obtained from a mammary abscess, and found it to consist of:

Water	86.1
Fatty matter soluble only in hot alcohol....	1.6
Matters soluble in cold alcohol (fat and osmazome)	4.3
Matters soluble neither in hot nor cold alcohol (albumen, pyine, globuline, and granules of pus).....	7.4
Loss	0.6

100.0

The saline residue amounted to 8, of which 7 were soluble in water, and consisted of sulphate, phosphate, muriate, and carbonate—of soda, potass, and lime. The remaining 1 was soluble in nitric acid, and was composed of phosphate and carbonate of magnesia and lime, with a trace of iron. (8)

Dr. Davy states, that pus consists of:

Fatty matter,	} Proportions not determined.
Albumen,	
Osmazome,	
Saline matter,	

M. Bonnet found the composition of pus to be: water, soluble albumen, aqueous and alcoholic extracts of meat, earthy salts, soluble salts (such as the hydrochlorates of soda and ammonia,) fatty matter, and fibrin; in short, all the elements of the blood except the colouring matter.

According to Dr. Golding Bird's analysis, the constituents of pus are:

Water	898.00
Aqueous extract (alkaline lactates)	8.00
Alcoholic extract (fatty matter)	5.00
Chlorides of sodium and potassium, with alkaline carbonates resulting from the decomposition of lactates	5.75
Albumen	75.75
Phosphates of lime and oxide of iron, with free iron	7.50

1000.00

Simon made two analyses of pus; the one of pus from the urinary bladder of a female,—the other of pus from a suppurating lymphatic gland of a horse. These, respectively, consisted of:

Fatty matter and cholestérine	5.2
Albumen and subphosphate of lime.....	40.2
Pyine, globuline, and extractive matter ..	17.0
Hematine, urea, and alcoholic extract....	10.6
Diluted spirituous extract, marine salt, &c.	1.3
Aqueous extract	13.8
Water	911.9

1000.0

Fatty matter and cholestérine	1.68
Albumen and subphosphate of lime	17.64
Pyine, globuline, and extractive matter ..	
Hematine, urea, and alcoholic extract	
Diluted spirituous extract, marine salt, &c.	2.94
Aqueous extract	1.26
Water	976.00

(To be continued.)

MAGIC, MESMERISM, HYPNOTISM, &c., HISTORICALLY AND PHYSIOLOGICALLY CONSIDERED.

By JAMES BRAID, (of Manchester,) M.R.C.S.E.

(Continued from page 273.)

I shall now bring this article to a close, by giving a condensed periscope of my views, both as to the nature and cause of the beneficial results of the hypnotic treatment.

A state of health may be defined thus: the harmonious and comfortable performance of all the functions of the various organs and tissues of

(7.) Wood, de Puris Natura atque Formatione. Berol. 1837, p. 24 et ante.

(8.) Güterboch de Pure et Granulatione. Berol. 1837, pp. 12-19.

an organized and living being. To ensure there is required the subsistence of a certain relation between the nervous and circulating systems and the solids, both as regards the quantity, quality, force and velocity, of the fluids various organs and tissues being thereby nourished and supported in their integrity of structure, whilst comfortably and efficiently forming their respective functions. Any deviation from this, is disorder, or disease. In extent and degree of the deviation merely indicates *function*, it is called *disorder*, but if, to *function*, is superadded *change of structure* or *derangement*, it is called *disease*. Long-continued *function* derangement tends to induce *disease* in the responding organ or tissue.

As the blood is the medium through which nutrition of organs and tissues, and all their functions, are carried on, and as it is in the capillary vessels that all these changes take place, it is obvious, that any remarkable change, either in quality, or quantity, the velocity, or force of tension, in respect to the blood in the capillaries, must be followed by a corresponding change in the system at large, or in any particular organ or point, to which, by concurring circumstances has been more particularly directed. If we therefore, regulate the quantity, or quality, velocity, or force of the blood, locally or generally, we ought to be able thus to *excite* or *depress* *function* in a corresponding degree, and place the patient under more favourable circumstances for a restoration to healthy function. Now, the principle upon which I act, by regulating the velocity and force of the blood, rendering it, more or less, highly arterialised, stimulating, as circumstances seem to indicate

I have seen no reason to believe, that either hypnotism or mesmerism adds a single *new* faculty, either mental or physical, to the subject; but their influence, we acquire the power of throwing them into *new ratios*, and producing very different results from the normal condition, by *exciting* or *depressing* *natural functions*, in an extraordinary degree. This is accomplished chiefly through the *law of concentration*, aided by the state of the *piration and circulation*; increasing or diminishing the *force and velocity* of the *circulation*, as we by *altering the quality* of the *blood*, by rendering it either *more or less arterialised* than in the normal condition, and consequently capable of *exciting* or *depressing function* in a corresponding degree. There is no difficulty in demonstrating, that we have power of doing this, to the satisfaction of any intelligent and unprejudiced person.

My great object in this investigation has been to ascertain what is real, and of practical value, and to reduce the whole to a few general and fundamental laws, capable of practical application to the cure of disease, or to illustrate peculiar phenomena. These laws are so few, and so simple, that I feel convinced they only require to be fully contemplated by any intelligent and unprejudiced person, to be admitted at once, and applied in the cure of disease, with the same ease and certainty as our most simple and approved methods of treatment. Thus, by inducing the *low circulation* or *suppressed respiration* (see my Treatise on Hypnotism, which explains the modes of accomplishing this, and how to apply it in various diseases,) the blood, being thus *insufficiently arterialised*, acts as a *narcotic*, and depresses all the powers **BELOW THE** OF NATURAL SLEEP; and, if the attention also been fixed in some particular train, even other function becomes deadened in an extraordinary degree, so that severe inflictions and operations may now be borne without the patient evincing any apparent consciousness of pain; and if questioned when he awakes, will he remember having felt any pain. The patient is reduced, it were, to a state of *temporary hybernation*.

But, let the *circulation and respiration* be *increased*, so that the brain and nervous system are *excited by an increased activity of circulation* of *inordinately stimulating* or *highly arterialised blood*, and we thus induce a condition as remarkable for *exaltation of function*, or *excitement*, as the former was remarkable for *depression*. Moreover, from the habit of abstraction, or concentration of attention, superinduced by the process of hyp-

ing, there seems not only to result a *general state of quickness of perception*, but also a *tendency to absolute concentration of the attention on whatever idea the mind is directed to*. In consequence of this, by directing the ATTENTION to any particular function of action, mental or physical, the whole force of the *vis nervosa* seems to be concentrated on THAT FUNCTION OR ACTION; and hence it is manifested with corresponding exalted energy.

Whilst I candidly avow my disbelief in the existence of any magnetic fluid, or special influence, arising from the operator to the subject, such as the mesmerists allege to be the cause of the sleep, and general phenomena, I have already admitted that varieties in the phenomena may be produced by the passes and manifestations. I shall now, therefore, briefly explain my views of the manner in which these effects are produced.

The efficacy of the mesmeric passes I consider arise from the mechanical impression, that of heat and cold, from the current of air, calling the attention to parts, and withdrawing it from others, and thus modifying physical action, sensation, and regulation. There is, moreover, an electrical condition brought into play, by the manipulations and passes, which may also exercise considerable influence in modifying physical action. It is well established fact, that a change in the electrical polarity necessarily takes place in all bodies inanimate or inanimate, by proximity or contact with other bodies, and in this manner, as well as by the mere mechanical one of contact, succussion of the air, heat and cold, and excited attention from these causes, physical action may be still farther influenced. For these purposes, therefore, I frequently resort both to passes and manipulations, never with the notion of transmitting, through the hands, any occult influence from myself to the patient. It is also highly probable, that additional mental impression might be made on some patients, by investing the subject in mystery, and adding them to believe, that there is some occult or special influence at work, regulated by particular manœuvres; but, as I do not believe in the existence of any such special influence, I could not honestly adopt such a course, and, therefore, prefer acting according to the more simple suggestions which have occurred to my own mind on the subject. My notion of producing curative effects, by altering the quality and quantity of the blood, circulating through any part of the body, at a given time, seems to have been entirely overlooked by the mesmerists. It has not, at least, been a leading and fundamental part of their modes of procedure, as it has with me; but I feel assured, that, until it is, they very materially circumscribe the efficacy of their art and science. By these means, we can exercise a positive and powerful physical impression, independently of any mere mental or moral influence.

To a certain extent, this fact of excited attention, altering function, is realized even in the waking condition, as is manifest by the rush of milk to the breast of the nurse on seeing, hearing, or even thinking of her child; the flow of saliva, from the mouth, or smell, or thought of savoury food; and the tendency to perform other functions, from mental impressions, associated with them, arising in the mind, by whatever means excited. In the year 1838, some very clever papers appeared in the *Medical Gazette*, in opposition to animal magnetism, the effects of "*attention strongly directed to any part of the body, especially if something is expected to occur*," which the writer so forcibly put forward, in refutation of the notion, that the symptoms enumerated resulted from "*a magnetic fluid, or special influence*," however well calculated to refute the theory of the mesmerists, is one of the strongest corroborations which could be adduced in support of hypnotism, and the application of this method of cure, in the treatment of disease. Hypnotism merely enables us to controul and direct the natural functions, either exciting or depressing them, as required, with more certainty and intensity than in the normal waking condition.

It might further illustrate the power of the mind in influencing function: by shedding tears from grief; blushing from shame; pallor and palpitation from fear; fainting from disagreeable sights, sounds, or even the thoughts of such; the effects

of painful intelligence, in instantly destroying the keenest appetite; excessive joy, or sorrow, or anger, suddenly producing most grave diseases, mental or physical, or even death. I might illustrate it further, by the history of the "*Bread Pills*," and the extraordinary effects which resulted from their use. I might also adduce the cures effected by Perkins' metallic tractors. In both these latter instances, the effects, no doubt, arose from the *mental impression altering both the sensation and circulation in the morbid parts, from excited attention, expectation, and hope*, and not merely from the vague and incomprehensible term—the imagination. Dr. Haygarth's experiments were, no doubt, well calculated to prove, that the effects did not depend upon any *magnetic influence inherent in the instruments*; but, in his zeal for science, he seemed altogether reckless of the claims of humanity. He succeeded in exploding a method of cure, which had undoubtedly been successful in many cases which had resisted ordinary medical aid, without substituting a better in its place; thus, he complacently sacrificed the cause of humanity at the shrine of science.

It is worthy of enquiry, how much of the benefits, derived during ordinary treatment, may be due directly to the effects of the medicine, and how much indirectly, by its directing attention to, or withdrawing it from, the seat of morbid action. I shall not, however, discuss the subject farther, at present, than to remark, that a mental impression is necessarily brought into operation whenever any substance is taken, supposed to be of a medicinal quality, and it will either excite or depress the function of the morbid part (to or from which the mind is naturally directed), according to circumstances, independently of the mere physical influence which would otherwise ensue from the particular medicine, supposing the patient had not been aware he had taken any medicinal substance.

The power of imagination and excited attention, in producing a specific influence in a healthy person, was beautifully illustrated in the following case:—Having read an account of some extraordinary discovery in America, of certain medicines which could manifest their influence through glass, that is, that, by taking hold of a phial, in which the medicine was contained, it would impart its peculiar medicinal virtues through the closed phial;—having read this account, I named it to certain parties, who scouted the idea as preposterous. I told them that I did not doubt the fact of such physical effects resulting by such means, but added, that I very strongly suspected the correctness of the philosophy of the explanation. I was inclined to believe it quite possible that it arose from vivid imagination, attention, and expectation, exciting the particular function to be acted on. This they scouted as equally preposterous, which induced me to repeat my conviction of the possibility of such a result taking place (although I had never tried it), and I also proposed to test it forthwith, in their presence. With this view, I requested an ounce phial to be brought to me, filled with common water, coloured with syrup of poppies, which I meant to use for the purpose of acting as an emetic. We then repaired to a room, where there was a female friend, who knew nothing of our intentions. I there commenced talking to the gentlemen, but so that she could hear the conversation, about the remarkable discovery of this extraordinary medium, which could act as an emetic through the glass. I then requested this lady to oblige me by trying its effects. She was very unwilling to encounter it, but at length was prevailed on to do so, by my assuring her it would much oblige me, and as I was most anxious to know the truth, and we could all place the most implicit confidence in her veracity. She very soon stated, that it gave her an unpleasant feeling, extending up the arm. I encouraged her to persevere, assuring her, that it would only make her sick, and added, that when it got as high as the shoulder, it would suddenly dart across the chest, when it would induce vomiting. When the feeling had extended as far as the elbow, we observed her become as pale as ashes, and from this it speedily mounted to the shoulder, and across the chest, and was evidently about to be followed by vomiting, had I not suddenly put an end to the

experiment. This I did by desiring her to take another phial into the other hand, which would neutralise the effects of the emetic phial. The result was equally successful. The experiment did not last more than two or three minutes. I repeated the experiment a second time, with the same patient, with like results.

And, now, for the result of a similar experiment during hypnotism. Observing that my patient was unusually flushed, and having been told, before she went to sleep, that her bowels had been very confined, not moved that day, whilst she was asleep, the idea occurred to me, to try the effect of calling the attention to the function of the bowels, by giving her a table-spoonful of water to drink, at the same time stating aloud that it would cause the bowels to move IN FIVE MINUTES. Before the expiration of the five minutes, I awoke her, so as to have this impression on her mind. She instantly repaired ad cloacina, and had a plentiful evacuation. I wished to have had ocular demonstration of this result, by examining the stool, but circumstances prevented. I, therefore, put her asleep again, and repeated the dose of water with the like prediction. I then requested the patient's mother to place an empty vessel in her room, as I wished to examine the evacuation. At the end of five minutes I aroused her, when she repaired to her chamber, and I had ocular demonstration of the immediate efficacy of the experiment. During the same afternoon, she had three loose stools, and the day after three or four more, with great relief, and she has remained quite well ever since, about two months.

I have realised similar results in the only other hypnotic case in which I have as yet tried it. A mouthful of beer, or simply drawing the hand over the bowels, accompanied with the like audible predication, to draw the ATTENTION to the function of the bowels, never failed, for eleven times in succession, to be followed by a stool before I left the house. This patient is twelve years of age, and her mother, as well as myself, examined the evacuation on each occasion. A mouthful of water had the same effect. Here then is the solution of the supposed efficacy of mesmerised water, for I used no such process with it: it is the moral impression, altering function, from excited attention and belief; or by withdrawing and arresting it in some other direction, thus depressing function.

The effects of excited attention and expectation, altering both sensation and circulation, and consequently the function of parts, affords a better explanation than any I have yet seen adduced, as to the cures effected during homœopathic treatment. By a moral impression acting on the physical frame, as I have explained, cures may, no doubt, be effected; but I cannot imagine how any man, with a correct knowledge of the powers of numbers, can believe that their infinitesimal doses of medicines can, per se, on physical principles only, do either good or harm.

The same principle seems to account for what most medical men must have remarked with surprise, the remarkable revolutions which have taken place at different times as to the estimate of the virtues and powers of particular medicines. At one period, an universal favourite, supposed to be possessed of every valuable quality; anon, discredited and forgotten, as utterly worthless; again, rising into meridian power and splendour, to be followed by another decadence, in due time. All this arises very naturally in the following manner. A zealous and sanguine professor prescribes it, with high confidence of its potency for good, and patients, who are generally acute physicians, as regards their medical attendants, catch the inspiration, and the results are most propitious. Every successful result exalts the confidence of the physician and patient; and others, prescribing with confidence, realise equally favourable results, and thus the remedy attains the culminating point of its fame and favour.

Others, however, follow in their wake, but neither with the same high hopes nor desire that they should find the discovery of some rival practitioner deserving such laudation. The patients discern the doubtful omen portrayed in the words, looks, and manner, of the attendant; the effects are correspondingly less salutary, and every suc-

ceeding ease makes a decadence in the reputation of the once fashionable and omnipotent remedy. Others espouse this view, and thus, *through their combined moral impressions, they subvert the natural tendency of the remedy, and prevent the good which should legitimately have attached to it, independently of either enthusiasm, or envy, or caprice.* It thus slumbers for a time in forgetfulness, to give place to another rival, which is now in the ascendant, until some other zealous patron at length takes the former under his special favour, and by a similar process, as at first, it once more rises to the highest honours, but only to sink again, in its turn, to unmerited neglect.

Every one who has carefully watched the influence of moral impressions, on the physical frame, must feel convinced that the want of well-directed moral impressions may cause a failure, in what were otherwise the best directed means, and, on the other hand, that well-directed moral impressions may have rendered the result satisfactory, when the physical means were very inadequate. In proof of this, I would simply refer to the great improvement in the modern mode of treating insane patients. It is, no doubt, the high confidence with which they are taken, which has given efficacy to certain nostrums, which were, otherwise, more calculated to have done harm than good to the patients.

The cures, effected by oracular aid, admit of similar explanation. It is well known that sick persons consulted the ancient oracles for the restoration of their health; that, sometimes, after certain preparations, they were made to sleep in the temples, when the presiding genius of the shrine revealed to them the appropriate remedies in dreams. On other occasions, they attained this information by proxy, the priest or priestesses falling asleep in the temples, and thus attaining the requisite knowledge in a dream inspired by the presiding deity. It appears that these inspired prescriptions were not infallible, however, but, when successful, the remedy and cure were inscribed on a votive tablet, and hung up in the temple, as a memorial of such divine power. Now, this is very much the same sort of process as is followed by some of the mesmerists of the present day. Nor do I at all doubt but the moral impression may be quite adequate to the cure of many affections, on the principles I have explained above, even granting the remedies applied to be wholly inert; just as the relics of saints and shrines, the royal touch, and seasons of intense public excitement, have proved most remarkably efficient, for a time, in curing diseases which had resisted every ordinary remedy. Charms, spells, and amulets, operate in the same manner, and also by sustaining the confidence and hope of the votaries of such practices.

The magnetic, or sympathetic cure of wounds, in which the ointment was applied to the weapon which inflicted the injury, instead of being applied to the wound itself, might, to a certain extent, operate in this manner also; but its chief efficacy was of a negative character. It allowed the powers of nature to have the opportunity of healing the wounds by the *first intention*, as is the approved method in modern surgery, instead of cramming them full of all sorts of irritating substances, as was the general practice in olden times. Thus, one of the greatest improvements in surgery was arrived at, through following the suggestions arising out of a most fanciful and erroneous theory.

Amidst the discordant notions which prevail amongst the inhabitants of different countries, as to their modes of worshipping the Deity, it is curious to observe the unanimity which prevails in their modes of worshipping Arimanes. Thus, in the oriental regions, including Hindostan, Egypt, Greece, the whole of continental Europe and Great Britain, the same practice has prevailed of making images of earth, clay, and wax, and such like, of persons whom they wished, by spells and enchantments, to torment and destroy. By certain processes, and inflicting certain injuries on the images, they imagined the party represented would sustain the like tortures as if they had been inflicted on his own person; and thus they could glut their fiendish propensities, in exposing the unhappy wight to the most agonising tortures,

and even to death itself without personal hazard. In Hindostan, they seem to conduct this practice with unusual precision, for they endeavour, if possible, to procure the exact admeasurements of the various parts of their intended victim, and fashion the image according to these proportions, which they allege gives greater efficacy to their ingenious modes of torturing the victims. The horrid rites which they go through, in order to effect their purposes on some occasions, are enough to make one shudder to contemplate, as capable of being entertained by human beings towards others of the same species. Whilst I do not believe the Almighty would grant such malignant spirits the power they allege themselves to possess over their fellow mortals, by such secret and fiendish devices, I have no doubt, whatever, that they might thus torture to death many credulous people, provided the latter were informed of the scenes enacting, and were, at the same time, thoroughly penetrated with the conviction that the witches, wizards, or necromancers, really possessed such powers. Thus, conveying intelligence to such person that they had got his or her image in wax, and that, at a certain time, they would begin to torment and gradually melt it, and that, at the expiration of a stipulated period, it would be entirely consumed, *when the victim would also inevitably expire*,—I have no doubt, whatever, but the mental impression might so act on the physical frame of a sensitive and credulous person, as to end tragically as predicted. In fact, this is realised by the negroes who pine, and wither, and die, under the ban of the Obi woman; and by those, in our own country, who believe themselves put into the famous cursing wells, where, by certain orgies, they are consigned to the tender mercies of the infernal Gods. They are by some called "wishing wells," and it is believed that whoever has been consigned to such malediction is fated to perish, unless by propitiating the offended party, who may, in that case, withdraw the name from the list of the doomed, or else by presenting a higher bribe to the Heeate who presides over the said well, so as to induce her to establish a counter spell. I know a person who was lately applied to, for the purpose of aiding in the extrication of a friend from a wishing well in Wales.

Whilst I admit so much as possible, on the principles explained, I do not believe that throwing a number of images into the sea, together with a Baptized cat to whose four feet as many human bones were tied, could have agitated the whole German ocean, and raised the dreadful storm of wind and waves which overtook the bride of King James the Sixth, on her marriage trip, and which, from the genius of the times, issued in the destruction of so many witches both in Scotland and Denmark. It is highly probable, however, that Admiral Munch's superstitious belief, in such powers, might so infect the seamen, as to paralyse their natural energies, and thus cause the loss of life which might otherwise have been saved during that tempestuous voyage. The admiral, believed the whole to have originated from an unlucky "kuff on the ear" which he had given to the husband of a celebrated Danish witch, which his loving wife had determined to avenge in this signal manner, calling to her friendly aid, a host of her own craft in Denmark, Scotland, and Norway. From their own confessions, it would appear the witches had the will, if they had not the power, to have destroyed the betrothed Queen.

The confession of the so-called witches, to the commission even of impossible crimes, has excited some speculation. No doubt some were monomaniacs, who, like others of the same class in every age, instantly imagine themselves the leading characters in any striking event. The greater the excitement caused by it, the more resolute will they be to maintain their important position. There were many others, however, who seem to have been so cruelly tortured, as to have been unconscious of what they said; and others who confessed their guilt, as the only and shortest mode of terminating their miserable existence.

Let me not be misunderstood, however, as undervaluing, by these remarks, the legitimate and positive physical and physiological efficacy of

many medicines in the cure of disease. My sole object is to call attention to the vast importance of moral AS WELL AS PHYSICAL impressions being taken into account, and to prove how much MORE is likely to be achieved by BOTH BEING COMBINED AND WELL DIRECTED, than by confining our resources to EITHER SINGLY. As stated in my reply to the Rev. H. M'Neile's "Satanic Agency" sermon, in which he said of the medical profession: "it is a very unsuitable profession for the examination of such a matter as this. If there be anything connected with the spiritual world in it, it is wholly out of the cognizance of those gentlemen, whose whole professional study is connected with matter." After stating that such remarks only proved how little he knew of medical men or of their habits and pursuits, I added: "I must take leave to tell you, that the medical man who has not studied the laws of mind as well as of matter, and how they act and react on each other, is very unfit for practising his profession, either with credit to himself or advantage to his patients. Let such individual only attend to these studies, and the advantages will soon become apparent, both to himself and others."

The following remarks, by Professor Alison, are very much in point: "however minutely the physiologist may have examined the anatomy of the brain and nerves; and, however accurately he may have noted the effects of injuries of these parts, in experiments on animals, and in observations on disease; still, unless he has carefully considered and generalized the MENTAL PART OF THE PROCESSES, of which the brain and nerves are the instruments, HE HAS DONE BUT HALF HIS WORK."

In support of these views, I beg to quote some admirable remarks from your own columns. "The generality of medical men attach too exclusive an importance to the mere drug. They deal with people as if there were nothing psychical in them. If their diagnosis be correct, they write their prescription, and there is a stop to their operations. If part of the frame be diseased, there is no reason why the whole should not combine against the enemy. Faith saves physically as well as morally; and to lull the trembling mind to ease, is to stay the heart's rapid pulsations, to allay the blood's fever, and to stop life in its quickening flight, with strengthened wings, from the human tenement."

With a clear comprehension of these physiological views, which, I feel confident, are pretty correct, nothing can be easier, for a person of ordinary tact and discernment, than to apply them so as to rectify certain pathological conditions. Thus, if the object is to stimulate a sluggish function, excite the quickened circulation and respiration; and then, by directing the attention to the particular part, or organ, or function, a greatly excited condition of the function of the respective organ will be the result. On the contrary, if the object is to allay over-excitement, we must then produce the general depressing condition, and then, also, direct the attention to some OPPOSITE FUNCTION, OR PART, from that which we wish to depress.

In ordinary practice, we aim at the same end by different means. Thus, we give digitalis, tart. ant. &c., to lower the force of the circulation; and we bleed, also, for the same purpose, and likewise to render the blood less stimulating, by diminishing the blood globules, or carriers of oxygen, and thus reduce over-excited function. We, also, apply blisters, counter-irritation in various ways, and other means, to produce revulsion. We, likewise, exhibit stimulants to rouse languid action, general or local, as the case may be. Hypnotism, however, can attain the same ends, in many cases, more pleasantly, speedily, and safely, than can be accomplished by these other means; and, moreover, as already remarked, it is strikingly successful in a class of painful nervous disorders, in which ordinary treatment is of little or no avail. How hypnotism acts, in such cases, it may be difficult to explain; but it may justly be considered to act as an alterative, producing a new action, during which the morbid action is suspended, which affords an opportunity for a natural and healthy action to be resumed, when the remedy is suspended, and that without any marked physical operation, or evacuation. This is all which can be said as to the

curative operation of most medicines denominated *alteratives*.

Hypnotism seems to act powerfully on the nervous and capillary systems; and, in an extraordinary manner, as regards the function of the skin. Perspiration is generally excited, even in a few minutes, in cases which have resisted every other mode of treatment resorted to for that purpose.

(To be concluded in the next number; which will also contain a report of the author's personal experience of its efficacy in curing a violent rheumatic affection, from which he suffered last September.)

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

CEPHALOTOMATOUS TUMOUR IN THE ABDOMEN.

—Mr. Montgomery attended a child, five years of age, who had a tumour form in the abdomen, in consequence of injury, and which continued to increase, until the little patient died. On examination of the body after death, an immense encysted tumour of an irregular, globular form, filling up nearly the entire cavity of the abdomen, was discovered. It weighed nine and a half pounds, and contained a soft, pulpy, whitish coloured mass, resembling the medullary portion of the human brain. Not a vestige of the left kidney nor of the mesenteric glands could be discovered. There were tubercles in the liver and left lung, containing a brain-like substance.

HYDRATED PEROXIDE OF IRON AN ANTIDOTE TO ARSENIC.—Mr. Underhill briefly narrates several cases to shew the antidotal powers of the hydrated peroxide of iron as an antidote to arsenic.

FOREIGN BODY IN THE VAGINA.—A female, forty-four years of age, was admitted under the care of Mr. Arnott in the Middlesex Hospital, having a gallipot in the vagina, which she had introduced to prevent prolapsus of the womb. The gallipot being firmly fixed, and encrusted with calculous deposit, was broken into several pieces, with instruments, and removed; a vesico-vaginal fistula was then discovered, and a large calculus in the bladder. It being impossible to remove this calculus through the opening in the urethra; it was enlarged, and the stone broken up. The woman afterwards left the hospital, the fistula being uncured, although diminished in size.

POISONING BY PRUSSIC ACID.—Dr. Letheby was called in to examine the bodies of two suicides, dead from the action of prussic acid. The features of the deceased were perfectly calm and placid, and the bodies did not exhibit any indications of struggling, and, consequently, Dr. Letheby is of opinion that death was immediate. The lungs, and right side of the heart were much gorged with dark blood, which was uncoagulable, and had a strong odour of the poison. About forty-seven grains of the cyanide of silver were obtained from the contents of the stomach, by distilling with dilute sulphuric acid, and precipitating with the nitrate of silver. This indicated about one ounce of pharmacopœial prussic acid. Dr. Letheby observes, from the fact of these cases, that if there had been any doubt respecting the criminal administration of the poison, and a third party had been implicated, he should have been led to give evidence against him, on account of the apparent care with which all the indications of struggling had been removed, as he had never before known any instance of poisoning by prussic acid without convulsions. He considers, therefore, that it is a case, pointing out the necessity of caution in giving evidence, however well the opinions may be grounded, or from whatever source they may be drawn. Another interesting point, with reference to the action of the poison, is that the blood assumed a dark color, was uncoagulable, and had the odor of the acid. The lungs, too, were exceedingly congested, as was, also, the right side of the heart; all of which indicates that the immediate cause of death was the stoppage to respiration and the accumulation of blood in the lungs. Dr. Letheby says, that in his opinion, the immediate ac-

tion of hydrocyanic acid is upon the nervous centres, and through them, the true and semi-voluntary muscles become fixed or tetanic, and respiration is in this way prevented.

A SUBSTITUTE FOR WOOD ENGRAVING.—Mr. Richard L. Bean recommends the following as a cheap substitute for wood engraving. He takes a piece of black glass, or glass with a black ground behind; melts common wax, so that there may be a coat about the thickness of a sixpence; when this is cool, he rubs it over with a preparation of salad oil and white lead, mixed into an ointment, to give a white ground for etching upon. The drawing is traced on it, so as to leave a red outline on the ground; and etched in with needles, the grooves being made perpendicularly through the wax. When this is done, some water is placed gently over the wax, and if there are any minute globules of air sticking to it, they are to be removed by gently heating with a lamp, great care being taken not to melt the wax; some of the finest sulphate of lime (plaster of Paris) that can be obtained is then sprinkled over it, and allowed to combine with the water, and set. When this is done, it should be made of a convenient thickness, by adding more to the back of it, and afterwards dried. The broad lights are afterwards to be deepened in the same manner as a wood engraver's block, and it is then to be boiled in glue, which will sink into the substance of the plaster, and enable it to bear pressure in printing. Proofs may then be taken, and gradual improvements made.

CORRODING ULCER OF THE OS UTERI.—Dr. Heming states, that this malignant disease is equally incurable as carcinoma. It seldom occurs before the fortieth year, and commences in the mucous membrane covering the lips of the os uteri, and soon spreads over it, deepening in the texture until it consumes the cervix, and perhaps, before it destroys life, nearly the entire body of the uterus. On examination, *per vaginam*, the ulcerated surface feels as if a piece had been cut out of the organ with a knife, without enlargement, or induration of the uterus itself. The pain differs entirely from that of carcinoma; it is, at first, merely an unusual degree of warmth, and as the disease advances, it becomes a glowing heat, as if a hot coal occupied its situation. There is a yellowish discharge, sometimes streaked with blood; this increases, and is attended with great debility. Although a distinct disease from carcinoma, it is equally fatal. The treatment is the same as for carcinoma, and local applications are of but little service. The greatest benefit seems to have been derived from the use of the liquor potassæ arsenitis, a solution of nitrate of silver, one grain to the ounce, and from the application of Peruvian balsam, under the use of which the ulcer has appeared to improve for a time. The disease is not of very frequent occurrence.

CAULIFLOWER EXCRESCENCE OF THE CERVIX UTERI.—Dr. Heming narrates a case, which appears to show that this disease is somewhat allied to fungus hæmatodes. The principal local symptoms are, the occurrence of a profuse watery discharge, and the occasional supervention of severe hæmorrhage. The other symptoms, indicative of malignant disease, are also present.

FEMORAL HERNIA.—Mr. Williamson mentions a case of apparently irreducible femoral hernia in a very fat woman, which he ultimately succeeded in reducing by repeated bleedings, low diet, warm baths, and occasional doses of aperients, by which plan he materially brought down her fat, and rendered her very flabby. Nearly six months were requisite afterwards before the hernia could be ultimately returned.

IDIOPATHIC TETANUS.—A case of idiopathic tetanus is reported from Guy's Hospital, in treating which a trial was given to the Indian hemp, with at first some apparent benefit; but the disease soon gained ground again, and terminated fatally. The principal morbid appearances were in the spine. On the removal of some of the bodies of the lumbar vertebræ, very great congestion of the spinal canal was noticed; the blood was dark-coloured and thick. The cerebro-spinal fluid was in large quantity, and of a pale straw

colour. The blood-vessels on the posterior part of the spinal marrow were much congested; frequent adhesions between the layers of the arachnoid, from about the seventh dorsal vertebra upwards; the arachnoid lining the dura mater presented a minutely granular appearance. There were several plates of bone upon the free arachnoid, chiefly opposite the seventh dorsal vertebra; they were confined to the posterior surface. Upon inflating the arachnoid of the anterior surface, it was found more opaque on the upper dorsal and cervical region than elsewhere, and also presented a minutely granulated appearance. The adhesions between the two free surfaces were not so extensive as at the posterior aspect. The large veins of the brain and the sinuses were filled with blood, and the veins in the medullary sheath were congested. The cannabis indica was exhibited in solution in spirit, and also in injection. About two hundred and forty-eight grains were given in the course of the four days the man was in the hospital. It was obtained from three several ounces in nearly equal proportions; the first from Mr. Squire—the second through Mr. Pearce, from a gentleman who brought it from India—and the third from Mr. Rouse. The gentleman who supplied the second portion tested the effects of one grain upon his own person; it produced the symptoms of intoxication, with the excitement common in that state to such a degree, that it was found necessary to call in medical aid—a sufficient proof, it is said, of the potency of his specimen of the extract. The case would have been more more satisfactory if the whole of the remedy had been obtained from one source; at present, it is not of sufficient value and importance to be taken into consideration when testing the medicinal value and physiological action of the drug.

FOREIGN BODIES IN THE EAR.—Mr. Wright says, he removes foreign bodies from the external passage of the ear, such as peas, &c., by using small steel hooks, with the handles marked, which are passed down flatwise beyond the substance, and then turned round, so as to enclose it. He adds, that it is very injudicious to endeavour to remove any large living insect, because its struggles are so violent as to affect the brain, through the fibres of the portio dura becoming excited, and communicating that excitement to the base of the nerve.

FISTULA IN ANO.—Mr. Hird mentions a case of fistula occurring in a gentleman who died of phthisis, in which, after a most careful and minute examination after death, no internal orifice of the fistula could be found, neither were the parietes of the bowel unusually attenuated.

THE EXISTENCE OF HIPPURIC ACID IN URINE.—Dr. A. B. Garrod read a paper before the Medical Society of London, in which he sought to shew that although benzoic acid, when taken into the system, is converted into hippuric, as stated by Mr. Ure, still that it does not destroy the uric or lithic acid which is naturally contained in the urine, and consequently the administration of benzoic acid, or any of its salts, will not prevent the formation of deposits of urates, which form the so-called tophaceous concretions, or gout-stones; nor is it of any use in cases of the uric acid diathesis. On the contrary, benzoic acid is very likely to produce a deposition of uric acid, by rendering the urine very acid, and thus causing the uric acid to be set free, and rendered less soluble. The property benzoic acid has of causing the urine to become more acid, seems to be one of its most useful qualities. It causes the urine to become slightly irritating, and when given in cases where there is a deposition of a granular kind of mucus mixed with the phosphates, it is often very efficacious.

PARACYANOGEN.—A light and very loose residue of a dark-brown colour remains after the decomposition of cyanide of mercury by a feeble red heat. It is a compound of nitrogen with carbon, in the same relative proportions as those two elements exist in cyanogen; hence its name *paracyanogen*. It seems, then, that there are two kinds of cyanogen, a gaseous and solid; the difference being attributed by Liebig to a different molecular arrangement.

CONTRIBUTIONS TO SEMEIOLOGY.

SMALL-POX.

By J. NOTTINGHAM, M.D.,

Member of the Royal College of Physicians, London, and
of the Medical Society of Emulation of Paris.

The small-pox eruption is not unfrequently preceded by symptoms of an unusual and anomalous character, the severity and duration of which, previous to its appearance, are sufficient, in certain cases, to occupy exclusively the attention of the practitioner, who may thus be easily kept in the dark as to the true nature of the malady about to break forth, during at least a considerable number of hours.

It need not perhaps be said, that any important mistake in treatment is likely to occur in such a state of things; it is nevertheless desirable that practitioners should be, as much as possible, on their guard in every position where it is known that unusual circumspection is occasionally required; this we make as a sort of an apology for offering a remark on the topic in question. Uneasiness or pain in the loins, as is well known, often precedes the variolous eruption. In one instance, this feature presented itself as a case of severe lumbago, the torture of which was extreme, and all the symptoms so strongly marked, that depletion by leeches in great numbers was practised, and such other remedies employed as were likely to relieve the rheumatic affection. This treatment had been continued four days, and the pain was lessened, but not removed; the small-pox eruption then presented itself, first on the chest and belly, afterwards coming out slowly on other parts of the body, when the lumbago completely subsided.

In a case lately observed, in a district where typhus prevailed, a lady, "subject to bilious attacks," had suffered for two or three days from a return, as it was supposed, of her old complaint, with occasional relief of extreme sickness by profuse vomiting which occurred; she did not, however, recover as she was wont to do; the tongue became loaded, yellow, and slimy; the pulse frequent, and the head very uneasy; the skin hot and dry; so that the friends began to fear that typhus fever, or some other serious disease, was at hand, and professional aid was sought. But the most remarkable feature of the case, hitherto purposely omitted, was the difficulty of articulation, which was not very striking, until the patient had uttered a few words, then becoming so very strongly marked, as to lead to the fear that some cerebral disease might be occurring; for, to all appearance, as soon as a few thoughts had passed through the mind, and their expression dropped from the tongue, the faculty of speaking betrayed a great derangement, while that of thinking did not seem altogether intact; this difficulty of utterance was observed on the evening of Saturday, when leeches were applied behind the ears, and a blister to the nape of the neck, and aperient medicines administered.

On Sunday morning, the patient was not any worse, but the difficulty of utterance remained much the same. The remedies, employed the day before, produced the ordinary effects, and a sudorific or febrifuge mixture was ordered in addition. In the afternoon of this day (Sunday), rather suddenly, from all accounts, an eruption appeared on the skin, spreading itself over the whole body, which, on examination, was clearly variolous. This had no sooner appeared, than the articulation began to improve, and the next day was perfectly natural, the coating of the tongue disappearing with equal rapidity, and every other symptom taking on a favourable aspect; the eruption, which was thickly spread, though not confluent, marching at the usual rate, and with the ordinary characteristics.

An accurate knowledge of any symptom, or class of symptoms, which may in rare cases present themselves, although not often met with, has a value which is easily appreciated; and the repetition of isolated remarks on special phenomena of disease, though exposed to the risk of being regarded as needless, serves, nevertheless, to remind us of important facts, some of which, from their

character, may easily be misunderstood, and, from their rare occurrence, as easily forgotten.

When we collect and bring under one view some of the preliminary symptoms of small-pox, such as the pseudo-lumbago and difficult articulation, which were met with in the cases above noticed, and such as the convulsions which are occasionally found to precede the outbreak of the eruption in children, especially in the confluent form of the disease, we cannot fail to see how seriously, at times, the nervous system is disturbed, in the earlier period of this malady, or to direct our attention to the spinal cord and base of the brain, as the more immediate sources of some of these morbid phenomena; for the glosso-pharyngeal, pneumo-gastric, and the lingual nerve, in some cases, and the lumbar nerves in others, are evidently partakers of the morbid action, or channels for its influence; while in cases where convulsions display themselves, and even sometimes prove fatal before the appearance of the eruption, the whole cerebro-spinal centres would seem to be at once overpowered by the morbid actions with which they have to contend. Such being the serious aspect of these nervous symptoms, in some of the cases we meet with, it may often be advisable to apply such local or general treatment as their special character may seem to indicate, even in cases where, from the prevailing epidemic, recent exposure to contagion, or other causes, the nature of the impending malady may be more or less obvious.

In both the cases here cited, previous and successful vaccination had been practised.

PHYSIOLOGICAL DATA ESSENTIAL FOR
THE PROPER TRAINING OF THE
MENTAL POWERS.

(To the Editor of "The Medical Times.")

SIR,—As you did me the favour to insert a paper of mine on PHRENOLOGICAL MANIPULATIONS, in No. 275 of your excellent periodical, I am induced to offer you a few remarks on the application of physiological data for duly and properly training the mental faculties, in order to give an answer to the oft propounded question of the "*cui bono*" of Gall's discovery.

I therefore propose arranging my observations under the two following heads (premising, as a matter of course, that it is now generally recognised that the brain is the organ of the mind)—first, that the brain is subject to the organic laws, and that the mental faculties are under our control and direction, if the training commences from infancy. Secondly, that governments are responsible for the consequences of not instituting a system of national education based on these data, and which would be calculated to ensure a better, and more intelligent, and consequently a less criminal, population than now exists; and, lastly, I shall point out the defects of the present system for restraining the ignorant and degraded beings who violate the laws, which, though expensive, is both ineffectual, and at variance with the best dictates of religion, and of the morality which gives to man his true nobility.

In the first place, then, the evidence that the brain is subject to the laws of waste of substance, and of increase by means of alimentation, is twofold. The one, *positive*, is inferred from the fact, that there is great *vitality* when nourishing and generous food is used with due regard to quantity and quality, subject to the important condition of proper and judicious exercise; and that sluggishness and torpor are indications of a deficient supply of nourishment, and the neglect of muscular exercise. But the brain is also subject to special laws; if any part of this *viscus* is unduly and constantly excited, by what are called, from the want of a better term, *moral* means, such a part receives a greater quantity of blood determined to it, and actually increases in volume, and in intensity of function. I might cite abundant proof to confirm these statements;—the skull of —, mentioned in my last, contains a most painful commentary of their accuracy; he had received no intellectual or moral culture, but all his animal propensities had been unduly stimulated by ex-

ample and precept, and the proof of their intensity of function was rendered demonstrable by the criminal character of the individual, his depraved and very degraded conduct, and the *thinness* of the *skull* corresponding with the *organs* he had so constantly exercised.

That parents and teachers can, however, give a direction to the mental powers, is evident by the effect produced by particular training. An individual, born of the middle or higher class of society, is watched from his infancy, and presented with such moral stimuli as tend directly to the end proposed, viz: to render the recipient well behaved, kind, just, religious, and intelligent; but if with a similar mental constitution at birth, such a child is abandoned to the tender mercies of a gin-drinking mother, and to the sacrilegious and brutalised conduct of a degraded and criminal parent, can any other result be anticipated than that he should be a sensual, ignorant, and depraved youth?

If education produces any effects to alter natural (or rather congenital) dispositions and tempers, it must be by the acting on the cerebral organs; and that such is the case, many proofs exist; but the difference of my position arises from the fact, that, knowing the physiological data essential for some systematic process, by which results might be predicated, it is altogether more certain than the *empirical* methods now adopted by those who produce similar results without any *theory* based on these data, and by which, if from some modification in the mental powers, these empirical plans are ineffective, parents and teachers have no means to correct or modify their usual modes of proceeding.

We have innumerable evidence, that education does directly affect the brain; in my work "Mental Culture; or, the means of developing the Mental Faculties," I have cited an instance, reported to me by a friend of Dr. Phillip, a missionary at Cape Town. The rev. gentleman having remarked—that the heads of the Caffre and Hottentot children, educated in the missionary schools, approximated more to those of the European type, than to that of their own castes or tribes. A similar fact was related to me, of the schools for the education of the native children in Ceylon and Calcutta; their heads, when taught the Christian religion, and the arts, &c., underwent similar changes.

If I thought you would not deem this communication too lengthy, I should be tempted to relate the case of an individual, whose head has been altered by a previously arranged plan of self-government, and direct intellectual culture, after he had attained the age of twenty-seven; but, suffice it to say, that in this instance there exists indubitable proof that the brain has been directly affected, in both its *shape* and *volume*; and this in accordance with, and commensurate to, the alteration and improvement in the temper, disposition and intellectual improvement of the individual—casts being in my own possession, taken at the ages of twenty-seven, thirty-three, and thirty-six years old. My second proposition is, that it is the duty of governments to provide a sound system of education, which should not only address the higher powers, but so train the feelings, that the latter should be in abeyance to the dictates of the intellect, and the ennobling aspirations of the moral sentiments. Such a system should be for all classes, of course modified by the circumstances and future pursuits of different persons; yet the elementary education should be similar, and all men have essentially similar mental powers. This subject may be regarded as *tabooed* for your pages; yet, as the long exploded dogma, that no one "could minister to the mind diseased," has been superseded by sound treatment of cerebral diseases, by which numbers are now cured, who would otherwise have been doomed to the gloomy walls and savage treatment of former mad-houses—so the criminal population will remain, in their degradation, and may, probably, increase, if the treatment now pursued be not abandoned—if instead of means being used to improve, those of merely punishing be adopted. What is now the fact? the poor and criminal educate their children to be thieves, or, from the improvidence of worthless parents, have been allowed to

gain habits of mendicity (the precursor of erime); and when betrayed into their first act of delinquency, they are committed to places, in which more finished criminals are to be found the willing tutors to such noviciates; they are tried, punished, and sent back on society more adepts in villany, without character, and without money, and seem, by the force of circumstances, to be driven to their old pursuits. This is, indeed, lamentable, but it is too true.

The physiological views of Gall and Spurzheim form then the *data* for a better system of education, and which, like the improvement in the treatment of cerebral diseases, would tend to render the training of the human faculties a science, by which certain results might be predicated; and in this way the *moral blot* on civilisation, presented by the vast number of persons who live on plunder and cheatery, would be effaced, and society would be advancing towards the important *epoch* when the family of man will live in recognised brotherhood.

In conclusion, I will merely add, that if we take a cursory view of the immense sums expended for goals, houses of correction, judges' salary, penal establishments, &c. &c., and contrast the amount with the £30,000 a-year, the grant for national education, we are forced to the conclusion, that whilst so vast a sum is spent for merely punishing, so trifling an amount is eked out for preventing crime.

To show that this is not an unfounded conclusion, I read a short time since, as an *item*, in the navy estimates, that for transporting criminals to our penal colonies, for a half-year, 97,000 some odd hundreds of pounds were granted! and this merely for transportation. Am I not therefore right in saying, that little is spent to prevent, while much is expended to punish, criminals.

I am, Sir, with respect,

Your obedient servant,

J. L. LEVISON.

14, Devonshire-place, Brighton,
Dec. 28, 1844.

HOSPITAL REPORTS.

ST. GEORGE'S HOSPITAL.

(Communicated by G. Sayle, Esq., M.R.C.S.)

CASE I.—Thomas Kendrich, æt. 46, ostler, admitted, July 10th, 1842, under Mr. Hawkins, with an enormous, serotal, strangulated hernia of the right side; has had rupture for many years, often coming down, though never previously to such an extent, and always easily returned. Has worn a truss, but not lately. About nine o'clock last night, the hernia came down, and he was unable to reduce it; suffered much pain during the night, and in the morning applied to a surgeon, who made an ineffectual attempt at reduction. He then came to the hospital. There is much pain and tenderness about the neck of the hernia, and some also around the umbilicus; has vomited twice this morning. Pulse quick and full; skin hot. Has drank freely.

Was put into a warm bath and bled freely to $\frac{3}{4}$ xx. This did not produce faintness. He was then retained in the bath another half hour, when, fainting being produced, another ineffectual attempt was made to return the bowel.

Operation.—Half-past three, p.m. An attempt was first made to return the hernia without opening the sac; but, after dividing the several fasciæ, &c., down to that under the transversalis muscle, the hernia still remained irreducible. The sac was then opened, and its contents found to consist of a considerable portion of the colon, with a large quantity of omentum; some of the latter was of recent descent, but the greater part was old, and had formed adhesions at the bottom of the sac. There was a mixture of blood, lymph, and serum, about the omentum and bowel, with some coagulated blood in the appendices of the colon. The serum was in excess, and all showing a great degree of inflammation. The whole of the bowel was returned into the abdomen without much difficulty, the neck of the

sac being large enough to admit two or three fingers. The omentum was allowed to remain. The edges were brought together by sutures, and some strips of plaister applied, together with one around the scrotum so as to support the large tumour.

8, p.m.—Pulse risen to 120; complains of considerable pain around the umbilicus and left side; V. S. ad. $\frac{3}{4}$ xx.

9, p.m.—Pulse 96, full; blood buffed. R Cal., gr. iij.; p. opii, gr. one-sixth; 4tis horis. Cataplas. anthemidis.

July 11; 10, a.m.—Pulse 86, quiet; no pain in abdomen; tongue clean and moist; has had some quiet sleep; bowels not open. Omit pill.

12th. Bowels have been open six times; pulse quiet; no redness of skin, or pain about the scrotum, which contains a considerable quantity of fluid. Beef tea, Oj.

July 13th. Less fluid; no appearance of inflammation about the wound. Two sutures removed. Pulse quiet. Mutton chop.

15. Last suture removed. Some redness, and a little matter, where the ligatures were; bowels not open. Green dressing. R Ext. colocynth. co., gr. viij.

16. Less irritability about the wound; bowels have not yet acted. R Haust. sennæ, $\frac{3}{4}$ ij.

18. Senna acted freely; no pain or uneasiness about the wound. Ligatures removed. Pulse quiet; skin cool. Porter, half a pint.

22. Scrotum softer and smaller; wound healing fast.

29. Wound quite healed; is able to return the parts into the abdomen.

Aug. 1. Has a truss.

10. Discharged cured.

CASE II.—Louis Pouchee, æt. 107, admitted Nov. 24th, 1842, under Mr. Hawkins, at one, p.m., with strangulated oblique inguinal hernia of right side. First perceived the hernia twelve months since, from which time he has worn a truss. Yesterday morning it again came down, and he was unable to reduce it. Has been to a surgeon, who made an ineffectual attempt. Has vomited two or three times, but not stercoraceous; bowels not open for three or four days; slight tenderness around the tumour. App. glacies.

Five, p.m. No reduction in size; rather more tenderness.

Operation.—On opening the sac, its contents were found to consist of a small portion of small intestine, which was glued together, and to the sac, by recently effused lymph. These adhesions were broke down, and the intestines returned. Some gelatinous fluid in the sac.

Nine, p.m. Bowels acted an hour after the operation; no pain, except in left hypochondrium. App. cataplas. sinapis lateri dolent.

Nov. 25; eleven, a.m. Enema commune.

One, p.m. Rather more swelling of abdomen, but no pain; bowels acted twice; pulse quiet. R Ht. ol. ricini, $\frac{3}{4}$ ij; milk, Oj.

26. Slept well. Wound dressed and sutures removed. Adhesions have taken place in greater part of the extent of wound; slight discharge of bloody fluid in one part, where a ligature had been placed.

Nine, p.m. Some pain in abdomen. Fetus anthemidis applicand. R Calomelanos gr. iv., s.s., et repr. post horas 4.

27. Bowels freely opened; pain relieved.

29. Pulse very weak. R Vini rubri, $\frac{3}{4}$ ij.; R Tinct. opii, gtt. xij; mist. camph., 5x; h. o. n.

30. Better; pulse stronger. To sit up; p. c. vino; porter, Oss; rpr. haust.

Dec. 1. Bowels not opened. R Ext. colocynth. co., gr. v, h. s.

2. Slight discharge from upper part of wound.

4. Some wandering this morning; still some discharge; bowels not open. R Ext. colocynth. co., gr. iij, h. s.

5. Rpr. pil., h. s.

7. Small slough in cleft of nates, apparently caused by discharge running over it.

8. Some bloody discharge from wound. A narrow sinus, extending some way up, was opened.

9. Porter, Ojss.

11. Considerable discharge from wound;

bowels not acted. R Ext. colocynth co. gr. vj, h. s.; vini rubri, $\frac{3}{4}$ vi; porter, Oss.

13. Rpr. pil.

15. Sinus closing up. Red wash. R Ol. ricini, $\frac{3}{4}$ ij.

19. Pergat.

26. Gaining strength; is occasionally sick after eating; sinus healing very slowly. R Pil. hydrarg., gr. ij; ext. colocynth. co., gr. vj, h. s.

Jan. 4. Went out; the sinus had quite healed, but very slowly; great weakness of body, and cough.

About three months from the time of his leaving the hospital, he was attacked with diarrhœa and dysentery, of which he died.

CASE III.—Anne Emberson, æt. 35, admitted May 10, 1843, under Mr. Hawkins, with strangulated femoral hernia, of right side. Experienced pain and nausea, with sickness, for the first time on the 6th, and since that time it has continued, but at much shorter intervals. On and after admission, vomited stercoraceous matter; great anxiety of countenance; tongue dry and loaded; abdomen tympanitic and swollen. Has been taking castor and croton oil, under the directions of an apothecary, who supposed it to be ileus, and rubbing in a liniment.

Has had hernia the last six or seven years; neither the taxis nor warm bath were employed.

Five, p.m.—*Operation.*—On opening the sac, it was found to be divided by a septum into two portions—the *inner* containing intestine—the *outer* a quantity of old omentum, and a small cyst, with some serofulous lymph deposited on the omentum. The parts were easily returned after division of the stricture, and the integuments were brought together by suture. R Calomelanos, gr. v; pulv. opii, gr. ss; post horam. Enema decocti avenæ, post horas tres.

Half-past ten, p.m.—Bowels acted once; has not been sick; feels comfortable; pulse 120. R Hydrarg. chlorid. gr. iij; pulv. opii, gr. j; statim.

May 11. Feels easy; passed a good night; tongue rather foul; bowels acted eleven times since the operation; pulse 123. Arrowroot and beef tea.

Three, p.m. Going on well; pulse 110. R Pulv. opii, gr. ss; statim and repr. hac nocte.

12. Passed a good night; feels comfortable; bowels acted three times; pulse 100. One suture removed; lt. enema c. conf. rutæ, $\frac{3}{4}$ j, decoct. avenæ, Oss, statim. R Calomelanos, gr. iij; pulv. opii, gr. j; hac nocte.

13. Bowels acted four times; no pain in abdomen, but still tympanitic. The second ligature removed. Slight suppuration in sac, and hardness of omentum; eatamenia adsunt; pulse 96. Green dressing to wound; rpr. enema.

14. Passed a good night; bowels acted four times since yesterday; abdomen still tympanitic; tongue foul; pulse 88.

15. Feels easy; bowels acted four times; tongue cleaner; pulse 100. Half-a-pint of porter.

17. Bowels acted once since last report; pulse quiet; size of abdomen natural. Ht. ol. ricini, $\frac{3}{4}$ ss, h. s.

19. Still some discharge from wound; bowels open. To have a truss.

20. Ol. ricini, $\frac{3}{4}$ ss, hac nocte sumend.; ordinary diet.

22. Some irritation and discharge, still, apparently from behind the omentum. Appr. cataplas. lini.

24. Matter rather confined; redness around the wound; perst. in usu cataplasmi.

26. More redness in front, and on outer side of omentum; discharge slight. Fetus et eataplas.

27. A small opening was made on outer side of omentum into the sac, and a little matter escaped.

29. Much better; no inflammation around.

June 2. No discharge; a small opening on either side of omentum. To sit up and wear her truss.

7. Discharged cured.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Dec. 26, 1844.

On Hypertrophy of the Spleen (Hypersplenotrophia).—A man, ætat. 30; lately arrived from Africa, entered the *Pitié* on account of febris intermittens, with which he had been for some time affected. The spleen, on percussion, was found to be considerably hypertrophied; its limits, readily ascertained by plessimetry and palpation, were: superiorly, as high as the fifth rib; inferiorly, running as low as the spine of the ilium; and anteriorly, reaching the umbilicus. The tint of the skin was that of splenic cachexia; the superior border was made the object of peculiar attention during the whole of the following experiment:—The inferior edge having been firmly seized by three assistants (Messrs. Muston, Duprè, and Ketif), the upper one was percussed several times with great care, in order to be certain that it was pushed upwards; this done, the quinine draught was administered; ere a minute had elapsed, the assistants just mentioned distinctly felt the spleen decrease, and shrink in a measure from their hands, and this fact was confirmed by percussion. Two minutes after, the diminution was about three-quarters of an inch in every direction, and this continued to take place. Professor Piorry, after quoting this case as a proof of the utility of plessimetry in establishing a diagnosis, and the efficacy of the acidulated sulphate of quinine in the treatment, proceeds to discuss and refute an opinion advanced by Dr. H. Gouraud, in the last number of the *Journal des Connaissances Medico-Chirurgicales*. This practitioner stated, that on causing the patient to make an effort, similar to that performed in order to evacuate the bowels, the infra-diaphragmatic organs are pushed downwards, and the spleen may thus be made to descend upwards of an inch, and be easily seized. But, asks Professor P., how is it possible to seize the spleen during such an effort, since in this act the diaphragm is almost motionless? The abdominal muscles are contracted, but the liver and spleen do not descend, being prevented from so doing by the resistance of the parietes of the abdomen, and by the intestines, to which the perinæum forms a solid support; neither can they ascend, for the lungs, being inflated, cannot diminish on account of the occlusion of the glottis (Bourdon), and, therefore, offer an effectual resistance. This fact is shown by mere elementary physiology. But, even admitting that the spleen descended, its presence could not be ascertained by palpation, on account of the violent contraction of the abdominal muscles; the transversalis, especially, forms a hard and considerable elevation, easily felt by the hand, and which might readily be taken for the hypertrophied spleen; so, also, the rectus abdominis, which, in its contracted state, has often simulated tumours in the interior of the abdomen, and become the cause of an error in diagnosis; here, the sulphate of quinine naturally is of no use.

It is not an unusual thing, in my wards at the *Pitié*, for me to make the abdominal organs descend, so that they may be felt without difficulty, as may be seen in my *Traité du Diagnostic*, in cases of disease of the liver (No. 1794), and this is equally applicable to the spleen; to accomplish this, it suffices to make the patient draw in a deep inspiration, to yawn, or sigh; the abdominal muscles, being thus relaxed, no longer form an obstacle, nor is any opposing effort then made by the patient. But this method permits our examining only the inferior edge of the spleen, and can never give the exact size of the organ, since a considerable portion is under the ribs; to discover which, plessimetry is indispensable. All that has just been said, relative to the abnormal condition of the spleen, is applicable to all the cases in which this disease is suspected; and on this subject, a few more remarks may be made on the case, related at the commencement of this paper. On December the 7th, the volume of the spleen was found to be the same as when percussed the day before, ten minutes after the administration of the quinine; and Dr. Bouvier, one of the physicians to the *Pitié*, kindly

consented to be present at this second trial. The dimensions of the organ were ascertained with scrupulous exactitude, by palpation and plessimetry, and then Diss. of the acidulated sulphate of quinine was prescribed at a dose. The spleen began visibly to decrease in forty seconds, and in about four minutes it was diminished an inch superiorly, and as much inferiorly; which fact was so positive, that Dr. B. affirmed instantly that it was beyond all contestation. If such a name is not of sufficient weight to convince the incredulous, the testimony of other witnesses may be added, viz: of the house-surgeon, as well as of the pupils, who follow the daily visits of the *Pitié*. Thus it may be considered as proved, that the acidulated sulphate of quinine causes the spleen to decrease rapidly, and, however surprising the fact may appear, it is not the less certain. As to the development of gases in the digestive tube, after the administration of the sulphate of quinine, diluted with sulphuric acid, or water, this cannot be admitted as the cause of the modifications observed on percussion. It would be contrary to all known physiological facts, to assert that the production of gases could take place so rapidly in the stomach; besides which, in a great many cases, it is the transverse or descending colon, which is situated under the spleen. How can it be, that the administration of a liquid into the stomach, could produce the development of gases in this intestine, in sufficient quantity to render the splenic region sonorous? Again, the neutral sulphate of quinine, injected upwards of thirty times, *per anum*, never caused the spleen to decrease; but as soon as the quantity of acid was increased, so as to render the salt soluble, this took place in less than half-a-minute. In this case, it is far more probable that the diminution was caused by the absorption of the remedy, and its action on the spleen, than by the development of gases in the large intestines. The size of the spleen, after its diminution under the influence of a dose of the sulphate of quinine, remains the same, unless a fresh dose be given; and it may be asked, do the gases continue to be generated, after having been expelled? or do they remain there on purpose to simulate the decrease of the spleen? If, some time after the diminution caused by the first dose, a second is given, the same result is produced; and the effect once obtained, the organ remains stationary. Can such facts be explained by the development of gases? Also, as to salicine, and other bitters, which never cause the spleen to decrease: were they not administered in a liquid form? And ought they not, on the hypothesis of the production of gases, to cause the splenic matity to become less apparent? In whatever manner we consider the fact of the diminution of the size of the spleen, when the sulphate of quinine is administered, we must view it as solved affirmatively. The assertion of persons, whose opinions are of great weight, and the immense publicity given to the experiments performed, render doubt untenable; as to the explanation of the fact, it is as impossible as that of the dilatation of the iris by belladonna. Another important circumstance is the diminution of the matity in the left hypochondrium, when percussion is performed on it, while the patient is lying on the right side; this phenomenon is caused by the displacement of the gases contained in the digestive canal, and ought never to be forgotten; nor ought the limits of the spleen to be marked, until this has taken place. Finally, it is very useful to employ auscultation (see on this subject, the 5th volume of Professor Piorry's *Traité de Médecine pratique*, just published) with percussion, in establishing the diagnosis of the diseases of the digestive organs: other means may likewise be had recourse to: thus, the patient may be requested to draw in a long breath, to sigh, &c., in order that the infra-diaphragmatic organs may be forced downwards; a warm bath may be given, so as to soften the abdominal parietes, and render palpation easier. Thus, percussion, palpation, and auscultation, must be employed simultaneously, in forming the diagnosis; and not the one to the exclusion of the others.

Cysticerci (cysticercus cellulosæ Rudolphi) observed in the muscles of a female.—On the body of a woman, about 36 years old, brought to the *Ecole Pratique* for dissection, several curious lesions were discovered; unfortunately, of her previous state, nothing was known. The lower extremities were infiltrated; the thorax and upper limbs firm and plump; muscles of the former pale, of the latter ruddy; spontaneous phlebitis of the two crural veins, the left containing a clot, formed partly of cruor (red), partly of fibrine (white); the right vein, near the falciform ligament, was destroyed by an abscess, which penetrated on the inner side of the cervix femoris, passed under the glutei muscles, and ascended on the right side of the vertebræ as high as the occiput; the muscles of all that region were destroyed; in many spots the vertebræ were bare, and the fossa iliaca externa denuded throughout its whole extent. In all the muscles of the thighs and legs, especially in the vasti externi, an enormous quantity of vesicles was discovered, from half to three-quarters of an inch in length, of the size of a goose-quill, cylindrical, terminated by two rounded extremities, somewhat smaller than the centre, this part being bosselated; they were parallel with the muscular fibres; more adherent superiorly than inferiorly, the adherence taking place by means of a prolongation of the cellular tissue; all were isolated from each other. In the gastrocnemii, there were some of a different shape, ovoid, with one extremity enlarged, and the other ending in a point, and from three to four lines in length. They separated, and adhered to, the muscular fibres, by a loose cellular tissue: were composed of a membrane of a fibrous aspect, and transparent, but becoming opaque when exposed to the air, or to the action of water; an aqueous solution of creosote seemed to render them firmer; for, when taken out of the bottle containing this liquid, they rebounded, if allowed to fall on the floor. Through this transparent membrane, something of the size of a pin's head, of a dull white colour, somewhat yellow in its centre, was perceived: it was enveloped in a membrane somewhat similar to the retina, but much thinner, and floated in a fluid quite limpid, whose quantity might be estimated at about one half of the size of the tumour. The body, contained in the vesicle, was the worm. It was round, of the size of a millet seed, of a pearly white aspect; if squeezed between the fingers, or two bits of glass, a small tubercle was perceived, offering a spot of a dark blue colour on it; hooks were affixed to the summit of the tubercle, and on its largest portion were four suckers; the body was of a spiral form terminated in a vesicle. Three or four cysticerci were found in the clot contained in the right crural vein; they were, however, not larger than a lentil. No cysticercus in the abscess, nor in the muscles of the feet, the bones, the brain, the heart, the lungs, the intestines, nor the bladder. The muscles of the upper limbs offered very few vesicles; two in one of the pectorales, and three in one biceps; the liver presented the fatty degenerescence, and occupied, not only the right, but likewise the left, hypochondrium; it weighed about fifteen pounds; the circulation in the abdominal venous apparatus—vena portæ, vena cava and its dependencies, as low as the cruralis, was quite free. The author of the foregoing interesting case, after remarking that Rudolphi states, that out of 250 bodies, dissected annually at Berlin, generally four or five were met with affected with this disease, and that the entozoa were found not only in the muscles, but likewise in the heart and brain, concludes:—That it is an example of a disease, very frequent in pigs, and caused by hydatids:—that the cause is, in all probability, an alteration in the blood, produced by living in a low and marshy situation, bad regimen, &c.; that the symptom, which leads to the supposition that there exists a primitive alteration in the blood, consists in the red or violet spots observed on the buccal mucous membrane of animals thus affected, and which caused the disease to be compared to scorbutus: an opinion already emitted by Chaussier, in a note inserted in the third volume of the *Mémoires de M. Ribes*;—finally, that it would be highly useful, were comparative ex-

periments established on the blood of a healthy, and of a diseased, animal.—*Gaz. des Hopitaux*.

Extraordinary development of the mammae in a young girl.—Case communicated by Dr. Malgaigne to the *Société de Chirurgie*.—M. —, ætat. 16, the thirteenth child of parents, most of whose offspring died at an early age, there being only three remaining: a son 35 years old, and a daughter 24, both strong and hale, and the patient, whose case is about to be related. Height four feet three inches; form rounded; general health good; not menstruated. In Jan. last, her breasts increased to such an extent as to be inconvenient from their weight, followed by symptoms of chlorosis. In May, the mammary gland augmented suddenly, and became the seat of severe lancinating pains, which the patient compared to the pricking of a pin; these ceased soon, to reappear in a month. A fortnight after, another paroxysm occurred, and was repeated at irregular intervals. The tinctura iodini, at the dose of gtt. x. per diem, was administered for about six weeks, but without any benefit; the pains became more frequent, more severe, and generally appeared during the night; the breasts now offer the following peculiarities: they are pendant; nipples nearly effaced; areola large, of a rosy hue; developed as during pregnancy. The dimensions are:—

	Right breast.	Left breast.
Circumference of the base . . .	17 in.	17½ in.
Vertically, passing on the surface from above downwards } .	9½ "	13 "
Horizontally, passing on the surface from right to left. } .	12½ "	15½ "

The development appears to be owing to that of the gland itself, the lobules of which are easily felt; at first they were separate from each other, but are now united into a hard uniform mass.

On the efficacy of nitras potassæ and acidum benzoicum in Enuresis nocturna.—By J. Delcour, M.D., physician to the Orphan Hospital, Verviers, Belgium. According to the author, this disease is very frequent in children, and the reason why parents neglect consulting their medical attendant is, because, in general, the remedies employed fail in procuring relief. As to the received opinion, that it disappears spontaneously after the second dentition, thirteen cases recorded (seven girls and six boys) prove, that this is far from being exact, since six had passed that period. But to what cause is this affection to be attributed? In all probability to an excess of tone, which, as M. Barrier observes, is neutralised by the contraction of the sphincter of the neck of the bladder during the day; but, during sleep, all voluntary acts being abolished, whilst the organic contractility persists, the urine is expelled. Other causes also exist; for instance, the custom of making water at stated times, the heat of the bed, the act of reposing in a state of supination, &c. Numerous remedies have been recommended: cold bathing; aromatic and alcoholised baths (Professor Lallemand, of Montpellier); immersion in cold water for a short time, recommended by Dupuytren, and employed with success by Dr. Rutten, sen., of Verviers; cantharides, nuxvomica, secale cornutum. But it is not these that we are about to examine, but two others—nitras potassæ and acidum benzoicum—the latter now employed for the first time. The efficacy of the nitras potassæ was made known to the profession by Dr. Young, of Chester, who discovered it by mere chance. This physician, when called in to a lady affected with enuresis, prescribed cantharides internally, which gave rise to inflammatory symptoms, and necessitated antiphlogistics. Two days after, the accidents having decreased, Dr. Y. ordered: R nitrat. potass. gr. x., tertia quaque hora sumend. Seven days after, the cure was complete. Such a result led him to employ it in similar cases and with equal success, and the author has not been less fortunate. As to the acidum benzoicum, its known action on the vitality of the mucous membranes led to its administration in two cases where nitre and strychnine had failed, and its effect was as expected. In the thirteen cases recorded, the ages were 12½, 11, 11, 11, 10½, 9½, 7, 6½, 6, 5, 5, 5, and 4 years; the disease had lasted (at least as far as could be as-

certained) from six years to one week; the cure was obtained by the nitrate of potass alone in ten cases; the time it was given being, in eight, from three weeks to three months; in the two others the cure was immediate; in these ten cases, enuresis occurred sometimes every day, sometimes three or four times a week; the prescription was—R nitrat. potass. gr. x., ter in die. In the three remaining cases, other means were requisite; thus, to a child eleven years old, nitre at the usual dose was given for five weeks without effect, and was replaced by: R strychnin. gr. ij., extract. tritic. repent. 3ss., M. ft. pilulæ, No. xxx.; quarum j. bis in die sumend., increased to two twice a day four days after; this medicine was persisted in for three weeks, and then the nitre recommenced; cure in a fortnight. With a second, 10½ years old, not only the nitras potassæ, but likewise the strychnine pills failed; the following prescription was therefore had recourse to:—R Acid. benzoic. 3ij; man. ping. q. s. ft. pilulæ No. xl., quarum, ij. bis in die sumend; cure in three weeks. Finally, with a third child 9½ years old, the nitras potassæ, 3 ss in two doses per diem, and first two and then four strychnine pills, failed, and the cure was obtained in the course of three weeks, by means of four pills of benzoic acid daily. The quantity of urine emitted was considerable, in the two last cases. To resume: of thirteen cases, the nitras potassæ succeeded in eleven; in one only was strychnine necessary; as to the mode in which the former acts, the author differs in opinion from Dr. Young, and thinks that the amelioration is produced by diminishing the excitation of the bladder. Finally, the two last cases come to the support of those recorded by M. Chabrely, of Bordeaux.—*Journal de Med. de Bruxelles*.

Poisoning by inhalation of the vapours produced by burning a mixture of sulphur and tobacco; death.—Case communicated to the *Société Médico-pratique de Paris*, by Dr. Blatin.—Mrs. R. D., ætat. 26, affected with a considerable deviation of the spine; pale, weak, chlorotic. Three years ago, was delivered with great difficulty of a still-born child, and she herself very nearly fell a victim, which excited fear as to a second accouchement, and led me to examine carefully the different diameters, to be certain that delivery was possible at the usual time. On the 15th of last month, she called upon me and informed me that she had reached her term; she suffered from slight pains in the loins; the cervix uteri was elevated, situated posteriorly, and on the left side; general health good at the time. In order to destroy some bugs, during the same day a considerable quantity of sulphur, mixed with tobacco, had been burnt in her bed-room. The next morning, after sleeping all night in that atmosphere, she felt seriously ill, and, when called in, I observed the following symptoms:—face pale, lips blue, pulse thready, anxiety, flesh flabby, œdema of the wrists and left foot, vertigo, comatose state, neck swollen, noises in the right ear, throat dry, nausea, no cough. Stimulants, slight tonics, derivatives, frictions, &c., were had recourse to; but as the symptoms persisted, venesection was performed; the blood was black and very fluid, presenting a soft clot, reddening very little when exposed to the air. The blue colour of the lips diminished very little; the respiration, however, became somewhat easier, and the pulse stronger, and forty per minute. Unfortunately, this amelioration did not continue; the pulse became more and more irregular, and the symptoms persisted with equal, if not greater, intensity, until the fifth day, when, after a fainting fit, which lasted several minutes, feeble uterine pains declared themselves, and at nine o'clock the amniotic fluid escaped spontaneously. Half-an-hour after, she was in the following condition:—face pale; lips of a livid violet hue; eyes dull; pulse thready; œdema of the left side of the neck and face, the left wrist, and the legs; upper and lower limbs cold; head fell first on one side, then on the other; intelligence perfect; slight labour pains every eight or ten minutes; cervix uteri as before, supple and thin; anterior fontanel perceptible. In the hopes of causing the uterus to contract, after bringing the cervix into the centre of the pelvis by gentle tractions, a few table-spoonfuls of warm negus were given, and I ordered an ointment con-

taining belladonna, with the following draught:—R secal. cornut. recent., ʒv.; tinct. cinnamon. 3iss.; syr. cinchon ʒj.; aquæ distill. tilia Europ. ʒiv.; M. ft. haustus. While these remedies were being prepared, Mrs. D. became comatose, which state was succeeded by syncope, and death shortly after closed the scene, although the most powerful derivatives were employed externally, and stimulants given internally.

Luxation backwards of the axis on the atlas: by M. Hirigoyen.—Two cases only have as yet been recorded of this affection; one by J. L. Petit, the other by Sir Charles Bell. The present case presents therefore some interest: John Dumé, ætat. 60, was brought at eight, p.m., to the Hospital Saint André, Bordeaux. This man, by trade a mason, while on a scaffolding about fifteen feet from the ground, lost his equilibrium, and fell on his head on some sand. When examined immediately after by M. Chaumet, chief-surgeon of the hospital, and M. Hirigoyen, his state was as follows:—deep coma; eyesshut; no deviation of the features; respiration quiet, though somewhat weak and slower; pulse very weak, 58; muscles flabby and not contracted; no blood had flowed from the ears and nose; no wound or contusion; vertebral column straight; slight excoriation of the skin on the inside of the right carpo-radial articulation; head thrown backwards, though not more so than that of a corpse when placed in a horizontal position; as mobile as when uninjured. These symptoms seemed to indicate cerebral concussion; consequently, sinapisms were ordered to be put on the lower extremities; purgative enemata to be employed, and blood to be drawn if the pulse became stronger; but all was useless; the intensity of the symptoms did not decrease in the least, and the patient breathed his last the night following the accident.—*Post mortem examination*: Impressed with the idea that the man had died from cerebral concussion, the skull was carefully removed, but no effusion of blood, nor any other lesion of the brain, could be discovered, and it was only on taking this viscus out of the cranium, that the cause of death was perceived. The medulla oblongata was pushed backwards, and somewhat flattened against the posterior portion of the atlas, on a level with the lower third of the corp. pyramidal.; the inferior portion of the brain, the cerebellum, and the pons varolii, presented no lesion; through the spinal dura mater, a bluish tint was perceptible anteriorly, produced by an effusion of blood between that membrane and the vertebræ; and a considerable eminence, the cause of the flattening of the medulla oblongata, was discovered, and, when the dura mater was divided, it was found to be formed of the odontoid process, placed behind the transverse ligament, somewhat more to the left than the right; right odontoidian ligament entire, whilst the left was torn near the processus dentatus: the former crossing the transverse ligament, and preventing the apophysis from rising above it, or pressing the medulla to a greater extent; the articular surfaces were separated from each other; no fracture; nothing abnormal in any other of the viscera.—*Bulletin Med. de Bordeaux*.

Academy of Sciences.—Sitting of the 23rd Dec, Baron Charles Dupin in the chair.—The Academy proceeded to elect a foreign associate (*associé étranger*), in place of the late Dr. Dalton. The list of candidates presented by the commission were:—1° M. Jacobi (Berlin); 2° *ex æquo* Messrs. Brewster (St. Andrews) and Faraday (London); 3° in alphabetical order, Messrs. Buckland (Oxford); Herschel (Collingwood, Kent); Liebig (Giessen); Melloni (Naples); Mitscherlich (Berlin); and Tiedemann (Heidelberg). The votes, fifty-five in number, were thus given: Mr. Faraday, 34; M. Jacobi, 19; Mr. Buckland, 1; M. Melloni, 1. Mr. Faraday is consequently declared duly elected.

Mr. Geo. Catlin addressed a copy of his work, containing the notes of his travels, during eight years, amongst forty-eight of the most remote and the wildest tribes of Indians, in North America, with upwards of three hundred steel plates; also the catalogue of the collection which he made with great labour and expense, during these eigh-

years, as a pictorial history of those fast perishing people.

On Hernia of the Foramen Magnum.—Mémorial presented by M. Gaudichaud, M.A.S., in the name of P. A. Vinson, M.D., of Bourbon. The author examines attentively:—the history; the normal anatomy; the diameters (on thirty female pelvises, it was from 2 to 3½ inches horizontally, and from 1½ to 1½ vertically; and in five male, vertically from 1½ to 1½, and horizontally 2 inches); the pathological anatomy (of 20 cases, in 14 the hernia was formed by the intestine; in 5 by the intestine and epiploon, and in one by the bladder); the causes (sex here seems to have a powerful influence, since, of 29 cases, 24 were females and only 5 males); the symptoms, the prognosis, and the treatment; in this chapter, after quoting the opinions of the most distinguished surgeons on this subject, he resumes thus:—1. In all cases, in which the tumour is easily felt exteriorly, and whenever the instrument has to divide but a very thin layer of substance to reach the hernial sac, as may be observed in very spare individuals, or in old men, the skin, muscles, and sac, must be divided as recommended by Dr. Hipp. Cloquet, after which dilatation must be attempted, as advised by Gaderman, by means of a blunt hook; should this however fail, the neck of the sac and the stricture must be divided *inwards and downwards*.—2. If the tumour is not appreciable externally, if the patient is very fat, or if the diagnosis is uncertain between hernia and internal stricture, by reason of the presence of a fibrous band, the abdomen must, notwithstanding the danger, be opened on the mesial line, or just over Poupart's ligament, and the intestine liberated.

Academy of Medicine.—*Sitting of the 24th Dec.*, Dr. Ferrus in the chair.—Dr. Denonvilliers writes, to request being placed on the list of candidates for the vacant seat in the section of anatomy and physiology.

Tubercles in a Dolphin.—A student in medicine informed the Academy that, on dissecting a young dolphin lately, he found several tubercles in one of the lungs.

Dr. Desportes requested that a committee be named to enquire as to the progress of an epizootia (a species of typhus) which ravaged Germany, and which, if report be exact, had penetrated into France, at Metz especially.—Dr. Dubois (d'Amiens) remarked, that there was a correspondent at Metz who could probably give some information on the subject.—M. Renaud stated that the Minister of Commerce had made the necessary inquiries, and that nothing of the kind had been observed. The proposition was not adopted.

Election of Office Bearers.—The Academy proceeded to the following elections: 1^o—*President*, votes 86, majority 44.

M. Caventou, Vice Prest., obtained 70 suffrages
Dr. Roche 12 „
Dr. Begin 2 „
Professor Gerdy 1 „

Consequently, M. Caventou is declared President for the year 1845. 2^o *Vice President*, votes 86, majority 44.

Dr. Roche obtained 64 suffrages
Dr. Begin 15 „
Professor Velpeau 5 „
Dr. Desportes 2 „
Dr. Louis 1 „
M. Collineau 1 „

Consequently Dr. Roche is named Vice President.

3^o *Annual Secretary*—Of 83 votes, Dr. Dubois (d'Amiens) obtained 67; the rest were given to Drs. Ollivier d'Angers, Londe, Rochoux, Martin-Solon, Ferrus, Gaultier de Claubry, and Begin.

4^o *Treasurer*—Of 68 votes, Dr. Merat obtained 55.
5^o *Members of the Council*—Ferrus, 33 votes out of 54; Begin, 38 out of 47; and Cornac, 23 out of 47.

GARLAND DE BEAUMONT, D.M.P., B.L., and S.
Honorary Physician to the Spanish Embassy.

MESMERISM IN LEICESTER.

(To the Editor of "The Medical Times.")

SIR,—In your journal of the 21st instant there appeared a letter from a correspondent, signing himself "Investigator," and asking certain ques-

tions touching the progress of Mesmerism in this town.

Your correspondent inquires whether we have not had a "second amputation of a leg, alleged to be without pain, within the last few weeks in this place, making thereby the *third* operation of the kind that has occurred in England;" and whether Mr. Paget, recently a sceptic, was not the operating surgeon on the occasion?

Your correspondent also introduces a few invective remarks upon the "mysterious silence" adopted on the subject, and insinuates, somewhat hastily, that there must exist an unworthy motive for the secrecy.

Now, sir, though not one of those who were present on the occasion, I can satisfactorily answer most of your correspondent's questions, having received a full and detailed account of the transaction, almost immediately afterwards, from an eyewitness and assistant.

The facts of the case are these:—The success that attended the amputation of Mary Lakin's leg last summer seemed to give so much corroboration to the former statement, that was published by Mr. Ward, respecting the amputation of Wombwell's thigh without pain under Mesmeric influence, that considerable sensation was stirred up among our *savans* and opulent gentry; and a third case of a nearly similar kind presenting itself for operation last October, it was determined on all sides to make another experiment of the power of Mesmerism. The patient, a most amiable and respectable young woman, was under the care of Mr. Paget, who, in compliance with this strong feeling, consented, in the very kindest manner, to surrender his own opinion in favour of a trial.

And what was the result? The operation took place at the infirmary, in the presence of twelve medical men, and, in spite of some most untoward circumstances at its commencement, was *eminently successful*. The poor girl seemed very little conscious that anything was going on, and when awakened from her sleep, would not believe that the amputation had taken place, till the stump of the leg was shown her; and she then declared that she had experienced no suffering at the time.

It is not my wish, however, to furnish a medical report upon this case, or to invite your readers to notice what an important fact for the physiologist this operation presents; these things speak for themselves. My object is to vindicate Mr. Paget from the insinuation of "Investigator," and to assure both you and him that nothing could have been more straightforward and honourable than the conduct of this able and scientific surgeon on the subject. To his medical brethren, Mr. Paget has candidly admitted that, in a surgical point of view, the operation is decisive of the question, that it proves the hitherto unsuspected powers of Mesmerism in certain cases; and that, however our previous opinions may reject the conclusion, the fact is now undeniable, that an insensibility to pain, even in the most agonising moments, may be obtained for many unhappy sufferers.

If this, then, be his admission with those of his own profession, whence, then, this curious secrecy, and suppression of the facts towards the public? The reason is one, which speaks little in favour of the enlightened character of Leicester and its neighbourhood. The female population of our town are so impressed with a belief of the diabolical character of Mesmeric proceedings, that they have set their faces firmly against the practice of the art; many have openly declared that they will not permit a Mesmeric surgeon, with his cloven-footed colleague, to enter their house: and as the fair sex are, in nine cases out of ten, the most valuable of our patients, the medical men, as a body, have yielded to their views. This, doubtless, will appear most ludicrous to a scientific journal, like the *Medical Times*; still, such is the fact; and though it will not place Mr. Paget in the high position of a lover of truth at all price, yet exonerates him most completely from the charge that your correspondent implies in his letter.

I am, Sir,

Yours respectfully,

VINDICATOR.

Leicester, December 28, 1844.

SIR,—I beg to acquaint you with the result of an operation under the Mesmeric influence, which I have this day performed, for the cure of strabismus. Dr. Noble, of Danet's-hall, Hugh Henry, Esq., and Mr. Downey, my assistant, being present, whose testimonials I have in my possession, corroborative of the statements I have to make.

I am, Sir,

Your obedient servant,

J. H. TOSWILL.

Leicester, Dec. 31, 1844.

William Brown, aged eleven years, was brought to me about ten days since, in order that I might operate upon him for the cure of squint. I appointed the succeeding morning for the operation, when, having placed him in a chair, I was about to commence in the usual manner, and I determined, provided the lad evinced any susceptibility, to avail myself of Mesmerism, to avoid giving pain. In about a quarter of an hour, I had placed him under its influence, rather in opposition to his wishes, and discovering that, by its employment, he was likely to be spared the suffering which usually accompanies the operation, I determined to persevere until I conceived he should be sufficiently under its power. For many days past he has been in the habit of uttering exclamations when in the mesmeric condition, and of replying to my questions. Without previously intimating my intention of operating, I this morning succeeded in mesmerising him in a few minutes; I then extended his arms at right angles from his body, and rendered them cataleptic. On seizing the conjunctiva with the forceps, there was no indication of pain; but, on snipping it with the scissors, he sighed twice, and exclaimed, "*Oh dear! pray put down my arms.*" The operation having been completed, he was de-mesmerised, and the arms which, during *the whole of the time* had, without support, remained extended, and rigidly cataleptic, were rendered flaccid and placed before him. He asserted, that he had felt no pain, that he was not conscious of having undergone the operation; and it was with difficulty, and not until he had placed his hand to the eye, and observed the blood, that he could be convinced. Feeling desirous of exploring the eye in this awakened condition, in order that I might discover whether any fibres of the internal rectus remained undivided, I endeavoured to reintroduce the curved hook in the aperture made in the conjunctiva; but the opposition I met with from the boy's hands, from the spasmodic contraction of the eyelids, and from the wriggling of his body, compelled me to desist, and it was not until I had mesmerised him a second time that I was enabled to make the examination, and cut through a few still adhering fibres of the muscle, without any evidence of pain or opposition on his part, save a slight elevation of the hands from the lap. There was no contortion at any time (when under the Mesmeric power) of the features or compression of the lips, the latter retaining the *entre-ouvert* condition, which is usual under such circumstances; and, from the respectability of my patient's connections, I do not apprehend that he could have any object in deceiving.

SIR,—I have this day seen a letter in the *Leicester Chronicle*, copied from your periodical, signed "Investigator," putting certain questions to certain medical men, concerning the late Mesmeric operations. As I think it very probable that they will not answer for themselves, I take the liberty of answering for them, and shall reply to the questions in the order they are put.

1st. It is true that a second amputation of a leg, alleged to be without pain, has recently taken place in Leicester, the patient being one on whose veracity Mr. Paget could rely, and who was selected by him as a *test* for Mesmerism.

2nd. It is true that the operating surgeon was the very Mr. Paget.

3rd. It is true that Mr. Paget called in the aid of Mesmerism, for this patient.

4th. It is true that the operation took place in the infirmary, in the presence of several medical men.

5th. It is true that most of those present de-

clared themselves satisfied with the result, Mr. Paget included.

6th. It is true that Dr. Shaw, who, after the amputation of Mary Lakin's leg, expressed himself sceptically as to the powers of Mesmerism, was himself privately at that very time, and in his own house, sanctioning the use of Mesmerism, for the benefit of a very near connexion.

These facts sir, are notorious in Leicester, and it is also equally notorious, that very lately a relative equally near of Mr. Paget's, has been Mesmerised with the greatest relief, for an affection of many years' standing, the pain of which no other remedy has ever assuaged.

I am, Sir,

Your obedient Servant,

MERCATOR.

Loughboro, December 30, 1844.

SCHOOLS FOR THE SONS OF MEDICAL MEN.

[Dr. Forbes, the chairman of a committee formed on this subject, has written to us, requesting the insertion of the following report. We may add, that we feel great pleasure in recommending the object of the committee to the best attention of our readers.]—ED.

At the annual meeting of the Provincial Medical and Surgical Association, held at Northampton, in August last, a committee was appointed to consider the establishment and organization of schools for the education of the sons of members of the medical profession, on such low terms of expense as might be consistent with a course of education of a high character. Although it was understood that the matter to be taken into consideration had reference to the profession at large, it was requested that the committee, after having digested a plan of proceeding, should report to the council of the association, or to the next general meeting of the members.

The following gentlemen were nominated on the committee, power being given them to add to their number:—Dr. Forbes, Dr. Kerr, Dr. Heygate, Dr. Edwards, Dr. Hodgkin, Dr. Hardwick, Dr. Budd, Mr. Hodgson, Mr. Nunneley, Mr. Daniell, Mr. Wallace, Mr. Martin.

The committee having assembled, appointed Dr. Forbes their chairman, and Mr. Martin their secretary.

They assume that it is not necessary to enter into a detailed explanation of the reasons for establishing such a school, or schools, as are now contemplated, as every one is well aware both of the necessity of an improved preliminary education for youth destined for the medical or other professions, and of the impossibility of obtaining this at ordinary schools, without incurring an amount of expense beyond the means of many parents. It is also generally known that schools on a plan similar to that now recommended have been established by the members of other professions—for instance, the clergy, and the officers of the royal navy, which have been most successful in realising the hopes with which they were founded. By their means a complete and most liberal education is supplied to the sons and nominees of the subscribers, at such a moderate expense as would be otherwise quite inadequate; and it would be reasonable to hope that a like degree of success will attend the establishment now contemplated.

The members of the committee appointed at the Northampton meeting being, for the most part, too far from each other to allow of convenient meeting in consultation, agreed that those gentlemen who reside in and near London should be considered as a sub-committee, namely, Dr. Forbes, Dr. Hodgkin, Dr. Hardwick, Mr. Wallace, Mr. Martin; and it was arranged that when any subjects of great importance were to be considered, the more distant members should be consulted by letter.

Raising of Capital.

The result of the inquiries of the committee into the proceedings of other schools, and of their careful consideration of the exigencies of that

which they are desirous of assisting to organise, is the conviction that the establishment of a certain capital, subscribed and paid up, or at least guaranteed, is a preliminary measure of positive necessity. Without this actual or potential fund, they feel that no single practical step can be taken towards the formation of the institution.

They have ascertained, also, that the capital requisite for this purpose must be large, in order to ensure the certain success of the school, and render the undertaking, in a commercial point of view, safe, either to the directors or to the subscribers at large.

They propose, therefore, in the first instance, to raise the sum of ten thousand pounds, at the least, as the basis on which all their future proceedings must rest.

The first view of the committee was to raise this sum by means of shares only, the usual mode adopted by proprietary companies; but they found that strong objections prevailed against this plan in the minds of some, on account of the responsibilities and supposed risks attaching to this species of investment. Although the committee believe that, under careful management, no such risks would accrue, they have thought it prudent to do away with any fears on this account, by proposing an alternative, in the form of donations, to which analogous privileges, but no pecuniary liabilities, should attach.

The following is, accordingly, the plan which they have adopted, after mature deliberation, and which they now submit for consideration to the members of the Association, as well as to the profession in general.

They recommend that there should be three forms under which the required amount of capital should be raised, namely: shares, donations, and benefactions.

1. *Shares.*—Proposals to be issued for the disposal of 300 or 500 shares, of the value of £25 each, the sum of £10 on each share to be paid in at a banker's at the time of subscription, subject to further calls, as more money may be required.

Shareholders to be of the medical profession, and no subscriber to hold more than eight shares. The transfer of shares to be to medical men only. For each share the subscriber to have the right of nomination for one boy at a time, provided that the full amount of each share shall have been paid up; but no share shall authorise more than five consecutive nominations; nor be available for more than fifty years, unless the original shareholder should survive that period. And the holder of any number of shares not to be entitled to more than three nominations at a time.

2. *Donations.*—They propose that an additional amount of capital shall be raised under the name of donations, to form part of the same stock; and to confer privileges during the life-time of the donor, and no longer: but donors to be at liberty to nominate prospectively. The lowest donation conferring privileges, to be twenty pounds, which shall confer the same rights and privileges as shares of twenty five pounds: these donations shall be paid in full at the time of subscription. Donors of fifty pounds to be entitled for life to the nomination of two pupils always in the school. Donors of an hundred pounds and upwards, to be entitled for life, to the nomination of three pupils contemporaneously in the school: and the nominations of donors of the largest sums to be entitled to preference. Persons of other professions to have the right of becoming donors, with equal privileges as to right of nomination, with those of the medical profession: but in this, as in all other cases, as subsequently stated, two out of three nominations must be in favour of the sons, grandsons, nephews, or wards of medical men.

3. *Benefactions.*—As there will doubtless be many members of the profession, who, without wishing to incur the responsibilities and duties of the shareholders and donors, will be anxious to promote the interests of an institution of such inestimable value to their brethren, it is proposed, in the third place, to adopt an additional form for the increase of the capital, by means of independent contributions under the name of benefactions.

As no privilege will attach to these contributions, they will bear no fixed amount, but the

smallest as well as the largest sums will be acceptable, and will be applied to the promotion of the general purposes of the institution.

Admission of Pupils and Government of the School.

The committee consider it advisable at present, to prepare for the establishment of one school only, consisting of not less than two hundred, nor more than three hundred boys. The committee, however, hope that this school may ultimately be made to comprehend five hundred. London being the common centre of railway communication, as well as having other obvious advantages, the committee consider its vicinity as being the most eligible locality for the establishment of the first school.

The following are the chief fundamental regulations respecting the government, and terms of admission to the school, which the committee would recommend for present adoption:—

First—Pupils to be admitted by nomination only.

Second—The sons, grandsons, nephews, or wards, of members of the medical profession, to be eligible for admission at the charge, for board and education, of thirty guineas per annum, with three guineas as an entrance fee.

Third—The sons of persons, not being the sons, grandsons, nephews, or wards, of members of the medical profession, to be likewise eligible for admission, but at the annual charge of forty guineas: the entrance fee to be the same in both cases.

Fourth—Payments to be made, half yearly, in advance, and to include all expenses, excepting for printed books, which will be a separate charge at prime cost.

Fifth—Shareholders and donors not to be allowed to nominate pupils, not being the sons, grandsons, nephews, or wards, of members of the medical profession, in a larger proportion than one in three.

Sixth—Boys not to be received before they are ten years of age, nor after they are fourteen; nor to remain at school longer than until they are eighteen years of age.

Seventh—Before pupils are received, they are to be approved of by the council of the school.

Eighth—The course of education to be of a high character, liberal, and comprehensive; calculated to produce well-principled, well-disciplined, and well-stored minds, elevated by religious instruction according to the doctrines and discipline of the Church of England.

Ninth—The officers of the institution to be a president, vice-presidents, trustees, treasurer, auditors, and secretary.

Tenth—The government of the institution to reside in a council, twenty-four in number, being all members of the medical profession, elected from the shareholders and from the donors, with power to apply the capital to the purchase, renting, furnishing, and fitting up of appropriate premises: they shall have the management of the property, and the entire direction of the affairs of the society. The members to continue in office three years; and to go out in sections of thirds, but to be immediately eligible for re-election. The council to have power, with consent of the president, to add to their number such contributors to their funds as they may deem qualified to render essential service to the institution, subject to confirmation at the next annual meeting.

Eleventh—The annual meetings of shareholders and donors to be held either in London or at the school, or wherever the council may consider to be most eligible. At such meetings, or at special meetings to be convened by the council, there will be power to revoke, or add to, or alter regulations, provided that due notice has been given.

In presenting this imperfect outline to the members of the Provincial Medical and Surgical Association, and to the profession generally, the committee hope that, although some of the principles, and a great part of the details, of the plan remain to be laid down, enough has been stated to enable the friends of the original scheme to make up their minds as to the probabilities of its being successfully carried out. The committee entertain no misgivings on this head, but, on the contrary, are daily more and more convinced of its

eventual success. They leave it for the future council of the school to carry into full effect this great and beneficial measure; but they consider it a part of their own duty to call, without delay, for the inscription of the names of donors, shareholders, and benefactors. They are happy to be able to append to their present report the names of a few subscribers, and doubt not that, before long, the list will be greatly increased.

So soon as a sufficient amount of capital has been engaged for, the committee will feel authorised to call a meeting of the subscribers, for the purpose of electing the officers of the institution, who will then be prepared to fulfil the wishes and the intentions of the supporters of the plan with the least possible delay.

The names of intending subscribers will be received by the Secretary, addressed to him at Reigate; or by any other member of the committee.

JOHN FORBES, Chairman.

THOMAS MARTIN, Secretary.

London, Dec. 26, 1844.

LIST OF NAMES OF SUBSCRIBERS AS SHAREHOLDERS, DONORS, AND BENEFACTORS, TO THE PROJECTED SCHOOLS FOR THE SONS OF MEDICAL MEN.

[Be pleased to date the signature, and write the Christian name at full length.]

	Shares.	Donations.	Benefactors.
22nd November, 1844.		£ s. d.	
Archibald Robertson, M.D., Northampton	one	1 0 0	0
Edward Daniell, Newport Pagnel ..	one	100 0	0
Thomas Martin, Reigate	one	100 0	0
26th November.			
Joseph Hodgson, Birmingham	one	100 0	0
28th November.			
Sir Benjamin Brodie, Bart., London	one	100 0	0
30th November.			
John Forbes, M.D., London	one	100 0	0
The Misses Wallace, Carshalton	one	25 0	0
Edward Wallace, Carshalton	one	20 0	0
Alfred Hardwick, M.D., Kensington	one	100 0	0
Sir James Clark, Bart., London	one	25 0	0
Thomas Nunceley, Leeds	one	25 0	0
Peter John Martin, Putborough	one	25 0	0

THE CHOICE OF FELLOWS.

(To the Editor of "The Medical Times.")

SIR,—To your Journal I feel grateful for its advocacy of the general practitioner, who, by the invidious distinction introduced into the new charter, suffers a greater humiliation than the poor-law commissioners or the boards of guardians have yet been able to inflict.

I addressed the enclosed to the council of the College of Surgeons, and its receipt was acknowledged by Mr. Balfour, who referred me to clause 6 in the bye-laws relating to the fellowship, the period having elapsed for the Council nominating to the fellowship, a fact, of course, I was aware of, my letter being intended merely as a remonstrance against an injustice that has been done me.

I am, Sir,

Your obedient servant,
EDM. JONES.

Ross, Herefordshire.

Ross, Herefordshire,
Dec. 16, 1844.

GENTLEMEN,—The new charter having placed in your hands the power of granting fellowships of your college, I thought, as one of your apprentices, I might have received that honour.

My Latin examination took place in 1830, before Mr. Vincent, when I left ten guineas deposited until I should obtain my diploma, which occurred in 1835. Now, observing in the last list of Fellows several of my juniors without the above advantage, and who, like myself, practise obstetric surgery, and supply their own patients with medicine, and in no way more distinguished by surgical merit, I cannot but feel it an injustice either to occupy

a lower grade in surgery, or have at a further expense, and for the third time, to appear before the Court of Examiners.

I have the honour to be, Gentlemen,

Your obedient Servant,

EDMUND JONES.

To the President, Vice-President,
and Council, R.C.S.L.

THE EXAMINATION OF SURGICAL FELLOWS.

(To the Editor of "The Medical Times.")

SIR,—Since the 5th instant I have been every week expecting to see a report of the proceedings at the College of Surgeons from a more able pen than (mine when the Court of Examiners thought proper to reject the one-third of the senior practitioners, who then presented themselves for the fellowship); but finding no one has as yet done so and thinking that the profession at large may wish to know the nature of the examination, and also that it may be of some service to those who may, on a future occasion, wish to present themselves before the Court of Examiners, I beg to send you a plain and unvarnished report of the proceedings, together with a few remarks on the same, the insertion of which in your next number will oblige

A PRACTITIONER OF MANY YEARS' STANDING.

Dec. 29, 1844.

On the morning of the 3rd instant, twenty-four members had assembled in the hall of the College; at a few minutes past ten they were all requested to walk into the council-room, where the Court of Examiners had assembled. The twenty-four were then desired to stand all round, like a class of school-boys, although they were rather old ones, I must confess; many of them had grown grey and bald in the profession. The president then addressed them, stating that it gave the Court the greatest pleasure to see so many gentlemen desirous of upholding their profession; that in the next room each gentleman would find a table with his number and name, and a paper with forty-eight anatomical questions; that no doubt all the gentlemen present would find no difficulty in answering them; but that the Court did not require that all should be answered; that they would find paper on the table, on which they were to write their answers, and to number them according to the written questions. The writing then commenced, and was got through in about two hours, two or three of the examiners walking about the room during that time. At two o'clock the candidates were called into the theatre of the college by four at a time, to perform the operations on the dead body; each member had to perform one operation, which was of the most trivial nature. One had to tie the anterior tibial artery, one the dorsal on the instep, another the posterior tibial artery at the inner ankle, and a fourth the radial artery at the wrist. No one performed more than one operation, and, excepting one, were all of the simplest nature; that one was performed by a gentleman who was understood to be a demonstrator, which was securing the subclavian artery. At five o'clock they were informed that they would not be again required until ten o'clock on Thursday, the 5th. On that morning they were all assembled again in like school-boy fashion, and were given thirty written questions in pathology, therapeutics, and surgery, which were all answered by two o'clock. They were kept waiting from that hour until half-past seven, when thirteen were requested to walk into the council-room, and were informed that they were to be recommended for the fellowship, but must first pay their ten guineas. At a quarter past eight, three more were had in; they were told that there was some little difference of opinion respecting them, but that now all was right, only to pay the above-mentioned fee. Immediately after this, the secretary came down into the hall, and informed the remaining eight that they were not to be recommended. For the first few minutes all was astonishment, nor could they believe it until the secretary had more than once repeated the information. Indignation then took

the place of mute amazement, and all demanded to know on what grounds they were rejected; the secretary could only declare that it was the will of the examiners, which he was deputed to make known to them.

I have now given a correct statement of all the proceedings, and have only to make a few remarks thereon. Many of the candidates who presented themselves were from the provinces, and there were few of them who had not written to one or other of the examiners to inquire the nature of the examinations; they all appeared to have received nearly the same answer, viz.: that the examination of candidates of upwards of eight years' standing would be purely a practical one; that the anatomical examination, would be on the dead body, and only of a practical nature; and at the same time gave them to understand that old practical surgeons would find no difficulty in passing. With this understanding, not one of them hesitated in going up, or had the slightest doubt of passing; many of them were not a little astonished when they had the forty-eight anatomical questions given them; however, they remembered that, according to the president's instructions, they were not required to answer all of them. To any young man going up for his member's diploma, these questions no doubt would be most easy; but for the old practitioner to remember whether the right or left spermatic vein passes into the renal vein, or the muscles of the leg, or the attachments of the external oblique, or the course and distributions of the median nerve, or what veins form the vena porta, or what nerves pass out with the internal jugular vein, and many of the like questions, of so little use in surgical practice, would be no easy task; therefore, to make sure of passing, he would require to spend another season in the dissecting-room, as practitioners in the country rarely think of keeping up more of their anatomy than what is required in operations. And of what use is it to them, in removing a leg, to know the name of every muscle they cut through, or in operating for hernia, to know that the external oblique arises from the eight inferior ribs? All these questions, no doubt, would be most easy to the members of yesterday, or to those of the twenty-four who were, or had been, demonstrators or lecturers; but it looked rather like a trap for those who went up from the provinces, and more particularly when it is remarked that many had been informed by those very examiners that it was to be a practical examination. I have no doubt every man of the twenty-four could have passed a good practical examination on the dead body, instead of the paltry operations required of them. On the second day, the thirty questions were all such as I doubt not every man there had met with in the course of his practice, and I, therefore, have every reason to believe that all were answered; but when a man has been many years in practice, surely he has a right to form some ideas of his own; and if he does not treat erysipelas, and other surgical diseases, in strict accordance with the notions of the majority of the nine examiners, is that to be a reason for rejecting him? Many of the twenty-four had been a very long time in practice, and more than one in better, than half of those examiners; it would, therefore, have been only an act of justice to have admitted them to *viva voce* discussion, to have proved that their thirty answers were founded on their own practical observations; and I much doubt whether the candidates would not have had the best of the argument. Rumour states that a considerable difference of opinion existed amongst the examiners, and that Mr. Guthrie and Sir Benjamin Brodie wished to pass the twenty-four. No doubt these gentlemen saw the injustice of rejecting them, after admitting 536 without any examination whatever, and they must have well known that not one-half of these *unexamined Fellows* would have passed so good, or a better, examination as those who were rejected. Should any of the seniors of the profession again offer themselves for a fellowship, they had better pass a season or two in the dissecting-room, and make themselves well acquainted with the surgical works of *all the examiners*, and in the way of operations they will do well to be quite conversant with those of the more formidable na-

ture—such as *tying the radial artery at the wrist*, or the *dorsal on the foot*; above all, I would advise their remembering that there is such a thing as obtaining candidates under false pretences, and that, when assured of a practical examination, they may find they have to play the old game of the rules of contrary.

[The candidate was directed to display his surgical skill, by ligaturing the subclavian artery, and performed the operation to the approbation of the examiners; one of whom, rather more inquisitive than wise, afterwards dissected the part, and ascertained that the ligature embraced a nerve, and not the artery. We have not heard that the diploma has been recalled.]—ED.

THE APOTHECARIES' COMPANY.

(To the Editor of the "Medical Times.")

SIR,—The lively interest that the Society of Apothecaries in London have lately taken in the welfare and dignity of the general practitioners, has led me to take a retrospective view of their behaviour to this class of practitioners.

I find, in their regulations respecting teachers, made in 1830, that the lecturer on materia medica and therapeutics "must be a fellow, candidate, or licentiate of the Royal College of Physicians of London, or a graduated M.D. of a British university, of four years' standing, unless previously to his graduation he had been for the same length of time a licentiate of this court, or he must be a licentiate of this court of four years' standing."

Now, this regulation essentially involves the assertion, that no general practitioner in practice, previously to August, 1815 (unless he should happen to be a graduate of a British university) is competent to teach materia medica and therapeutics. Now this is a very bold and malignant assumption, and cannot be supported; for we all know that some men of distinguished and publicly known talent in these departments of medical science were general practitioners before August, 1815; and, for aught the worshipful company may know, many might exist who were fully competent to teach even the examiners, but who had not appeared as public men in these branches of medical literature. So much for their regard to the interests and feelings of general practitioners, as such.

I am, Sir, yours respectfully,
SENEX.

London, Dec. 28, 1844.

OPINIONS ON THE NEW BILL.

All the regulations contained in Sir J. Graham's medical bill are good; but the quackery clause is so much opposed to the other principles of the bill, that I have been induced to offer a few remarks on the subject. The quackery of Sir J. Graham's bill is, as you remarked, "one of omission, not commission."

Sir J. Graham appears to think that, by substituting a clause for allowing public offices to be held by qualified medical men only, he gives us something approaching to an equivalent for the act of 1815; but it ought to be remembered that *private practice* is the sole source of emolument in nineteenth-twentieths of cases for the profession; consequently, this substitution would fall very far short of the *intentions* of the act of 1815 in its practical working. The moral question in the discussion of empiricism ought to claim our first consideration; and I have accordingly put the following questions?—Is quackery right? Does it contain within itself any inherent or adventitious principles of good? Can it recommend itself to our present social organization, and use the plea of adaptation to the wants of the community? Has it the voice of virtue, goodness, integrity, and usefulness to call to its assistance in this, the day of its dangers? Is it or can it be defended by any rational being?

In an improved condition of society we shall require no law against empiricism; but there is no denying its pressing necessity at the present day. Sir J. Graham wishes to introduce free trade in physic. Now what is the principle of

free trade in physic?—I will give it in his own words. In speaking of the different licensing bodies in Great Britain and Ireland, he says, "These various bodies are naturally rivals; and having peculiar interests involved in that rivalry, the natural tendency, if unchecked, is to underbid one another. Now, what is underbidding each other in this matter? If one only required lower fees than another, that would be, comparatively speaking, a small object; but with lower fees, there exists the desire to attract students, and to grant degrees by lower demands of qualification. The inevitable tendency of such rivalry is to produce the effects I have stated." Now, what are the effects stated?—they are reducible to one, namely: the strong bias and tendency produced, by the present arrangements of the various licensing bodies, to grant diplomas in medicine and surgery to men, intrinsically disqualified by their superficial knowledge of the profession. Now, it appears to be the wish of Sir J. Graham to remove these irregularities, and, perhaps, the strongest claim to our respectful attention to the bill lies in the clauses for effecting this object. Still, I think the ground taken by Sir J. Graham is not sufficiently broad and comprehensive; for the idea almost instinctively rises, that, whilst he is anxious to prevent persons practising medicine, *who have received a somewhat limited education*, he allows, *others who have received none, or the most superficial only, leave to practise.*

The meaning of the word liberty is not, as some persons would have us understand it, unrestrained action, whether good or bad. The highest function of law is to check rapacity and crime, and surely that crime which destroys the life of a human being, as it is the highest known to the law, ought to meet with a corresponding verdict from the chair of justice. In truth, a man ought to be more severely dealt with for destroying life than property, in the proportion (if such a term can be appropriately used) of the relative value of the two.

The public have generally believed that persons practising medicine, without having passed any examination, were infringing the law, and liable to a penalty, and they have had this belief from two sources, 1st, From the assertions of medical men to that effect; 2nd, They have occasionally seen newspaper accounts of prosecutions for illegal practice. Thus, the introduction of a penal clause against quackery, in Sir James Graham's bill, would be nothing new or startling to the public, and, I may add, that the intelligent class of the community, who have thought on this subject, wish it. Sir J. Graham's bill, on this point, will throw the profession into a retrograde movement, which it would take some time to check and repair. He would make quackery one of the institutions of the country (indirectly, I grant), a feature it has not hitherto assumed, and my sincere prayer is, may this new feature never make its appearance on the face of the medical reform of this age.

With respect to the act of 1815, every party allows it has been very inefficient in its operation. Why? Because the penalty has been directed against the qualified practitioner, and not the empiric. Legal practitioners have had to pay nearly £400 to obtain £20; *here is the fault* of the act of 1815. I know not that I have seen this practical working of the Apothecaries' Act distinctly noticed, yet nothing has impressed me more strongly.

Neither the Apothecaries' Company, nor, indeed, any other body of men, or individual, ought to be called upon to pay large sums of money, or a great expenditure of time, to suppress empiricism. We want efficient, short, and simple means, introducing for the accomplishment of this object. If means of an opposite character are used, we shall have to enact the tragedy of the Act of 1816 once more.

I grant that it may be impossible wholly to suppress quackery; but the circumstance of a good law being occasionally broken, would form no reason why that law should not exist. If no laws are to be formed, because sometimes transgressed and set at naught by unprincipled persons, there would be an end of all law. Statutes cannot entirely suppress murder, theft, or other crimes;

but they can teach the offenders that they are punishable, and that the lives and property of men are defended by the State, as far as it has power. And as quackery has nothing to say in its defence, as it is opposed *directly* to all that is beneficial, good, or holy, what stronger inducements can be required to enact a law for its suppression?

If Sir J. Graham would make a trial of suppressing quackery by any suitable means, he would at least have the respect of the profession; and if it should fail in its anticipated effects, he would have the satisfaction of an approving conscience for his manly and well-intentioned essay. I do not think quackery can be entirely suppressed in the present state of society. Society does not comprehend the extent of the mischiefs produced by it; and until it sees them with more distinctness, it will not rise with power to overthrow them. This to me is a very strong reason that we, who have witnessed them in all their length and breadth of deformity, are bound to reveal them to our fellow-men with calmness, but, at the same time, with the full power of truth.

I do not think druggists can ever be prevented from prescribing medicines in their shops; I can call to mind no means for this purpose, but such as are at first glance shown to be futile and useless.

As it is very wrong for a druggist to prescribe, so it is equally wrong for a medical man to sell drugs. The druggists, with much reason, complain of this invasion of their privileges, and they ought to be supported by law. No man ought to practise medicine and keep a druggist's shop. The bulk of the profession cannot believe the assertion that empiricism can be checked. The reason for disbelieving it is this: suitable means have never been tried; the prosecutor has had a penalty, in the form of law expenses, twenty times as great to pay as the prosecuted quack. The legal practitioner has been the injured party, and the really prosecuted one, as far as loss of money and time are concerned.

To suppress quackery, then, I would suggest the following means to be adopted:—

1st, That every qualified practitioner should have the royal arms engraved on his door-plate, and his distinctive qualifications also placed on it, according to his entry in the annual register. Sir J. Graham's penalty of £20 to be paid by any party calling themselves physicians, surgeons, or licentiates, or any other name implying they undertake to attend or attempt to cure any disease or accident, if not duly registered.

2nd, I would have sent annually to all law and other public offices a list of qualified practitioners within each parish, to be transmitted in January, in the same mode as to the council of health.

3rd, That any person, not registered, visiting or prescribing, or both, any patient or person labouring under disease or injury, at any dwelling-house, shall be summarily brought before a magistrate, and fined in a given sum for a first offence; the fines for all subsequent same offences to be multiples of the last fine, or, in default of payment of fine, to be imprisoned for a given time for a first offence, and all subsequent imprisonments to be multiples in point of time of the last term of imprisonment, provided always the charge against him is substantiated.

4th, That no person be allowed to travel in any part of her Majesty's dominions for the purpose of offering for sale any drugs, nostrums, or medicines, without incurring the penalties of fine or imprisonment, as stated under the third clause.

5th, That no patent medicines shall be recognised by government, and no stamps be sold for any such medicines; and that any and all editors or publishers of newspapers, reviews, journals, or other periodical publications, shall be liable for inserting quack advertisements or medicines; all fines to be multiples of the last one levied.

6th, That if our government cannot dispense with the emoluments from the stamps for patent medicines, after a two years' trial, that the sum of £1 ls. for a licentiate of medicine or surgery, £2 2s. for a licentiate of medicine and surgery, and £3 3s. for a doctor of medicine or surgery, or both, be paid annually by every member of the profession, to prevent government sustaining loss.

7th, That no grade of practitioners shall employ any one as assistant unless such assistant be duly registered.

8th, That no physician's prescription shall be sent to any chemist or druggist to be compounded, under the penalty of a fine for every offence.

9th, That no one be allowed to attend any market, or otherwise expose for sale, any drugs, nostrums, or medicines, in any street or byway in her Majesty's dominions.

VINDICATOR.

THE NEW BILL AND THE GENERAL PRACTITIONER.

(To the Editor of the "Medical Times.")

MR. EDITOR,—There is one point which appears to me not to have met sufficient attention in discussions and resolutions on the Medical Reform Bill, and that is the time of study necessary for the new birth, under the Bill, of the future general practitioner. How he is to be moulded in the womb of time is a question, or whether he will be an abortion? But presuming it possible that he may come into existence, it is very necessary we should watch over the period of his utero-gestation for the sake of giving every help to his proper formation. Now, as the period and drudgery of an apprenticeship is to be done away, the intended general practitioner, it strikes me, ought to have a sufficient time allotted him to acquire a sufficient knowledge of all those branches of the profession he may be called upon to practise—an education up to the high water mark of art and science on all points of medicine and surgery.—Should he have less he will be sent out with a lie in his mouth, because he will be insufficient for the public service; but should he receive the full measure of education, he will then have a foundation sufficiently broad to build up reputation and usefulness upon, in the practice of his profession. What time, Mr. Editor, should you think enough? Not less than four years, probably. Well, then, Sir, what term would you like for the new-born physician or surgeon? Now this foetation of the bill must be watched or it must come to a monstrosity in the eyes of common sense. The functions of the general practitioner, pre-suppose a person qualified to practise medicine and surgery, or to have a sufficient education to work out in practice the two-fold functions of the physician and surgeon; and then—by a long interval of age and study between the acquisition of the degree for practically administering both, and the degree for practising only one—the first degree is inferentially assumed inadequate. I confess this is a piece of logic I cannot understand; but I am afraid it is a subtlety of words which means neither more nor less than that the general practitioner in future shall really be below his present competency, and shall be only the assistant to the pure physician or surgeon. What, Mr. Editor, is to be the position in the new order of things of the present M.R.C.S. Because he may happen to be a L.S.A. and a general practitioner, is he to submerge in the grade No. 3 of the Licentiate of Medicine and Surgery on the Registration Roll? A pretty state of things in which a few fantastical and arrogant individuals shall ride rough-shod over the less fortunate multitude of practitioners. Well may we, the working classes, exclaim, *O tempora! O mores!* How might Sir Benjamin Brodie and the Dons, Mr. Editor, have lived in the annals of the profession as benefactors to us and the public, had they acted an honest and sensible and a discreet part; but to them, and not to Sir James Graham, as concoctors of the Bill there is every reason to attribute what is called the ferment and fever this Bill has put us into. Inasmuch as it proposes to assimilate the institutes of professional tuition and degrees in Great Britain, the principle is admirable. Then, how easy to have followed out the simple and common-sense view to guard the public on the one hand from the evils of unbridled quackery, by not allowing the unqualified the same privilege as the qualified; and on the other hand, allowing every man (who should enter the profession under the common degree) to take up that of

physician or surgeon, by standing for another examination particularly applicable, which might enter more largely into that branch which a general examination could not reasonably so much do.

I am, Mr. Editor, one of your subscribers,

A COUNTRY SURGEON.

Nailsworth, Gloucestershire, Dec. 13.

P.S.—By-the-bye, Mr. Editor, does it not appear very ridiculous in the College of Surgeons to require a member who wishes to become a fellow to pass another examination? Admitting the standard of examination for the member to have been on a par at the time he passed with the maturity then of surgery, and admitting the necessity of such second examination, on account of the further improvement of surgery, it follows as matter of course, that the member who has so passed for a fellow ought at stated intervals, when surgery may be considered to have made some advancement, to undergo another and another examination to test his acquirements!

[To the last remark we would append the wish that the Councillors would have the decency to exhibit *their* improved surgery by the same test they think good enough for others—a *second* examination. It is not right,—it is not commonly respectable—that the examiners should tempt their newly made fellow to turn round on them with the truthful reproach, "I have stood a severer examination than yourselves: I have undergone a test you never dared to peril; though as a general practitioner you will exclude me from your Council, by this document you declare me a better surgeon than yourselves have ever been declared!" With regard to another point: the Bill will certainly *qualize*, and, we think, *elevate*, the education of the future practitioner.—ED.]

NOTICES TO CORRESPONDENTS.

M. M. sends us a statement of his *Professional history*, to shew the injustice of his omission in the lists of Fellows. It is now too late for publication. The Council can no longer make Fellows, save by examinations, and ere they make many such there can be no doubt the Charter will be altered. The Council majority are now, we understand, united in the opinion that the Charter should be altered. It remains to be seen what the Government will do.

A Subscriber.—It is not the practice, we believe, of Coroners to receive evidence for the accused: and there exists no remedy for a Coroner's misdeeds but the expensive interference of the Court of Queen's Bench. We do not know whether Mr. Churton is a medical man or lawyer.

Listener.—Reports of some of the trials of Alexis appeared in the Medical Times.

Subscriber (Ireland).—An M.D., of whatever University in Great Britain, will be registered under the same title by the New Bill.

Mr. Barron.—The name shall be given correctly in our list. The names of the sixteen or seventeen new Fellows will appear next week, in an authorised form, in our columns.

A Subscriber.—The future Licentiate of Medicine will be—we take it—by the New Bill, a Licentiate of the College which examines and gives him his diploma—that of Physicians. The Bill seems to us most obscure, however, as to its arrangements respecting members of any one public licensing body. We suppose that the authors mean, that the Apothecary shall register as a Licentiate of Medicine, the Member of the College of Surgeons as a Licentiate of Surgery; and the gentleman possessing both licenses, as a Licentiate of both Surgery and Medicine.

LECTOR (Ipswich).—There is such a "hindrance." The hints are valuable.

M.D. (London).—The new Council of Health will no doubt decide the status of the extra-licentiate.

DELTA is inadmissible.

AN ENQUIRER.—We are not of those who, without analogous evidence almost irresistible, would recommend a new REMEDY in a case of immediate and great peril, where every hour lost, tells fatally. Things must not go too precipitately.

The paper "On the Philosophy of Medicine," is respectfully declined.—Several communications are in the same position.

J. Y. B.—The MEDICAL TIMES gives no advice gratis.

"LOFTY" is more alarmed than hurt.

M.D. (Liv.)—The proposal is accepted with thanks.

Many correspondents are unavoidably postponed.

Mr. A. DURLACHER assures us that he, and not a Mr. Eisenberg, is the Chiroprapist to the Royal Family; and that, therefore, our mention of the latter as filling that office, in our "Almanack," may not only do him serious injury, but is in itself a circumstance requiring explanation. We were indebted for our mistake, we think, to the "Post Almanack." We agree that any intentional change of the kind noticed would be very disgraceful.

THE MEDICAL TIMES.

SATURDAY, JAN. 4, 1845.

"The numerous and striking claims in favour of Mesmerism, emanating from so many sources, have at length made it a subject of serious and philosophic enquiry, which can no longer be resisted by the members of the Profession. It is by them only that its pretensions can be properly weighed, and it certainly behoves them to enter on the enquiry with candid and unprejudiced minds."—T. M. GREENHOW, F.R.C.S. of England, Senior Surgeon to the Newcastle Infirmary, &c. (Report of Case, &c.)

MISS MARTINEAU ON MESMERISM!—A lady author on a doctor's subject—launching forth into psychological and physiological marvels! The temptation for a joke and laugh, if even truth and feeling pay the price, is not small, and considering how men like to write on the funny side—it is so easy—we have no wonder that paper pellets without number, the effect and provocative of many an idle fit of laughter, have before this reached this first political economist of the female gender. Besides, what man—of thought, too—likes to sit on the pupil's stool before a lady monitor? Not we; and, therefore, we are weak enough to share the *manly* prejudice against your authoresses. In Phaon's place, we should have been a Phaon; Sappho, for aught we cared, might have dashed whizzing hot, like blacksmiths' tongs, into the dark deep, and our hat have worn no willow green. In the post of Pericles, Aspasia would have given Athens even less care than ourselves; and as for Madame de Staël, Napoleon outshone Solomon, in all his wisdom to Queen Sheba—the blue stocking of her age—when he told her "he'd like her better if she bred more boys and fewer books." Still, we can be fair—even to a lady). With all our dislike of the characteristic, we can be just to the character; and thus claiming that while our hearts deny her a cheerful reward, our minds admit her a full merit, we will endeavour, in our remarks on her case, to remember, what seems to have been a little forgotten, (and by gentlemen too), that she is not only a woman, but a woman of high principle and unsurpassed talent, and that our own title to respect will not fall as we do homage to hers; or our claim to ability be anything the more, the less we appreciate hers.

In the "Medical Report of the case of Miss H. M." by her medical attendant, T. M. Greenhow, Esq., the respected senior surgeon to the Newcastle Infirmary, and the letters of Miss Martineau herself, we have now all the materials for forming something of a certain opinion on the alleged case of her cure by mesmerism, which has excited so much public attention and discussion.

From these sources we learn that Miss Martineau's illness dates from before 1839. During a few antecedent months she had experienced an on-coming and monthly increasing debility, with occasional accompaniments of sharp pain in the uterine region. In June, 1839, irritating discharges, irregularly frequent catamenia, general suffering and weariness, especially in the back, and down the legs, accompanied by the appearance of "a membranous substance like the end of a little finger," projecting from the os uteri, prognosticated, though somewhat obscurely, that retroversion of the uterus which clearly took place the following month. In August, a sur-

gical examination, by her brother-in-law, Mr. Greenhow discovered the uterus large, retroverted, and low down in the vagina, pressing against the urethra and neck of the bladder, and the lower part of the sacrum. From the lip was seen a small polypus, which was removed without any perceptibly good effect, and for a short time she was treated (ergot of rye, &c.) under a hope of expelling a second polypus, which appears not to have existed. In September, 1841, Sir Charles M. Clarke saw Miss Martineau, and having given his opinion that her malady was no disease of the neck of the uterus, but simply an enlargement of that organ, sanctioned the rest and palliative treatment that had been for some time previously followed, adding a suggestion which led to the daily internal use of iodide of iron, almost without an interval, during the two years and a half *preceding*, and for about a month *following*, the trial of Mesmerism. The patient's sufferings were throughout, of course, great: they arose from a painful tenderness of the left groin; oppressive sickness, amounting often to retching; difficulty in emptying the bladder and bowels; abdomen distended with flatus and accumulated fæces; constant and distressing aching in the back, with the tortures ever and anon arising from the pressure of the uterus on both excretory apparatus. The treatment pursued by Mr. Greenhow, in addition to the points before noticed, consisted mainly in relieving the bowels pretty constantly by medicines, and a moderate though frequent use of opium, in the shape of pills and injections. Under this system, in Sept., 1843—nine months before the essay of Mesmerism—Miss Martineau acknowledged to an increase of comfort, and the relief of most of her woes, save "the mechanical troubles" arising naturally from the nature of her malady. In April (two months before the trial of Mesmerism) the attachment of the uterus to the fundus was found less fixed, and though, just before the trial, the symptoms had been somewhat aggravated by an attack of indigestion with "loaded bowels," Mr. Greenhow assures us that the time was then arrived when nothing but a powerful stimulus was required to shake off the distressing nervous symptoms characterising her malady, and that the present perfect health—which he does not deny—under an organic disarrangement noticed as so entire in the beginning, was but a natural sequel of the pathological improvement begun about April. Mr. Greenhow adds that there was no malignant disease present: that he *always* believed that she would perfectly recover, and that, though he expected the event about the period of the catamenial crisis, he was not without hopes it might occur, as it did, earlier. Miss Martineau, on the other hand, tells us, that when she applied in June to Mesmerism for relief, her use of opiates was on the increase; that there was no favourable change in the disease; that nothing in medicine availed her, except in mere alleviation; that her brother-in-law, Mr. Greenhow, avowed to her as late as last Christmas, and twice even later, that he found himself compelled to give up all hope of affecting the disease; and that, as to all the essentials of the disease, she was never worse than immediately before she made trial of Mesmerism.

Her history under Mesmeric treatment is known to most of our readers, and may be thus briefly given. Mr. Spencer Hall, who is introduced by Mr. Greenhow, fails to produce sleep, but gives rise to the following phenomena, described by the patient:—

"Twenty minutes from the beginning of the *séance*, I became sensible of an extraordinary appearance, most unexpected, and wholly unlike anything I had ever conceived of. Something seemed to diffuse itself through the atmosphere.—not like smoke, nor steam, nor haze,—but most like a clear twilight, closing in from the windows and down from the ceiling, and in which one object after another melted away, till scarcely anything was left visible before my wide-open eyes. First, the outlines of all objects were blurred; then a bust, standing on a pedestal in a strong light, melted quite away; then the opposite bust; then the table with its gay cover, then the floor, and the ceiling, till one small picture, high up on the opposite wall, only remained visible,—like a patch of phosphoric light. I feared to move my eyes, lest the singular appearance should vanish; and I cried out. "O! deepen it! deepen it!" supposing this the precursor of the sleep. It could not be deepened, however; and when I glanced aside from the luminous point, I found that I need not fear the return of objects to their ordinary appearance while the passes were continued. * * * The other effects produced were, first, heat, oppression, and sickness, and, for a few hours after, disordered stomach; followed, in the course of the evening, by a feeling of lightness and relief, in which I thought I could hardly be mistaken."

The second day the same experiments with much the same results, and at night a similar but increased feeling of refreshment and relief. The third—in the absence of Mr. Hall—Miss Martineau's female servant became the operator, with even improved results; for the patient acquired an appetite, and "ate with a relish for the first time these five years." The "lazy hot ease of opiates" gave way to the cheerful and happy sensations of one in strong health. This went on though six weeks, increasing relief from pain, and growth in strength, marking each week's progress; there being no intermission of the *séances* but four times, each of which days were, singularly enough, marked by a recurrence of "the old distress and pain." In the middle of August, all remedies were abandoned, save opium, and a second change of mesmerists, giving her in charge to a clergyman's widow, she was in the beginning of October enabled to give up, with little or no suffering, what she frequently calls her "desperate dependence" on opiates. The improvement in the pathological condition of the uterus went on increasing with her sense of recovered spirits and general health, and on the 6th ult., Mr. Greenhow reports, after examination, that the fundus uteri is less fixed, and that although the retroversion still continues, and two membranous pendicles remain hanging out of the os uteri, the health appears to be quite good, the catamenia regular, the nervous pains and irritations gone, and the abdominal distension less.

The first question that here suggests itself, is whether, between Miss Martineau, and her three mesmerists, any agency of *any kind* was exerted new to medicine, or worthy of our attention and study. The Athenæum assures us that the phenomena are of every day occurrence, and that admitting Miss Martineau's statement in its full force and integrity, they amount to nothing. We should have been indebted to our contemporary if he had condescended to have furnished us the grounds of his positive opinion. We have had some experience of the protean forms of hysteria and have scrutinized, we hope not without profit, many of their various and mysterious phenomena. We can willingly, moreover, allow much for an imaginative patient suffering from long-standing disease of the uterus, and more or less affected by her habits of opium-taking, but with all these aids we confess we meet with some difficulties in accepting

the Athenæum's off-handed opinion that the whole affair is an "every day occurrence," or if so, that, it is an every day occurrence, not worth investigation. The sensations Miss Martineau describes above, were, we can suppose without difficulty, really felt: how were they educed? By a stranger repeatedly passing his hand, in the presence of her doctor, from the forehead to the back of the head, and thence downwards towards the spine. They did not occur once, but often: they seem to have been at the command of the mesmeriser: for the stranger repeats the same passes at any time; and the same effect is described. He, however, was a mesmerist, and phenomena being expected, of course the phenomena came. Well: he is absent, and that unromantic familiar thing—the lady's own servant-girl,—imitates the manipulations: there are here no expectations, yet the same result. A third party—a lady—essays the same procedure and again the same effects, and this for days, weeks, and months—the same in disease as in comparative health, wherever, or whencesoever the manipulations, these singular sensations present themselves! Now, whether there be or not, an excited imagination in this case, is of little or no consequence; for here it can be but a medium of action, and seems as susceptible of being commanded and regulated as the most stable agent in nature. Whatever the derangement of Miss Martineau's nervous system, one thing is clear, that at a moment when every power of an exalted ratiocination was at its highest point, a physiological condition of a very curious character was produced, as systematically as by a law of nature, by common manual passes, made by persons, no matter in what number, or of what grade in society; and the question whether disease helped in producing the phenomena or not, through imagination or not, really leaves their claim for investigation in much the same position; except, perhaps, that it would be in disease we should be most interested to command such effects by such means. We admit that it is not yet *demonstrated* to us, that it may not be to an idiosyncrasy we owe the physiological curiosity which has been here depicted to us; or that the *passes* which were enlisted for her special case were not an agency much used, yet never of use, owing their effect in her case to a chance which nobody ought to expect or attempt to account for; but we affirm, at the same time, that there exists, at least, a respectable amount of testimony for a different view of the case,—viz.: that analogous effects by analogous means may be produced on nearly every individual of the human family. Whatever the impositions of many of the lecturers and professors of animal magnetism—and we are disposed to think them enormous to have so prejudiced the Profession's eyes—our own among the rest—to a physiological question of such vast import—we are much inclined to believe that sleep in open day in the least somnolent, a pseudo-coma in the most healthy, a pseudo-catalepsy in the most flexible—all accompanied by a greater or less insensibility to pain—may be produced in almost any circumstances, in every case, by means at once simple and not hurtful, and which have hitherto wholly escaped our notice or attention. Some simple movements of the hand, known by the magnetists as *passes*, and made with little apparent art; or a fixed gaze for some minutes at an object at a right angle with the eye, as so well elucidated by Mr. Braud in our pages, seem to suffice to produce these strange phenomena—phenomena which though

now we fear principally matters of curiosity to those who believe them, and of ridicule to those who do not, may some day, offer an important adjunct, as well to the Practice, as to the Science of our profession.

But another question offers—is the improvement in Miss Martineau's health to be logically laid at the door of these "magnetic passes?" We think not. We may fancy that the agreeable excitation of the nervous system, on which she dilates, may have assisted any revulsive action commenced in her favour: and it is easy enough to imagine that the mental stimulus of so startlingly-hopeful a topic of thought and conversation, may have lent no little favouring influence; but the nature of the malady, the beauty of the season (June, July, and August of last year), and the never-to-be-forgotten *vis medicatrix nature*,—all forbid our accepting her case as a trophy to the prowess of Mesmerism.

With a third topic we close this protracted article:—what is the duty of scientific men to this now all absorbing subject?

The *Athenæum* tells us in its last number, that scientific men should have nothing to do with it, or else "should conduct their experiments apart, and keep the results to themselves, until they shall have reduced them within the natural bounds of science, and rendered them intelligible and definite." We profess that we see neither the "definiteness" nor "intelligibility" of our contemporary's advice. He evidently foresees results from mesmeric experiments, which, while neither definite nor intelligible, are *beyond* "the natural bounds of science." Now, supposing such extraordinary phenomena possible—and surely the natural bounds of science are not less limited than those of experimental fact—i. e., of nature under scrutiny—we take leave to ask why they are recommended *not* to be investigated? We are told, indeed, that some of the Mesmerists are no better than a Cagliostro or a Katerfelto—but if that portion of science is not to be studied which has been misused by charlatans, what shred of knowledge shall be left us? Chemistry has had its alchemists, comparative anatomy its plagiarists, medicine its Paracelsus and Van Helmonts, astronomy its nativity casters—and so on to the end of the chapter. True science and true philosophy knows nothing of the contemptible considerations which identifies high causes with miserable cultivators, which would postpone the study of the truth till our hands can be washed with a moral *eau-de-Cologne*, and no fool suspect us to be not quite *comme il faut*. It is not the man but the study—not the name but the "*thing*" the philosopher values: and there cannot be a stronger presumption of dealing with a charlatan of science, than to find him putting his miserable personal respectability in the way of an honest enquiry after truth. He as much turns science to low uses, for his own benefit, as any Lilly or Cagliostro of a preceding century. He makes it serve his social status—of so much money value in our day—as they made it help their pocket. The most delusive and lying Mesmerist does no more.

Now, the "*thing*," in Mesmerism, is probably of as much price as some of its "*cultivators*" are of little. Though our clever contemporary tells us that he thinks Mesmerism will "turn out a mare's nest," he four lines earlier avows that it offers us "*statements*" which, even "*stripped of their exaggerations*," are "*curious*," and "*may, perhaps, lead to an extension of our knowledge concerning the nervous system*." What more shall

we ask? What would we more than an extension of our knowledge of the nervous system? The case for investigation is thus irresistible, on the shewing of even the enemies of Mesmerism; for we suppose there is now no thinking being, in England at least, who does not conceive that, with all the false pretensions of mercenary professors, there is beyond a doubt something *true* in Mesmerism. Mesmerism may—it is true—have lived on *little*, but that little, at least, it must have had. Now, this *little* or *great* truth, throws light, as our contemporary tells us, on the nervous system; that system which gives vitality—so to speak—its wondrous qualities of sensation, volition, and thought! On any ground, therefore, that of the opponent or that of the friend, we must oppose the conclusions of the *Athenæum*, and accept those of Mr. Greenhow—prefaced in our motto—that the subject is worthy the scientific man's careful investigation. If the friends are right, a *great* truth will be found and turned to profit. If the enemies are right, while a practical addition, though small, will be made to our Science, the great service will be rendered of laying bare imposing pretensions, injurious to the public, and dishonouring to our Profession.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. I.

When John Bull has eaten a good dinner, and drank to the full of wine, to the tune of "God Save the Queen," and "Rule Britannia," he is apt to be a little excited, and though usually as silent and unconscious as one of Carlyle's heroes, and by no means so much disposed to self-glorification as our loquacious neighbours across the Channel, he gives way to a little boasting. With his portly person dilated to the full, his cheek flushed with excitement, and his eyes bright with good humour, his money all the while jingling in his pockets, he will tell you of an empire on which the sun never sets, of a flag that has braved a thousand years the battle and the breeze, and of the liberty which he has conquered for himself, and purchased for others at so heavy a price. Sometimes he will condescend to deal with particulars, and varying his subject with his company, will boast of his glorious constitution, his unconquered armies and fleets, his warriors, his statesmen, his poets, his philosophers, his philanthropists, his men of science, his great inventors, and, though last not least, his bold and valiant peasantry. On all these great and glorious themes, the old gentleman, at times, will grow quite eloquent, but there is nothing which gives him so much inward satisfaction as the contemplation of his own cherished attribute of common sense. His constitution, laws, and usages, are the very perfection of this homely quality, and do all you can to persuade him of the contrary, he remains steadfast in his belief. It is no use arguing with him. He is for none of your new-fangled doctrines. If you venture to suggest that a new plan would be a boon to the poor, if you whisper a word against the game laws, or offer an argument in favor of a change, he falls back at once upon common sense, and prophecies the ruin of his state. If you tell him that the poor are perishing by thousands and tens of thousands by fever and consumption, from causes admitting of removal, he will laugh at your figures, and call you names; or, not liking to be put out of his way, and yet willing to oblige, he will appoint a commission of inquiry, and order the publication of a blue book.

It is astonishing what a virtue lies hidden in these masses of printed paper. Do men want work, give them a blue book—are they

starving, issue a commission of inquiry—are they perishing by tens of thousands of pestilential diseases, let the matter be thoroughly investigated. The satisfaction they must experience from such a course is intense. What can they want more? Verily, if blue books could supply men with work, food, clothing, and health, we should be the happiest people under the sun; but as we never yet heard of a golden age produced by such means, we must take leave to doubt their efficacy. In the meantime, they are not useless. The trunk-makers and buttermen will give a halfpenny a pound for them, and they look imposing on the shelves of a library. They are, indeed, almost the only folios we can get, in these days, for love or money.

For our parts, we think so well of these blue books, that we would have them handsomely bound in some durable material, and piled up one upon the other as a national monument. This monument should stand in Palace-yard, so that our legislators of both houses might see it as they are on their way to their responsible duties. It should be surmounted with the bust of one of our greatest statesmen, executed in papier maché. Joseph Hume is the one we should ourselves select, as having been most active in collecting the materials of the structure. We should prefer the pyramidal shape, with an inscription on each of the four sides. The principal one might run thus:

To the
STATESMEN AND PHILANTHROPISTS
of
GREAT BRITAIN,
THIS MONUMENT
is erected

by a grateful people
In humble acknowledgment
OF THEIR UNWEARIED INDUSTRY
In inquiring into the causes of the
EVILS, PHYSICAL AND MORAL,
To which they are exposed,
AND OF THE LIBERALITY
With which they have made known the same.
The opposite side of the monument might bear this inscription:

KNOWLEDGE IS POWER.

If quotations from scripture should not be thought out of place, we would suggest as suitable inscriptions for the remaining two sides:

BE YE CLOTHED AND FED.

And:

WHAT MAN IS THERE OF YOU WHO, IF HIS SON ASK BREAD, WILL HE GIVE HIM A STONE, AND IF HE ASK A FISH, WILL HE GIVE HIM A SERPENT.

We would not laugh at thee, honest John Bull, nor at thy statesmen, if we could help it; but is it not enough to make devils laugh, and angels weep, and all true mortal economists shake their heads in silent sorrow, to see thy goings on? Thou art like the Roman Emperor, who fiddled while Rome was burning. Much too grave to fiddle, but not too wise to talk when thou shouldst act, and to print big books when thou shouldst be doing great things. Is it a part of thy common sense, friend John, to let thy rich children squabble about the playthings of place and pay, while thy poor are perishing of want and disease. Hast so lost all power of discrimination, honest John, that thou canst suffer a *qui tam* action to take precedence of an enactment for preserving health and life. Truly, if thou dost not mend thy ways, thy children will grow undutiful, and laugh thee and thy common sense to scorn, and none will pity thee. Health is not to be preserved, or life saved, by a blue book, or by whole libraries of them. A man whose house was on fire would be thought a strange sort of person if he were to summon witnesses to prove the fact, and write a history of it, before he sent for the engines. Art thou much wiser, dear John Bull! Much as we love thee, we cannot compliment thee on thy wisdom. With all thy common sense, thou art wofully dull of apprehension. Our readers will perceive, by our frequent mention of blue books, that we have one at our elbow, and they will, perhaps, think that the attempt to digest its ample contents has given us a mental dyspepsia, and put us out of humour.

Not so. The blue-book is well enough in its way, and better than most of its companions. Its 700 pages are filled with important information, well worth the extracting; but we confess that we think it a poor substitute for sewers, and supplies of water. As, however, it has appeared otherwise to those who have the dominion over us, we must submit with the best grace we can, and, as the blue-book is all we are to have for the present, make the best use we can of its contents.

Be it known, then, to our readers, and to all whom it may concern, that we propose, in humble imitation of the wisdom of our legislature, to spread the knowledge of the causes of disease and premature death, and of the means of preserving health and prolonging life, by publishing a series of analyses of the evidence recently published by "The Commissioners for inquiring into the State of Large Towns and Populous Districts," and that we shall, from time to time, as occasion serves, make use of such other materials in illustration of this important topic as may fall in our way. The commissioners, to whom this important inquiry was intrusted, are the Duke of Buccleugh, the Earl of Lincoln, Mr. Slaney, Major Graham, Sir Henry De la Beche, Dr. Lyon Playfair, Dr. D. B. Reid, Mr. Richard Owen, Capt. Denison, R.E., Dr. J. R. Martin, and Messrs. James Smith, Stephenson, and Cubitt,—a very promising, though not altogether unexceptionable, union of rank and science, and a very desirable mixture of the chief scientific elements necessary to a successful investigation of the causes, material, and immaterial, or, to speak more correctly, sensible and insensible, of disease and misery.

The specified objects of the commission are the following:

"The causes of disease among the inhabitants.

"The best means of promoting and securing the public health, under the operation of the laws and regulations now in force, and the usages at present prevailing with regard to—

"The drainage of lands;

"The erection, drainage, and ventilation of buildings;

"And the supply of water in such towns and districts, whether for purposes of health, or for the better protection of property from fire, and—

"How far the public health and condition of the poorer classes of the people of this realm, and the salubrity and safety of their dwellings, may be promoted by the amendment of such laws, regulations, and usages."

The general result to which the inquiries of the commission directed to these objects led, are expressed in the following terms:—"That defective drainage, neglect of house and street cleansing, ventilation, and imperfect supplies of water, contribute to produce atmospheric impurities, which affect the health and physical condition of the population, generating acute, chronic, and, ultimately, organic disease, especially scrofulous affections and consumption, in addition to the fevers and other forms of disease, to which public attention has hitherto been chiefly directed by previous sanitary inquiries, and which are more distinctly entered in the returns annually laid before Parliament under the provision of the Registration Act."

Once more we say, why appoint a commission to teach us such truths as these? Have our legislature never heard of the gaol fevers, and the dreadful diseases that raged in our fleets when our gaols and ships were substantially in the same filthy and neglected state as the houses and workshops of the poor are now? Is there any such difference between bilge and sewer water, and the foul air of a ship and of a house, as to prevent the experience so dearly purchased at sea, from being practically carried out on land. Nay, did we not know long since, that the neglected state of the streets and dwellings of the poor was the cause every year of thousands of deaths from fever? Has it not been asserted without contradiction, that "the annual slaughter in England and Wales, from preventible causes, of typhus fever, which attacks persons in the vigour of life, is double the amount of what was suffered by the allied armies in the battle of Waterloo?" Truly,

our legislators require much teaching, but no one can wonder at their slowness of comprehension when we remember the wide difference there is between the words in which they have been educated, and the things which men are doing and suffering. One new truth, at least, our friends of the Commission have taught us, that besides the amount of slaughter from typhus and other analogous acute diseases, there is a fearful loss of life from scrofula, consumption, and other chronic maladies. This is worth the knowing, and when it shall have been known a century or two, will, perhaps, be acted on.

Let no one accuse us of approaching the important subject of the public health with levity, because we have attempted to speak slightly of blue-books, and the common sense of honest John Bull. We write, as many feel, in the bitterness of hope deferred—hope not for ourselves, but for others—and such bitterness is apt to take the shape of satire. But the fit is past. We approach our task with seriousness, and if, in laying before our readers the pregnant facts of the "Report," we lapse into levity, we shall be as much surprised as all good men will have a right to be displeased. The subject, itself, is much too serious for mirth; it is one of life and death for thousands of our fellow creatures, in every class of society, but especially in the lowest. More depends on the right understanding of it, and on the practical application of the knowledge which we acquire concerning it, than on any or all of the great public questions which are now agitating and perplexing society.

In our next, we shall enter more into particulars. In the meantime, thus much has been written by way of introduction.

PENCILINGS OF EMINENT MEDICAL MEN.

DR. COPLAND.

SURGERY'S *Ursa Major*—Liston—and sleek, slippery, glistering-eyed serpent, Syme—have been both impaled in deathless preservation in our Cabinet of Natural History. Antipodeal opposites—wide as the two poles asunder, they are like them in one thing more, in the want of the warmth that vitalizes, and the rich verdure (of the heart) that beautifies. Startling impersonations of each other's deprivations, they tend to shew the boundless resources of human fault: each the opposite of each other's wrong, yet each equally remote from right.

A kinder, lovelier duty now invites our care. We ascend in the human scale; we take the highest leap our humble powers permit, up the Jacob's ladder of Medicine, and leaving our pair of Scotia's sons far distant in the rear, place before our eye that worthier scion—albeit, sprung from the same soil—COPLAND. We are completely overrun with these Scotchmen, who are Egypt's ten plagues concentrated in one: our only comfort with them is, that occasional Coplands come, to prove that even out of this evil, good may—at rare intervals—arise.

And, reader, in common honesty, we must forewarn thee against a cheat we are like—without much will of ours—to try and practice on thee. We are, unfortunately, men of flesh, and bone, and nerves, but especially of flesh and nerves, and as our hot red blood gallops through our confoundedly tender heart, just as if it were really *not* the nineteenth century, we have an unaccountable fancy—even in these utilitarian days of maltreating one's affections—to love and to hate, both in very tolerable quantities, without speaking of an immense waste of raw material in the admiring and condemning line. Yes; we are, really (and at a good round age, too) fools enough to have likings—sometimes, too, excessively contumacious ones—and ninety-nine to one, that while we take the most inopportune moment in the world—the very *first*—to shew them, but we may be carried away by them with notions as extravagant as that even a successful Scotchman *may* have a heart, and though our professional rival, be yet a learned fellow. Reader—we warn thee: beware of us.

James Copland, M.D., F.R.S., and—to save a column of further learned description—the pos-

essor of a kite-tail of capital letters as long as that which of yore followed the name, "unpleasing to the married ear," of Dionysius Lardner, comes as far north as any man it would be safe to let into one's acquaintance. He was born in a wintry month, some half-century or more since, in the romantic island of Orkney. A *brain* bent on the honest thing, and a *heart* taking to labour as a pleasure, were the principal hereditary property he inherited from his family; and, after these had had the training of two *pious*, and no doubt worthy Presbyterian ministers, he left his seven or eight brothers and sisters in their worthy paternal home—which the domestic virtues that ennobled it before Heaven, makes sacred before us—and proceeded to Edinburgh to receive from its then far-famed University those keys that alone can open the doors to real eminence in any of the learned Professions. While partially storing the mind with facts, he above all things applied himself to give its original powers full action. He empowered it to gather knowledge stored in whatever language, he taught it, when knowledge was gathered, how to winnow and sift from the valuable the worthless; and, when so selected and garnered, how to turn it to its proper and full account. Here was a point gained for him that told in his whole future career; and while making *his* wealth has added to that of society. What a broad hint—what an invincible argument—have we in this single point (and some small reasoning on it), for that vast national provision which shall secure to the whole future generation of doctors a sound preliminary education. Without some training of the reasoning powers, we can have no correct use of facts; and how shall we have the scholarly simplicity, the gentlemanly generosity of character, where the day's interests are not opposed into their true proportions by the standard of a noble antiquity? The loss is a *mercantile* want to us individually; and, as a profession, it breeds us a lower standing; but to society it is a loss of infinitely higher price than a year's payment of the national debt, or the sacrifice of its richest colony. If for the last century all our doctors had had a preliminary education, how proud a position would English science have assumed; and how many a protracted agony or untimely end been spared!

Copland was fortunate in his University career. Without showing any premature brilliancy of talent, he was felt to be clever, and sound, and industrious; and Dugald Stewart, Playfair, and Brown, disdained not to measure with him metaphysical weapons. The Church was his original destination, as of most Highland youth who stalk South to Edinburgh for learning, but doctoring suiting his tastes or *conscience* better, he set out to see what Celsus and his successors in the Scottish capital could teach him. He appears to have learned more than he read, for the rumour goes, that the examiners were about to deny him their medical degree, because he ventured on some daring novelties of opinion in his examination thesis. James claims that, startling as were his views, time has since established their truth; and to those who know the happy power of conjecture possessed by minds like his, ever on the alert to compare and explain, will not refuse him their faith.

The medical degree, at last in his pocket, with very little else we much fear, and no tangible prospect, save the world, "before him where to choose," our young Scotchman, naturally enough, looked further South, and, in a Roderick Random mood of mind and fortune, determined to give London the honour of his first visit. Accordingly, in 1815, he reached the metropolis much about the same time as the allied sovereigns; and if history tells truth, the future benefactor of his species was the less honoured visitor. Posterity may doubt the fact, but we pledge our honour to its truth.

For a year or so, he struggled through our streets, to find in sad earnest that they were not paved with gold, a conviction which, when fully inspired, made him the less unwilling to make a trial of a surgeons'hip on the real gold coast of Africa. Leaving London, therefore, a "sadder," if not "a better man" he sailed to the west of Africa; went now prowling into the interior, à la

Clapperton and Mungo Park, new playing the surgeon to this merchant vessel, or that, till finding himself not yet quite in Paradise—far south as he had got from Scotia—he determined on a return. His travelling oats were, however, not yet sown. Germany and France were duly visited, and their medical arrangements scanned with philosophical sagacity, we dare say; and one circumstance or another answering favourably to the demands of honest tact and ability, he found himself one fine morning passing the College of Physicians as a licentiate, established as a physician in Walworth, and the medical attendant of a charitable institution, he had himself done something to forward. Ill-natured people talk of the nuisance of the poor, but we should be glad to know how doctors could get on without them. If we ever get great or rich, we do so like the French philanthropist—a force de soulager les pauvres. There is great wealth in a prudent—a very prudent charity.

As time went on, physicianships to the Royal Infirmary of Children and to Queen Charlotte's Lying-In Hospital fell in his way; and he himself made his own way to farther professional science, by giving the world the benefit of his experience on the diseases of the Western Coast, and the worthy booksellers, his splendid translation of Richerand's Physiology. It was in his appendix to this work that he gave that view of the reflex functions under the not unhappy name of "Reflex Sympathies," which a few years later made Marshall Hall a great discoverer.

For a number of years Dr. Copland edited the journal so long and favourably known to the more scientific part of the profession—the Medical Repository. He brought to the work industry, great talent, and much learning; but they did not tell—as they should have done on the profession, partly perhaps from his avoidance of the topics which disturbed factions rather than advanced science. The *Medical Repository* was a scientific journal, and nothing more; and at a moment when the profession was excited to its centre by the daring attempts of the *Lancet* to form into a conspiracy the whole marketable blackguardism of medical talent in the service of slandering every man of station who bore a reputation as a man of virtue and a gentleman; medical men were not in the temper for appreciating a periodical whose whole attraction was its philosophical respectability. Copland indeed, himself, was a main mark for the fabrications and abuse of the rival journal. His abstinence of personal discussion or irritating political topics—his uniformly inoffensive demeanour in private life or the discharge of his editorial duties—his known devotion to the tranquil delights of a studious life, were the very qualities that made him a fit subject for the editorial vial of wrath. Copland, however, though he provoked no affray, was no weak antagonist, and the *Repository* for 1826 contains one of the most crushing and gentlemanly criticisms of the character of the *Lancet* and its editor that perhaps ever appeared in print on any similar subject.

The great work of Copland is his Dictionary; begun, it is said, at the suggestion of Dr. Willis. It will immortalize his name; and before he had issued four numbers did much to aristocratize his position. Nothing like it has ever seen day, if we except that other result of gigantic labour—the Dictionary of Johnson. Dr. Copland had long designed some such work—for which his immense reading so well qualified him—and in 1830, when the Cyclopædia of Medicine was commenced by Conolly and Forbes, entered into terms with Longman and Co. for facing his rivals single handed. Many complaints have been made at the long intervals that divide the different parts; but to those who have read them with care, noticing not the learning a love displayed, but the discriminating skill evinced in its use, will wonder that so much, rather than murmur that so little, has been done.

The personal appearance of Copland does not mirror the idea of elegance and good taste the perusal of his writings calls up. He is rotund without fatness—broad-built while escaping by the narrowest possible point—the trait of vulgarity. He is of middling height, somewhat awkward gait, with a good-natured face, full of *bonhomie*—a

man who evidently takes life as easily as if it were but a very common-place affair, and who never wastes a look or gesture in homage to that goddess of smaller-brained men, affectation. We would take a cool hundred that London does not afford a more "natural" man, or one who, by a lucky conformation, has a deeper interest in being "natural." Under all the homeliness of the world, the gentleman is complete, though not prominent; and his disregard of "nonsense" is felt at once as the impulse of a huge good sense, the characteristic of most of his countrymen. With familiar features enough (full and plenty on 'em) Copland is yet a good-looking man. One wonders that so good a *tout ensemble* could be made out of such indifferent parts. On surveying his countenance, we are apt to ask in what part of his body his huge intelligence has taken refuge; the face seems to it forbidden ground. Breadth of feature is carried to its whole extent. The massive head, which might well match with some of the marble statuary of Athens, is fronted by a forehead—broad, ponderous, and not unsymmetrical. His nose, which is large and thick, with huge nostrils, is wanting in Grecian finish; the cheeks are remarkable for the immensity of muscle, which, on first appearance, seems thrown on the face, as by a trowel, without order or precision, as if nature tired by the exquisite workmanship of the interior, indulged a lazy fit in the construction of the outside. The mouth is large, the lips thick, and when closed denote an unbending disposition: the eye, which in general is considered the soul's mirror, may in him be said to have forgotten its office. It is large, dark, slightly sunk in the socket. You perceive in the whole a touch of the spaniel overshadowing the bull-dog; experience influencing nature. Thoughttime has frosted his "pow," he is yet hale and hearty, with a look which his devotion to science has not made older than his years.

Dr. Copland now resides in Old Burlington Street. After migrations which have included predatory, we beg pardon, professional, visits to Walworth, Jermyn Street, and more lately to Bulstrode Street, he is still a bachelor; and so has defeated many a deep laid scheme of the old maids about Saville Row. He enjoys—we hardly need say after this—a fair share of the confidence and honoraria of London patients. He has been Lecturer on Medicine to the Middlesex Hospital School; is a Fellow of the College of Physicians, of which body he has also recently been the Censor. There are few Learned Societies at home or abroad of which he is not an associate. His position is in truth among the highest of our London physicians; and the retrospect of his career shews the well meaning student, the elevation which a high moral character, seconded by dogged perseverance, may accomplish. H. B.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

Cacao and Theobromine.—Of all vegetable substances, hitherto analysed, theobromine contains the greatest quantity of azote, being composed of $C_9 H_{10} N_6 O_2$, whilst caffeine is represented by $C_8 H_{10} N_4 O_2$. Buchner refers to this remarkable constituent of cacao, conceiving that it may, very likely, be used medicinally; he wishes also to observe that, for the purpose of obtaining theobromine, the pressed cakes, left after the preparation of cacao butter, should be used, and thus the chocolate manufacturers, who make the cacao butter in great quantities, will also be best able to produce theobromine. By maceration in warm water, an extract is obtained from the pressed residuum of the cacao beans, which is then to be decomposed by acetate of lead. The liquor, filtered from the precipitate, is purified from the lead by means of sulphuretted hydrogen, then boiled up, filtered again, and evaporated, thus leaving an impure theobromine. To purify it, it is to be dissolved in boiling alcohol, and the solution, filtered while hot, is placed aside to cool, when theobromine will be separated in the form of a reddish-white crystalline powder; unchanged by the action of the air; of a slightly bitter taste, similar to that of cacao

and caffeine; on account of its difficult solubility, the taste is but slowly developed. At $100^\circ C.$, it loses only 0.81 per cent of its weight. At 250° , it becomes brown, and, if the heat be increased, it volatilizes entirely with formation of a crystalline sublimate, leaving a small residuum of charcoal. Theobromine is only slightly soluble in boiling water, still less so in alcohol or ether. Dilute acids and alkalies do not decompose it, nor do they seem to enter into any particular combinations with it. Tannic acid forms a precipitate with it, soluble equally in an excess of tannic acid, in alcohol, and in hot water. Corrosive sublimate produces a white crystalline precipitate, in the watery solution of theobromine, difficult of solution in water or alcohol.

The large proportion of azote, contained in theobromine, induced the conclusion, that it must be very nourishing; but it ought to be considered, that, if the abundance of azote were the measure of nutritive property, urea, which contains 46 per cent of azote, would be found much more nourishing than albumine, which contains only 15 per. cent.

However this may be, we have in cacao beans and chocolate, at all events, nourishing and oily substances in combination with theobromine, and consequently the physician will rarely employ the latter by itself, if his object be to employ a nutritive remedy. At the same time, chocolate is a corrective and useful medium in which to give some other strong remedies; thus, French physicians frequently order "*Chocolat au lichen, au saulep, a l'hydrate de fer, &c.*" The Germans sometimes use it as a vehicle for iodide of potassium, calomel, sulphuret of antimony, protoxide of iron, &c., mixed up in the form of lozenges, &c.—*Buchner's Repertorium*.

On the Medicinal Properties of Ergot of Rye.—A series of experiments have lately been performed by Parola, with the above remedy, on healthy, as well as diseased, persons, and on animals. It was found that the ergot of different species of rye possessed the same efficacy, although not always displaying an equal intensity of power.

We think the following experiments worthy of being quoted. First. No. 1: a person, æt. 24, entered the Hospital; and, as no organic disease was discoverable in him, he was subjected to an experiment with the ergot of rye. His pulsations were 67, and his respirations 20 per minute. He received 30 grains of powdered ergot of rye, for a dose. After 2 hours, he complained of weakness, chilliness, and difficulty of respiration. The pulse was weak, irregular, and reduced to 60. Face pale; pupils of the eyes dilated. The next morning, the dose was repeated; the effects were now more intense; strength and heat considerably diminished; pulsations only 58, and respirations only 15, per minute. These effects continued to the third and fourth day, although no further dose of ergot was given. (2) A Student of Pharmacy, tolerably healthy, but who had been bled from time to time, on account of hypertrophy of the left ventricle of the heart, consented to subject himself to an experiment with the ergot of rye. He took, on the 3rd of June, 10 grains of ergotine, prepared according to Wigger's method. On the 6th of June, he took 12 grains; and, on the 7th, he took 3 grains of the spirituous extract of secale cornutum. On the first day, when his pulse was hard and full, making 67 beats per minute, it fell, after the use of the ergotine, to 61, and became softer; after the 2nd dose, the pulsations were reduced to 60, and the beatings of the heart were considerably diminished; at the same time, a decrease of the general strength was apparent. After the third dose, the effects were more striking: the young man felt as weak as if he had been bled; the pulse beat only 46 times a minute, and the face appeared pale and dejected. The effect lasted for several days, so that the patient's usual palpitation of the heart did not re-appear for some time.—(3) M. Parola himself took, on the 17th December, while in a state of perfect health, 20 grains of powdered ergot of rye; after the lapse of an hour, he felt a sensation of nausea, heaviness of the head, painful constriction at the stomach, coldness of the extremities, and such muscular debility, that even the motion of the fingers became laborious; the pulse had sunk from 74 to 62. This state lasted

for 3 hours, when the pulse was further reduced to 60. At dinner, he drank some wine, which caused him no headache as it usually did.—*Annali Universali di Medicina.*

On the Variability of the Composition of Mineral Springs, at different periods. (Letter to Dr. Buchner, jun.)—On analysing the waters of the *Adelheidsquelle von Heilbrunn in Oberbayern*, which contain iodine and bromine in solution, a great variability has been observed in their composition, at different periods; and Prof. Buchner has expressed an opinion, that this difference of composition does not arise from the addition of extraneous matters, but rather from the varying constitution of the spring itself, and that, in general, the composition of medicinal springs is not so constant as is ordinarily supposed. The cause of this variability has been shown, by the author, to depend on the different quality of the waters, infiltrating the earth, at various periods of the year, and which coalesce for the formation of the spring.

The following are his observations on this point:

The late M. Biltz, of Erfurt, analysed, during every month, for a year and a half, the waters of a saline spring, by evaporating a few pounds of water, and reducing the residuum to a state of dryness. The result of his experiments proved, incontestably, that the saline constituents varied each month, sometimes departing considerably from the average. M. Biltz ascribed this difference to meteoric influences; but, since he only calculated the rainy days, without taking into account the quantity of rain, his conclusions were necessarily somewhat incorrect, and he consequently remained in doubt as to the real cause of the difference in the results obtained.

The treatise of M. Biltz only fell into my hands, accidentally, a long time after his death. I then instituted a comparison between his results, and the relative quantity of rain which had fallen in the respective months; for it appeared to me, that the above doubt might be resolved by this comparison, provided I were justified in assuming the atmospheric constitution of Erfurt to be the same as that of Armstadt, which is distant from it only a mile and a half. To my great satisfaction, I found that the quantity of rain, in the several months, always stood in an inverse ratio to the solid constituents of the saline spring. This fact would, perhaps, have been more conclusive, if I could have ascertained the precise days on which the water was analysed. I could, in that case, have added the quantity of rain, which fell in the interval between two successive experimental days. It would be instructive to ascertain the proportion of meteoric precipitates, measured exactly by a pluviometer, in the neighbourhood of any mineral spring, which might be subjected to monthly examination of its solid constituents. It would, I think, certainly be found, that the smaller or greater amount of meteoric precipitate is the simple cause influencing the composition of the waters. Consequently, an invariability of composition can only be looked for, when the source of the well or spring is very deeply-seated. I have only to regret that I have neither the treatise of M. Biltz, nor my own, at hand, so that I am unable to illustrate the subject by a table of numerical or analytical proportions. At all events, observations of this kind cannot fail to prove highly interesting, as illustrative of the theory of the formation of springs.—*M. Lucas, of Armstadt, in Buchner's Repertorium.*

GOSSIP AND NEWS OF THE WEEK.

The Practitioners of Halifax have agreed on a petition, approving of the leading principles, and some of the details, of the new Bill.

The announcement of a bequest of £2,000 by Dr. Dalton, for the foundation of a Professorship of Chemistry at Oxford, was incorrect. The bequest was revoked two years before the doctor's death.

Dr. I. H. Davidson has been appointed first physician to her Majesty in Scotland, in the place of Dr. Abercrombie.

OBITUARY.—On the 29th ult., aged 39, Mr. Kipling, of Newport Pagnel. Dr. I. Home, late

Professor of Medicine in the University of Edinburgh; at Cork, Dr. Buller; Dr. I. Stephens, at Beerhaven; and Dr. John Heron, of Portumna.

Mr. Chisholm, who has been attacked in the *Lancet*, for allowing himself to be puffed in the *Dispatch*, explains that the help so rendered was not given with his request. It appears that he shares the *Dispatch's* encomiums with Mr. Liston.

The "Quarterly Review" and "Edinburgh Review" (just out), contain each an elaborate article on Medical Reform. Both are in favour of the new Bill, and it is announced, in circles well informed, that the first is written by Sir Benjamin Brodie, the second by Dr. Christison: Dr. Forbes also gives an article in his "Quarterly, much in favour of the Bill.

A young gentleman was recently sent to sleep, in Belfast, by Mr. Braid's hypnotic process; and a dentist removed three stumps, one with the forceps, another with the key, and the third with the punch; no apparent sign of pain manifesting itself. Mr. Grattan, the apothecary, was the medical operator, Mr. Richard Barnett, the dentist, and Dr. McCormac, Dr. W. Burden (both medical professors of the Belfast school), were present, with other gentlemen of scientific note. Dr. McCormac gives a written letter, bearing testimony to the truth of what he calls the cataleptic sleep, and expresses his surprise at the organs of hearing being impressionable while the sentient surfaces and extremities were otherwise.

The *Provincial Medical and Surgical Journal* in a recent number reads the *Lancet* a lesson on its impudent affectation of being a respectable journal, and after a sharp reproof of his "usual flourishes of the editorial stiletto," warns the Editor against persevering in what it calls "his incendiary attempts to foment discord" among the members of a Profession, which, for its own interests, cannot be too united.

Orfila was summoned, the other day, before a Paris police court, to make amends for driving over a poor woman, to the serious injury of a limb. He had offered one hundred francs; the court awarded a thousand.

A German paper announces that there are eight hundred doctors in Moscow, and that all live in the most perfect harmony. Every fortnight the principal members meet by turns at one another's house.

The House Committee of the London Hospital have ordered that their senior dressers are no longer to fulfil, as heretofore, the duties of house surgeons. This is complained of as being an improper interference with those who had paid for dresserships on the faith of such a privilege.

The Marylebone Board of Guardians have decided to appoint no one to the office (recently vacated by Mr. Phillips) of consulting surgeon to their infirmary. The future appointments are to be paid for by the parish, and, though several gentlemen have offered their services gratuitously, they have been courteously declined.

The power of the Irish College of Surgeons, to enrol its Licentiates, or other Practitioners of Medicine, as Fellows, expires on Jan. 10th.

Eight hundred students have entered themselves on the medical list of Paris this year, of which number 251 present themselves for the first time.

The City of Paris is about to construct a new Hospital of immense size near the Fauburg St. Denis. It will bear the name of Louis Philippe.

The missing books of Galen's Anatomy are said to have been recently discovered. No authority is given for the announcement.

In a respectable Bath paper of Nov. 4, is published the following challenge on the part Dr. Cardew, of that city:—"I challenge Mr. Storer, Dr. Elliottson, and the whole world for the sum of 1000*l.* to produce a person who can read a word or words I will put into a Seidlitz powder box, after it has been secured in any manner I may think proper, and under certain fair and honourable conditions, giving them an hour every day for one month to perform the task,—provided always that they guarantee to me the sum of 100*l.* in case of failure; which sum shall go to the support of some charitable institution in the city of Bath."—We are requested to

state, that "this challenge has been accepted by Dr. Owens and Mr. Vernon, and that they are shortly expected in this city to arrange preliminaries." It remains, however, to be seen whether the matter will *actually* be brought to this test.—

At a General Quarterly Court of the Scottish Hospital in London, held on Thursday last, Rowland Hill Mackenzie, Esq., of Mortimer Street, Cavendish Square, was elected surgeon in the place of Robert Davidson, Esq., resigned.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted Members on Friday, December 20th, 1844.—G. I. Wycherley, J. Joliffe, H. J. Aldham, G. E. Givins, G. Rigden, J. T. Newberry, J. W. Littler, J. J. Mason, C. Townsend.

APOTHECARIES' HALL.—Gentlemen admitted Members 19th Dec. 1844.—James Williams, John Calthrop Coulton, Philip Brown, Edward Henry Millin, George Frederick Mitchelson, George Buckell, George Alexander Hallion, Frederick Charles Grant Ellerton, Henry Fenton, Joseph Hewitt, Charles Brooks, Benjamin Thompson Lowne, Robert Dinham, Francis Rawle, Mark Oliver Larmuth.

Dec. 26th, 1844.—William Vittery, Wheaton Langley, Nathaniel John Dampier.

Two meetings have been held this week, the one at Finsbury, the other at the Crown and Anchor. The former meeting offered no new lights on the Bill: and the latter was the remnant of the Association of Surgeon Practitioners, formed in 1813. There were about thirteen members present. Mr. Morrah presided.

HUMBLE PETITION FOR THE MEDICAL TIMES.

London Hospital, Dec. 24th, 1844.

SIR,—The majority of your cotemporaries being in the habit of giving their works to our library, I am requested, by the members of the "London Hospital Medical Society," respectfully to state that they would feel greatly obliged by being permitted to add your invaluable Journal to their existing stock.—An answer will oblige.

Your obedient servant,
ROBERT N. BROWN,

Librarian.

To J. A. CARFRAE, Esq.

[Mr. Carfrae has handed us the above note, and thinking it not devoid of interest to a thinking mind, we have given it its due of full insertion. Can it be? "The London Hospital Medical Society,"—an important scientific institution of the metropolis—including in its body many of the Medical Professors and Students of one of our great national hospitals—formally supplicating us, through their honorary secretary, to save their creature comforts ten halfpence weekly!—to give them, of our great bounty, five-pennyworth of scientific nutriment gratis! "begging" us in good gentlemanly English to write, print, and publish for them a Journal for nothing, rather than put them to the serious inconvenience of "clubbing" fivepence between them! Have we not here one of those odd things that do not occur every day, opening a view into a certain psychical interior in human beings, not often so frankly unbared to the public gaze? The honour is doubtless great—but we really must decline to have the members of the "London Hospital Medical Society" attached to us as hebdomadal paupers to the amount of fivepence per week between them! It would do them no credit, and us no service. Our contemporaries may do exactly as they please: in the market of Journals, as of other things, prices fall to their level. We shall give the MEDICAL TIMES for nothing, exactly like other people, only when it is worth nothing. We trust that our "answer," which we are happy to learn "will oblige," may in no way be misunderstood.—Ed.]

CHLORIDE OF LIME IN FEVER.—Mr. Conway Edwards, in the *Provincial Medical Journal*, says, that the solution of the chloride of lime, when given internally in cases of fever, destroys the morbid condition of the secreting vessels; the fœtor of the breath is directly subdued, and within a short period the fauces lose their dryness, and the secretions their offensive character.

MEDICAL POOR LAW RELIEF.

PARLIAMENTARY REVELATIONS.

(Continued from p. 286.)

Have the enquiries you have made, and the representations that have been made to you, led you to doubt the propriety of many of the regulations now in force for the management of the poor?—The regulations, I believe, may be divided in two parts, general and local regulations. The general regulations I first wish to bring under the notice of the Committee are those which relate to the sick man and the relieving officer. When a man falls sick, or a woman, or any member of his family (and it is the case even with persons in a higher rank of life), they do not usually send for the apothecary, but they wait a little time to ascertain the nature of the complaint. A poor man is not so competent to distinguish the nature of the complaint as one in a better situation, and in many cases, from want of knowledge, they may not send for the doctor; and for fear of not being able to pay for him, they probably do not send till the case is in an aggravated state: they are then met with the order that they must go to the relieving officer. It happens sometimes that the relieving officer lives at a very considerable distance, and it becomes a matter of great inconvenience to the parties to go to the relieving officer, and therefore it is very desirable that this rule should be abolished, and that the sick man should be able to send direct to the medical officer, and obtain the assistance, in the first instance, which he requires. I have here the particulars of a case where a person had, in that way, to travel 23 miles: it happens to be a very strong case, but not more strong than hundreds of others. In another the three parties live at a triangle; 133 people reside upon a little island, from which there is a mile and a half of sea to cross; they have then to go directly up one side of the angle to the relieving officer, and to come down the other side of the angle, to the point of the base, to the doctor; they have four miles and a half to go to the relieving officer, four miles to the doctor, and four more to go home; so that these unfortunate people have near 13 miles to go before they can possibly get relief, and four miles more each way if they have to return for medicines afterwards.

Where is that?—It is in Hampshire; I sent a letter stating these facts to the Secretary of State, and the Poor Law Commissioners, and I believe that in consequence of their interference 23 miles in one case have been reduced to 13, the district having been divided.

Mr. Pakington.—Do you know whether the medical officer to whom you refer does, in all cases, require an order from the relieving officer before he attends the sick?—No; he is so much aware of the horror of those proceedings, that he tells these people to come to him without going to the relieving officer. But there is inconvenience in this, he writes to me to say, for having attended a poor woman without an order, they refused him payment; therefore, if he did his duty to himself, he would refuse to see any individual who had not made this tour of 13 miles, in order to obtain his order. I had a surgeon, Mr. Young, with me yesterday morning, who tells me that at Hawkhurst, in Sussex, the course of proceeding in one case has been this: in August he had an order to attend the husband; he attended him, and cured him; in October the woman was to be confined; when the parish officer said to her, "No, I will not give you an order to be confined, because that would entail upon the parish the expense of 10s.; you get confined in the best way you can." She did so at the risk of her life. The next month two of the children were sick, and then the relieving officer gave an order without the least ceremony, because, he said, "The doctor having a fixed salary, must physic you for nothing." In August, he gives an order for the poor man, he refuses it the next month for the woman, and he gives it the month after for the child, clearly shewing that they were paupers during the whole time, and that the refusal of the midwifery order was unjust.

Mr. M. Sutton.—Is this a particular instance?—Yes, at Hawkhurst, in Sussex; but I could give 50 instances in the course of the next week. Here is a case upon another point in the Dartford Union.

Mr. Lascelles.—What is the size of the Dartford Union, and the salary of the medical officers? It has 47,500 acres in it: there are two medical officers who receive £100, and a third £150. One gentleman has three miles to the furthest patient; another has seven miles; a third has five miles, although there are several medical men living in the district who are nearer, and would be happy to attend them. In the Ross Union, in Herefordshire, one of the medical men, I am informed, lives 16 miles off the furthest point of his district, so that to go for him and back again is 32 miles, and if an instrument or anything is wanted, there are 32 miles more to go; so that an unfortunate man may have 64 miles to go before he can get necessary assistance for his wife. The cause of this is, that the guardians in that county have thought it right to give a man two districts, because respectable men living in one of them will not take it at the price offered, and consequently the other man took it. He has taken it, and the poor people have to walk through the village, in which highly qualified men are settled, who are willing to attend to them, but they cannot call on them because they must go to this poor-law doctor, 16 miles distance.

Mr. M. Sutton.—And the 64 miles is made up in this way; first, 16 miles to go to the doctor, then 16 miles to return from the doctor, and then the same distance to go for medicine or for instruments?—Yes.

But not taking into consideration the distance to be gone by the party applying for relief to the relieving officer?—No; I give that into the account, thinking it quite enough; I have taken the shortest course, as I am informed.

Then your objection in this case is not to the necessity of applying to the relieving officer, in the first instance, but the distance at which the surgeon resides?—It is both, because the relieving officer generally does not live where the surgeon lives; therefore, they frequently will have to go a greater distance.

You stated that they have always to go to the relieving officer for an order; are you aware that in cases of emergency the overseer of the parish has the power to grant an order?—The overseer of the parish may live also at a very great distance. The overseer of the parish does not always live near the sick person; he may live three, four, or more miles from him. I object, in the first place, in point of delay, but I have several other objections to the relieving officer. One reason for not going to the relieving officer is, that his duty is to visit the sick and the poor all over the district, and therefore he cannot always be at home. A Poor woman, for instance, sets off to get an order for her husband, and when she arrives, the relieving officer is not at home; he has gone out on duty. She has to wait; consequently 24 hours may be lost. Mr. Richards, of Old Brentford, made a very particular statement of a child who had croup or inflammation of the windpipe, and by going to the relieving officer 24 hours were lost. When the order was obtained from the relieving officer, 24 hours more were lost in going to the surgeon; and between the first loss of 24 hours and the second loss of 24 hours the child had died. One half of that was attributable, at least, to the necessity of going to the relieving officer, for which no good reason can be given.

Mr. M. Sutton. What distance did the overseer reside from that particular place?—He may have resided a mile or a mile and a half; but overseers are not always to be found at home; their duties carry them away also, and unless you apply at the particular hour when they are at home, you cannot obtain an order, and in rural districts a parish is four, five, or more miles long.

Is that the usual extent of a parish?—It is very often several miles longer. A man must not go to the overseer, unless he believes it is a case of urgency; but one who has an inflammation of the lungs does not know that it is a case of emergency, unless he is near dying. What I mean to propose is this, that the person shall go at once to the medical man, and that the medical man shall give him an order on the relieving officer; instead of the relieving officer upon him. It makes all the difference of life or death to the patient, and it is quite the same to the public. If the medical man gives the patient an order, he takes it to the relieving officer, who says "You are," or "you are not, a pauper;" I shall sign this paper," or "I shall not sign it;" if he signs it, it should be carried to the medical officer next day. If the relieving officer says, "No, I will not sign it; you are not a fit person to be a pauper;" then no order is returned. The difference is, that the man gets his advice and his life is saved, in the one instance; he does not get advice and his life may be sacrificed, in the other. There can be no difficulty upon the subject; but the next point is a great deal more important, it relates to the relieving officer having an opinion on the nature of the case.

Mr. Pakington.—Do you not think the best practical remedy would be to do away altogether the necessity of the intervention of the relieving officer, giving the medical officer an appeal to the relieving officer or to the Board in those cases where they think the party is not entitled to relief at the expense of the union?—Certainly; the medical officer generally knows a great deal better than the relieving officer who is poor, and who is entitled to advice, and if he is left to himself he will not give advice to those that ought not to have it. He would be amenable to the guardians for any misconduct. The great object is to give relief to the poor in the quickest way.

Do not you think that one of the most important objects connected with this inquiry into the sick poor, would be to get rid of the intervention of the relieving officer?—Assuredly; he is the person of all others who ought to be got rid of.

Mr. M. Sutton.—You say the medical officer would be amenable to the guardians of the poor for any misconduct?—Certainly; if he refused to give advice, improperly.

What you would recommend would be, that the medical officer should give an order upon the relieving officer; instead of the relieving officer giving an order upon the medical officer; that the medical officer should judge both of the nature of the case, as to whether the party required his attendance, and also as to the station of the party, whether he was entitled to medical relief at the cost of the union?—I take a very high ground upon that point. I say more than that: I say, that medical relief is to be given to every body in the world who asks for it. The first question is, "Are you sick, and do you want medical relief?" "Yes." It is given, and then comes the question, "Who is to pay for it?" (To be continued.)

ON BURNING.

(To the Editor of the "Medical Times.")

The late fatal case of burning, at Drury-lane Theatre, induces me again to direct your attention to the valuable properties of creosote, in checking the fatal progress of wounds caused by burning or scalding.

Referring to the Munich case, detailed by me in the *Medical Times* of the 30th November (page 182), wherein I endeavoured to explain the cause of this anti-gangrenous action of creosote, I shall proceed now to illustrate the theoretical views I have expressed on the subject, by another case, which I have lately treated.

On Saturday, the 14th of December, I was called at two, p.m., to see a boy, of six years, who had just been scalded by upsetting a kettle of soup over part of the right side of the head, the ear, the face, and the shoulder. I found him in the most dreadful and convulsive agony; and the mother, in whose hands the kettle was upset, in great dread, lest the child should expire from con-

vulsions. I ordered the right side of the head to be shaved, which was very carefully done, and then had the following ointment prepared.

R. Creosot. gutt. xv.
Carbon. anim. præp. ʒj.
Spir. vin. 3 ss.
Ung. spermacet. ʒj.
M. Ft. ung.

This ointment was spread on linen, applied to the injured parts, and thin shavings of potato laid over it. Immediately after the application of the ointment, the distressing cries of the child gradually diminished, and, in about ten minutes ceased entirely, so that I was enabled to leave him. When I repeated my visit at six o'clock, I was agreeably surprised to find the patient enjoying a quiet sleep. No other remedies were administered. On the next day, the child was cheerful and free from pain, the wounds being in an advanced state towards cicatrization, which he continued to progress as favourably as possible, so that he is now nearly recovered. Though several scalds, in this case, were not so extensive as to be dangerous if treated with ordinary care, still the most speedy removal of the convulsive pain was indicated, and this, I am convinced, could not have been effected by any other remedy so promptly as by creosote.

Taking into consideration the remarkable and dangerous case at Munich, mentioned in my former letter, and the slight one just recited, besides several others which I have witnessed, I think myself justified in recommending the following preparation to be kept ready by every medical man and chemist, under the name of "Burn ointment," or any other name expressive of its object:—

R. Creosot. drachmam dimidium
Carbon. anim. præp. drachmam,
Spir. vin. drachmam et dimidium,
Ung. spermacet. unciam et dimidium,
M. Ft. ung. for adults.

This might be modified, according to age, in the following manner:—For children under five years, the ointment should be weakened, by mixing with four times its bulk of spermaceti; for children from five to ten years, with twice its bulk of spermaceti; and so on, gradually increasing the strength of the ointment, according to the age of the patient. In cases requiring protracted treatment, the dose of creosote should be gradually and carefully increased, in the successive applications. Hoping that the importance of the subject will excuse my intruding this case on the attention of your readers, I have the honour to remain, your most obedient servant,

SIGISMUND SUTRO, M.D.

3, Great Marlborough-street,
Dec 23rd, 1844.

[Press of matter unavoidably prevented our inserting this letter, last week.—ED.]

Metropolitan Mortality for the Week ending Saturday, December 21st.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1249	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	223	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	112	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	180	152	151
Diseases of the Lungs, and of the other Organs of Respiration	415	312	288
Diseases of the Heart, and Blood-vessels	39	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	91	66	61
Diseases of the Kidneys, &c.	11	6	6
Childbirth, Diseases of the Uterus, &c.	17	11	11
Rheumatism, Diseases of the Bones, Joints, &c.	10	6	6
Diseases of the Skin, Cellular Tissues, &c. ....	...	1	1
Old Age	90	74	74
Violence, Privation, Cold, and Intemperance!	51	26	26

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, with New Views on the Nature, Causes, and Treatment of Mental Diseases. By PINEL, Physician to the two National Mad Asylums of France, &c. Translated, with Illustrative Notes, by Dr. COSTELLO 315

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THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes Illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

II.

UTE MANIA, OR MANIACAL FUROR. (ACUTE CEREBRITIS.)

Furious or maniacal exaltation is the type of that is commonly called insanity, or mental alienation; it is a general delirium, extending to all the sensations, characterized by ideas, confused, incoherent, hurried, and expressed by irregular movements, cries, singing, menaces, and, in short, all the symptoms of furor.

Premonitory Indications.—Although it is said that furious mania always breaks forth suddenly, the attentive observer of the early indications, even when they are slight, will always be able to detect a period of incubation. In the account given by the friends, we often find that the first startling fact of insanity has been preceded by sundry acts more or less unreasonable and strange, which they were unwilling to believe as springing from a disordered mind. Very often, too, an insane person, during this period, is perfectly unconscious of his derangement, and tries his utmost to combat, or to conceal it; the explosion of their delirium is always preceded by a more or less protracted struggle, and all the tastes, habits, and passions of the individual undergo a change before it can be discovered that he is insane. One man enters into extravagant speculations totally out of character with his previous habits and condition of life; another, who had been leading a dissipated life, gives himself up at once to the practice of an exaggerated devotion. A poor shopman, in the Rue St. Jacques, of melancholic temperament, observes, for the first time, one of the omnibuses of a new company. He at once becomes possessed with the idea of getting up a company on his own account; he can no longer rest, nor sleep; he wears all the bankers in the city with the details of plans, and grows angry when they venture to express a doubt of his success: after a few days, he is taken with a most violent attack of mania. A young gentleman of fortune, all at once, is seized with a desire to travel only a week before the expected confinement of his wife, in spite of the strongest and tenderest motives for remaining with her. During his journey he experiences some annoyance, flies into a passion, and experiences an attack of mania that continues for several years. The journey, like the shopman's visit to the banker's, was the first act of insanity. A young girl, deeply affected by the misfortunes that had befallen her family, is obliged to go to severe toil to earn her living, after having been brought up in comfort and affluence; all at once she becomes convinced that she alone is the author of their misfortunes; she delivers herself

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up to the most excessive devotion; she wearies her confessor with her never ending complaints; by-and-bye she accuses herself of loving him more than God; she becomes desponding, loses her gaiety, her appetite, and sleep. The persons, about her, remark that her disposition is altered, but attribute the change to deeper reflection and more matured reason. Eight months after she is attacked with furious mania. This long incubation shewed phenomena sufficiently strange to presage the explosion of mania in its complete form.

In this insidious period of mania, which almost always escapes the attention of the persons with whom the patient lives, the functions of the intellect are the first to be disturbed; the conception becomes slow and difficult, new ideas arise, and new propensities are formed. Absence of mind of more or less duration occurs, and this circumstance is accounted by persons, who have experienced former attacks, as the forerunner of a relapse.

But, in spite of every effort, they soon betray themselves by some oddity in their actions, or some singularity in their sentiments. Under some pretext of study, fatigue, or dislike of exercise, they avoid the society of friends, that they may the more at ease give themselves up to the contemplation of ideas which at first only astonished, but which ultimately will obtain complete dominion over, them; they take a pleasure in solitude. The wife feels indifferent to her husband; the merchant neglects his business; and the man of small means dreams of nothing but pleasures or brilliant speculations.

Now, all these actions being no longer in harmony with existing circumstances, and springing only from internal impulses that are kept secret, it becomes impossible for strangers to comprehend them at all; even the questions that are addressed to the patient, instead of drawing forth any satisfactory reply, only tend to irritate and sour his disposition. This period of incubation which may last for months, and even more than a year, after having in the first instance perverted the functions of the intellect, at last extends to the whole economy; headaches, and sanguineous congestion, supervene, accompanied by an oppressive feeling of heat, fever, and agitation without assignable cause. The digestive functions are disordered, the appetite becomes depraved, the plumpness of the body disappears, the skin assumes a yellow hue, and becomes rough and wrinkled; the perspiration is suppressed. In women, the menses are irregular, and at last disappear; and in men, cutaneous exanthemata, and rheumatism and gouty affections, hitherto rebellious to every plan of treatment, are driven inwards, or, according to the term of the schools, are repercussed.

This is a general sketch of the remote preludes that may be observed in the still obscure *debut* of mania, during the deceitful period in which a man, who is on the point of becoming insane, still bears a part in society. We now arrive at the time when, no longer subjected to the government of the will, he compels the law to deprive him of his liberty and of the enjoyment of his civil and political rights.

Invasion.—As we have just seen, the attack of

mania is, then, often nothing more than the augmentation of a delirium that had already existed; it rarely bursts forth without prelude; most commonly the passage through the early symptoms into complete delirium takes place insensibly. Persons who up to this time had carefully concealed their strange ideas, and internal illusions, at last allow words to escape them, and commit actions in conformity with their delirium. Henceforward, instead of trying to defend themselves or to dissemble, in the full conviction of their thinking and acting as they ought to do, they take a pride in their thoughts, and actions, which they endeavour to prove to be right by every possible means. The slightest occasion then brings on the attack which had been brooding some time before; agitation, vague anxieties, panic, terrors, and constant sleeplessness supervene; the disorder of the ideas is soon betrayed by wild gestures and strangeness in the looks and motion of the body. "The patient" says Pinel "sometimes keeps his head and eyes raised to heaven; he speaks in a low voice; or utters cries and vociferations without any known cause; he walks and stands still by turns, with an air of pensive admiration, or of profound thought; some abandon themselves to the vain excesses of a joyous humour, or to fits of immoderate laughter; sometimes, too, as if nature took delight in contrasts, we observe a sombre taciturnity, the effusion of involuntary tears, or concentrated misery, and extreme anguish. In some cases, the sudden suffusion of the eyes, and an exuberant loquacity, presage an imminent explosion of mania; extatic visions during the night are the prelude to an attack of maniacal devotion; and it is by enchanting dreams, and the apparitions of the object loved, in the features of purest loveliness, that insanity for love is violently ushered in, assuming the character of a tender reverie, with the most extreme confusion in the ideas."

In this period of the attack, the disorder of the intellectual functions is constantly predominant, with an almost continuous exaltation of all the faculties. Once established, there can no longer be any doubt as to the nature of the phenomena which the disease presents; and the delirium, which up to this time had not assumed any special character, puts on the most decided and known forms of insanity, those of acute mania, which must now pass through several inevitable phases.

Period of Excitation.—During this period, the patients speak, shout, sing, and enter into fits of passion, night and day, and take no rest; the countenance is flushed, the eyes inflamed, the look fiery. The sleeplessness especially is constant; there is a general reaction; an excess of vitality, which renders them insensible to pain, as well as to all impressions, and which enables them to brave with impunity cold, and all atmospheric vicissitudes.

The duration of the excitement varies greatly, from a few days, or only a few weeks, to several months, and even sometimes to years. But in the majority of cases, a remission takes place in the symptoms about the second or third month; being now separated from the furious, and protected from any exciting influences, and subjected to proper regimen, they become calm, and the organic functions begin to resume their regularity.

MEDICAL POOR LAW RELIEF.

PARLIAMENTARY REVELATIONS.

(Continued from p. 286.)

Have the enquiries you have made, and the representations that have been made to you, led you to doubt the propriety of many of the regulations now in force for the management of the poor?—The regulations, I believe, may be divided in two parts, general and local regulations. The general regulations I first wish to bring under the notice of the Committee are those which relate to the sick man and the relieving officer. When a man falls sick, or a woman, or any member of his family (and it is the case even with persons in a higher rank of life), they do not usually send for the apothecary, but they wait a little time to ascertain the nature of the complaint. A poor man is not so competent to distinguish the nature of the complaint as one in a better situation, and in many cases, from want of knowledge, they may not send for the doctor; and for fear of not being able to pay for him, they probably do not send till the case is in an aggravated state: they are then met with the order that they must go to the relieving officer. It happens sometimes that the relieving officer lives at a very considerable distance, and it becomes a matter of great inconvenience to the parties to go to the relieving officer, and therefore it is very desirable that this rule should be abolished, and that the sick man should be able to send direct to the medical officer, and obtain the assistance, in the first instance, which he requires. I have here the particulars of a case where a person had, in that way, to travel 23 miles: it happens to be a very strong case, but not more strong than hundreds of others. In another the three parties live at a triangle; 133 people reside upon a little island, from which there is a mile and a half of sea to cross; they have then to go directly up one side of the angle to the relieving officer, and to come down the other side of the angle, to the point of the base, to the doctor; they have four miles and a half to go to the relieving officer, four miles to the doctor, and four more to go home; so that these unfortunate people have near 13 miles to go before they can possibly get relief, and four miles more each way if they have to return for medicines afterwards.

Where is that?—It is in Hampshire; I sent a letter stating these facts to the Secretary of State, and the Poor Law Commissioners, and I believe that in consequence of their interference 23 miles in one case have been reduced to 13, the district having been divided.

Mr. Pakington.—Do you know whether the medical officer to whom you refer does, in all cases, require an order from the relieving officer before he attends the sick?—No; he is so much aware of the horror of those proceedings, that he tells these people to come to him without going to the relieving officer. But there is inconvenience in this, he writes to me to say, for having attended a poor woman without an order, they refused him payment; therefore, if he did his duty to himself, he would refuse to see any individual who had not made this tour of 13 miles, in order to obtain his order. I had a surgeon, Mr. Young, with me yesterday morning, who tells me that at Hawkhurst, in Sussex, the course of proceeding in one case has been this: in August he had an order to attend the husband; he attended him, and cured him; in October the woman was to be confined; when the parish officer said to her, "No, I will not give you an order to be confined, because that would entail upon the parish the expense of 10s.; you get confined in the best way you can." She did so at the risk of her life. The next month two of the children were sick, and then the relieving officer gave an order without the least ceremony, because, he said, "The doctor having a fixed salary, must physic you for nothing." In August, he gives an order for the poor man, he refuses it the next month for the woman, and he gives it the month after for the child, clearly slewing that they were paupers during the whole time, and that the refusal of the midwifery order was unjust.

Mr. M. Sutton.—Is this a particular instance?—Yes, at Hawkhurst, in Sussex; but I could give 50 instances in the course of the next week. Here is a case upon another point in the Dartford Union.

Mr. Lascelles.—What is the size of the Dartford Union, and the salary of the medical officers? It has 47,500 acres in it; there are two medical officers who receive £100, and a third £150. One gentleman has three miles to the furthest patient; another has seven miles; a third has five miles, although there are several medical men living in the district who are nearer, and would be happy to attend them. In the Ross Union, in Herefordshire, one of the medical men, I am informed, lives 16 miles off the furthest point of his district, so that to go for him and back again is 32 miles, and if an instrument or anything is wanted, there are 32 miles more to go; so that an unfortunate man may have 64 miles to go before he can get necessary assistance for his wife. The cause of this is, that the guardians in that county have thought it right to give a man two districts, because respectable men living in one of them will not take it at the price offered, and consequently the other man took it. He has taken it, and the poor people have to walk through the village, in which highly qualified men are settled, who are willing to attend to them, but they cannot call on them because they must go to this poor-law doctor, 16 miles distance.

Mr. M. Sutton.—And the 64 miles is made up in this way; first, 16 miles to go to the doctor, then 16 miles to return from the doctor, and then the same distance to go for medicine or for instruments?—Yes.

But not taking into consideration the distance to be gone by the party applying for relief to the relieving officer?—No; I give that into the account, thinking it quite enough; I have taken the shortest course, as I am informed.

Then your objection in this case is not to the necessity of applying to the relieving officer, in the first instance, but the distance at which the surgeon resides?—It is both, because the relieving officer generally does not live where the surgeon lives; therefore, they frequently will have to go a greater distance.

You stated that they have always to go to the relieving officer for an order; are you aware that in cases of emergency the overseer of the parish has the power to grant an order?—The overseer of the parish may live also at a very great distance. The overseer of the parish does not always live near the sick person; he may live three, four, or more miles from him. I object, in the first place, in point of delay, but I have several other objections to the relieving officer. One reason for not going to the relieving officer is, that his duty is to visit the sick and the poor all over the district, and therefore he cannot always be at home. A poor woman, for instance, sets off to get an order for her husband, and when she arrives, the relieving officer is not at home; he has gone out on duty. She has to wait; consequently 24 hours may be lost. Mr. Richards, of Old Brentford, made a very particular statement of a child who had croup or inflammation of the windpipe, and by going to the relieving officer 24 hours were lost. When the order was obtained from the relieving officer, 24 hours more were lost in going to the surgeon; and between the first loss of 24 hours and the second loss of 24 hours the child had died. One half of that was attributable, at least, to the necessity of going to the relieving officer, for which no good reason can be given.

Mr. M. Sutton. What distance did the overseer reside from that particular place?—He may have resided a mile or a mile and a half; but overseers are not always to be found at home; their duties carry them away also, and unless you apply at the particular hour when they are at home, you cannot obtain an order, and in rural districts a parish is four, five, or more miles long.

Is that the usual extent of a parish?—It is very often several miles longer. A man must not go to the overseer, unless he believes it is a case of urgency; but one who has an inflammation of the lungs does not know that it is a case of emergency, unless he is near dying. What I mean to propose is this, that the person shall go at once to the medical man, and that the medical man shall give him an order on the relieving officer, instead of the relieving officer upon him. It makes all the difference of life or death to the patient, and it is quite the same to the public. If the medical man gives the patient an order, he takes it to the relieving officer, who says "You are," or "you are not, a pauper;" I shall sign this paper," or "I shall not sign it;" if he signs it, it should be carried to the medical officer next day. If the relieving officer says, "No, I will not sign it; you are not a fit person to be a pauper;" then no order is returned. The difference is, that the man gets his advice and his life is saved, in the one instance; he does not get advice and his life may be sacrificed, in the other. There can be no difficulty upon the subject; but the next point is a great deal more important, it relates to the relieving officer having an opinion on the nature of the case.

Mr. Pakington.—Do you not think the best practical remedy would be to do away altogether the necessity of the intervention of the relieving officer, giving the medical officer an appeal to the relieving officer or to the Board in those cases where they think the party is not entitled to relief at the expense of the union?—Certainly; the medical officer generally knows a great deal better than the relieving officer who is poor, and who is entitled to advice, and if he is left to himself he will not give advice to those that ought not to have it. He would be amenable to the guardians for any misconduct. The great object is to give relief to the poor in the quickest way.

Do not you think that one of the most important objects connected with this inquiry into the sick poor, would be to get rid of the intervention of the relieving officer?—Assuredly; he is the person of all others who ought to be got rid of.

Mr. M. Sutton.—You say the medical officer would be amenable to the guardians of the poor for any misconduct?—Certainly; if he refused to give advice, improperly.

What you would recommend would be, that the medical officer should give an order upon the relieving officer; instead of the relieving officer giving an order upon the medical officer; that the medical officer should judge both of the nature of the case, as to whether the party required his attendance, and also as to the station of the party, whether he was entitled to medical relief at the cost of the union?—I take a very high ground upon that point. I say more than that: I say, that medical relief is to be given to every body in the world who asks for it. The first question is, "Are you sick, and do you want medical relief?" "Yes." It is given, and then comes the question, "Who is to pay for it?" (To be continued.)

ON BURNING.

(To the Editor of the "Medical Times.")

The late fatal case of burning, at Drury-lane Theatre, induces me again to direct your attention to the valuable properties of creosote, in checking the fatal progress of wounds caused by burning or scalding.

Referring to the Munich case, detailed by me in the *Medical Times* of the 30th November (page 182), wherein I endeavoured to explain the cause of this anti-gangrenous action of creosote, I shall proceed now to illustrate the theoretical views I have expressed on the subject, by another case, which I have lately treated.

On Saturday, the 14th of December, I was called at two, p.m., to see a boy, of six years, who had just been scalded by upsetting a kettle of soup over part of the right side of the head, the ear, the face, and the shoulder. I found him in the most dreadful and convulsive agony; and the mother, in whose hands the kettle was upset, in great dread, lest the child should expire from con-

vulsions. I ordered the right side of the head to be shaved, which was very carefully done, and then had the following ointment prepared.

R Creosot. gutt. xv.
Carbon. anim. præp. ʒj.
Spir. vin. 3ss.
Ung. spermacet. ʒj.
M. Ft. ung.

This ointment was spread on linen, applied to the injured parts, and thin shavings of potato laid over it. Immediately after the application of the ointment, the distressing cries of the child gradually diminished, and, in about ten minutes, ceased entirely, so that I was enabled to leave him. When I repeated my visit at six o'clock, I was agreeably surprised to find the patient enjoying a quiet sleep. No other remedies were administered. On the next day, the child was cheerful and free from pain, the wounds being in an advanced state towards cicatrization, which has continued to progress as favourably as possible, so that he is now nearly recovered. Though the several scalds, in this case, were not so extensive as to be dangerous if treated with ordinary care, still the most speedy removal of the convulsive pains was indicated, and this, I am convinced, could not have been effected by any other remedy so promptly as by creosote.

Taking into consideration the remarkable and dangerous case at Munich, mentioned in my former letter, and the slight one just recited, besides several others which I have witnessed, I think myself justified in recommending the following preparation to be kept ready by every medical man and chemist, under the name of "Burn ointment," or any other name expressive of its object:—

R Creosot. drachmam dimidium
Carbon. anim. præp. drachmam,
Spir. vin. drachmam et dimidium,
Ung. spermacet. unciam et dimidium,
M. Ft. ung. for adults.

This might be modified, according to age, in the following manner:—For children under five years, the ointment should be weakened, by mixing it with four times its bulk of spermaceti; for children from five to ten years, with twice its bulk of spermaceti; and so on, gradually increasing the strength of the ointment, according to the age of the patient. In cases requiring protracted treatment, the dose of creosote should be gradually and carefully increased, in the successive applications. Hoping that the importance of the subject will excuse my intruding this case on the attention of your readers, I have the honour to remain, your most obedient servant,

SIGISMUND SUTRO, M.D.

3, Great Marlborough-street,
Dec 23rd, 1844.

[Press of matter unavoidably prevented our inserting this letter, last week.—ED.]

Metropolitan Mortality for the Week ending Saturday, December 21st.

Causes of Death.	Total.	Average of 5	
		Springs.	Years.
ALL CAUSES	1249	990	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases.....	223	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	112	115	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	180	152	157
Diseases of the Lungs, and of the other Organs of Respiration	415	312	286
Diseases of the Heart, and Blood-vessels	39	23	21
Diseases of the Stomach, Liver, and other Organs of Digestion	91	66	69
Diseases of the Kidneys, &c...	11	6	5
Childbirth, Diseases of the Uterus, &c.	17	11	1
Rheumatism, Diseases of the Bones, Joints, &c.	10	6	6
Diseases of the Skin, Cellular Tissues, &c.....	...	7	1
Old Age	90	74	71
Violence, Privation, Cold, and Intemperance.....	51	26	26

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, with New Views on the Nature, Causes, and Treatment of Mental Diseases. By PINEL, Physician to the two National Mad Asylums of France, &c. Translated, with Illustrative Notes, by Dr. COSTELLO 315

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THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale, 'Médecine Clinique,' 'Nosographie Philosophique,' &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

II.

ACUTE MANIA, OR MANIACAL FUROR. (ACUTE CEREBRITIS.)

Furious or maniacal exaltation is the type of what is commonly called insanity, or mental alienation; it is a general delirium, extending to all the sensations, characterized by ideas, confused, incoherent, hurried, and expressed by irregular movements, cries, singing, menaces, and, in short, by all the symptoms of furor.

Premonitory Indications.—Although it is said that furious mania always breaks forth suddenly, the attentive observer of the early indications, even when they are slight, will always be able to detect a period of incubation. In the account given by the friends, we often find that the first startling fact of insanity has been preceded by sundry acts more or less unreasonable and strange, which they were unwilling to believe as springing from a disordered mind. Very often, too, an insane person, during this period, is perfectly conscious of his derangement, and tries his utmost to combat, or to conceal it; the explosion of their delirium is always preceded by a more or less protracted struggle, and all the tastes, habits, and passions of the individual undergo a change before it can be discovered that he is insane. One man enters into extravagant speculations totally out of character with his previous habits and condition in life; another, who had been leading a dissipated life, gives himself up at once to the practice of an exaggerated devotion. A poor shopman, in the Rue St. Jacques, of melancholic temperament, observes, for the first time, one of the omens of a new company. He at once becomes possessed with the idea of getting up a company on his own account; he can no longer rest, nor sleep; he wearies all the bankers in the city with the details of plans, and grows angry when they venture to express a doubt of his success: after a few days, he is taken with a most violent attack of mania. A young gentleman of fortune, all at once, is seized with a desire to travel only a week before the expected confinement of his wife, in spite of the strongest and tenderest motives for remaining with her. During his journey he experiences some annoyance, flies into a passion, and experiences an attack of mania that continues for several years. The journey, like the shopman's visit to the banker's, was the first act of insanity. A young girl, deeply affected by the misfortunes that had befallen her family, is obliged to go to severe toil to earn her living, after having been brought up in comfort and affluence; all at once she becomes convinced that she alone is the author of their misfortunes; she delivers herself

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up to the most excessive devotion; she wearies her confessor with her never ending complaints; by-and-bye she accuses herself of loving him more than God; she becomes desponding, loses her gaiety, her appetite, and sleep. The persons, about her, remark that her disposition is altered, but attribute the change to deeper reflection and more matured reason. Eight months after she is attacked with furious mania. This long incubation shewed phenomena sufficiently strange to presage the explosion of mania in its complete form.

In this insidious period of mania, which almost always escapes the attention of the persons with whom the patient lives, the functions of the intellect are the first to be disturbed; the conception becomes slow and difficult, new ideas arise, and new propensities are formed. Absence of mind of more or less duration occurs, and this circumstance is accounted by persons, who have experienced former attacks, as the forerunner of a relapse.

But, in spite of every effort, they soon betray themselves by some oddity in their actions, or some singularity in their sentiments. Under some pretext of study, fatigue, or dislike of exercise, they avoid the society of friends, that they may the more at ease give themselves up to the contemplation of ideas which at first only astonished, but which ultimately will obtain complete dominion over, them; they take a pleasure in solitude. The wife feels indifferent to her husband; the merchant neglects his business; and the man of small means dreams of nothing but pleasures or brilliant speculations.

Now, all these actions being no longer in harmony with existing circumstances, and springing only from internal impulses that are kept secret, it becomes impossible for strangers to comprehend them at all; even the questions that are addressed to the patient, instead of drawing forth any satisfactory reply, only tend to irritate and sour his disposition. This period of incubation which may last for months, and even more than a year, after having in the first instance perverted the functions of the intellect, at last extends to the whole economy; headaches, and sanguineous congestion, supervene, accompanied by an oppressive feeling of heat, fever, and agitation without assignable cause. The digestive functions are disordered, the appetite becomes depraved, the plumpness of the body disappears, the skin assumes a yellow hue, and becomes rough and wrinkled; the perspiration is suppressed. In women, the menses are irregular, and at last disappear; and in men, cutaneous exanthemata, and rheumatismal and gouty affections, hitherto rebellious to every plan of treatment, are driven inwards, or, according to the term of the schools, are repercussed.

This is a general sketch of the remote preludes that may be observed in the still obscure *début* of mania, during the deceitful period in which a man, who is on the point of becoming insane, still bears a part in society. We now arrive at the time when, no longer subjected to the government of the will, he compels the law to deprive him of his liberty and of the enjoyment of his civil and political rights.

Invasion.—As we have just seen, the attack of

mania is, then, often nothing more than the augmentation of a delirium that had already existed; it rarely bursts forth without prelude; most commonly the passage through the early symptoms into complete delirium takes place insensibly. Persons who up to this time had carefully concealed their strange ideas, and internal illusions, at last allow words to escape them, and commit actions in conformity with their delirium. Henceforward, instead of trying to defend themselves or to dissemble, in the full conviction of their thinking and acting as they ought to do, they take a pride in their thoughts, and actions, which they endeavour to prove to be right by every possible means. The slightest occasion then brings on the attack which had been brooding some time before; agitation, vague anxieties, panic, terrors, and constant sleeplessness supervene; the disorder of the ideas is soon betrayed by wild gestures and strangeness in the looks and motion of the body. "The patient" says Pinel "sometimes keeps his head and eyes raised to heaven; he speaks in a low voice; or utters cries and vociferations without any known cause; he walks and stands still by turns, with an air of pensive admiration, or of profound thought; some abandon themselves to the vain excesses of a joyous humour, or to fits of immoderate laughter; sometimes, too, as if nature took delight in contrasts, we observe a sombre taciturnity, the effusion of involuntary tears, or concentrated misery, and extreme anguish. In some cases, the sudden suffusion of the eyes, and an exuberant loquacity, presage an imminent explosion of mania; extatic visions during the night are the prelude to an attack of maniacal devotion; and it is by enchanting dreams, and the apparitions of the object loved, in the features of purest loveliness, that insanity for love is violently ushered in, assuming the character of a tender reverie, with the most extreme confusion in the ideas."

In this period of the attack, the disorder of the intellectual functions is constantly predominant, with an almost continuous exaltation of all the faculties. Once established, there can no longer be any doubt as to the nature of the phenomena which the disease presents; and the delirium, which up to this time had not assumed any special character, puts on the most decided and known forms of insanity, those of acute mania, which must now pass through several inevitable phases.

Period of Excitation.—During this period, the patients speak, shout, sing, and enter into fits of passion, night and day, and take no rest; the countenance is flushed, the eyes inflamed, the look fiery. The sleeplessness especially is constant; there is a general reaction; an excess of vitality, which renders them insensible to pain, as well as to all impressions, and which enables them to brave with impunity cold, and all atmospheric vicissitudes.

The duration of the excitement varies greatly, from a few days, or only a few weeks, to several months, and even sometimes to years. But in the majority of cases, a remission takes place in the symptoms about the second or third month; being now separated from the furious, and protected from any exciting influences, and subjected to proper regimen, they become calm, and the organic functions begin to resume their regularity.

The cutaneous perspiration loses that acrid and nauseating smell, which is so strong in some persons; the skin becomes moist; the digestive functions are restored; and frequently, after a little time, nothing remains, save slight headache, some restlessness in sleep, and a degree of cerebral excitement which will require care.

This period of diminution, during which the intellectual phenomena gradually resume their intensity, is generally the passage to cure, after a lapse of time, sometimes very short, but ordinarily after six months, a year, or several years.

Terminations.—Acute mania terminates in three ways: by cure; by passing into the chronic, incurable state; and in many cases by a death frequently very sudden.

Convalescence. Cure.—The return to reason, like the attack of the disease, may occur suddenly, by a spontaneous movement of the organisation, or by a vivid commotion, physical or moral; but these cases are rare: the brain, which is so easily deranged, resumes the exercise of its functions only gradually. Persons, labouring under stupid mental alienation, have been known to recover suddenly the use of reason. A young girl, in a state of fury, throws herself out of a window, and recovers her senses, as soon as the first effects of the commotion of the brain have passed away. It is true she becomes maniacal afterwards. These sudden cures are in general deceitful, and much more subject to relapse than those that pass insensibly into a period of calm, and well-marked convalescence.

The convalescence has its characteristic signs. The patient, who no longer cared for his friends, enquires after them, and wishes to see them, and becomes affected, and sheds tears in their presence; this return of natural affection is one of the surest signs of convalescence. His attention, which up to this he had no power of controlling, he can now fix on subjects that interest him, and he will even bear, without shrinking, to discuss the erroneous motives of his past delirium. Study, labour, or the love of reading, which had been abandoned so long, are resumed, at first with difficulty, but soon with pleasure, as in former days. The intellectual functions are doubtless feeble at first, and do not give him power to form a solid judgment; he is still uncertain of himself; he hesitates, and his resolutions are formed less from himself than from the counsels he receives; time and gentleness restore confidence in his own powers; he remembers the most minute particulars of his extravagances, and if it should be perceived that these recollections are painful to him, they ought to be excused, or made light of to him.

The habit of the body also presents changes no less favourable; the expression of the countenance especially is no longer the same; to the convulsed and rigid features, the terror and anguish continually on the countenance, succeeds an expression of calm, gentleness, and gratitude. It is only amongst monomaniacs that this apparent tranquillity of the countenance frequently conceals ideas that have undergone no change. Almost all maniacs seem to grow thinner as they enter into convalescence; the face is pale, and becomes lengthened; the eyes are less prominent. These appearances are not to be construed unfavourably; there is no real diminution, only less of tension and erethism in all the parts, from the cessation of the disease of the brain; the blood, instead of being carried to the head, remains in the large vessels of the splanchnic cavities.

The doctrine of crises has been much invoked, to explain the phenomena of the convalescence and cure in mania; all sound observers have dwelt on the efforts of nature to expel morbid matter. Without, however, adopting all the old ideas on this point, we cannot reject the evidence of critical phenomena, especially in maniacal attacks; these crises consist of nasal, hæmorrhoidal, or uterine hæmorrhages, abundant perspirations, considerable flow of urine, salivation, very copious evacuations from the bowels, the appearance of exanthemata, boils, or even swelling of the parotids. In general, the appearance of these phenomena is followed by amendment, and constitutes the true crisis; and it is matter of constant observation, that patients who experience those movements of crises, more

especially as regards the urine, perspiration, alvine evacuations, or hæmorrhoids, are much less liable to relapse.

PASSAGE OF MANIA INTO THE CHRONIC STATE.

To the state of excitement gradually succeeds one of subsidence, which constitutes chronic delirium, partial or general; melancholic delirium; simple demency, without paralysis; imbecility; intermittent mania; and all those varieties of insanity in which our treatment proves unavailing against a delirium, which seems the more tenacious, as it is more calm, and which is only renewed at distant intervals. We shall have to return to this subject hereafter; but we have first to notice one of the most rapid and fatal terminations of mania, and on which authors furnish but scanty information.

TERMINATION OF MANIA BY PROMPT DEATH: SEAT AND NATURE OF ACUTE MANIA.

We are often struck with the rapid and fatal termination of an attack of acute mania. After an extreme furor and agitation, that has lasted three, four, ten, fifteen, or twenty days, these patients die suddenly; they die, not from what is still called—nervous apoplexy, but from the extreme development of a violent congestion of the brain, a superacute cerebritis, which is suddenly arrested at the moment of its highest intensity. These cases are frequent enough in large hospitals for the insane; we are surprised to hear of the death of a patient who, but the day before, was in state of furious excitement. Sometimes the termination is not so sudden, though it is equally fatal: a furious maniac, after several months, or even years, of agitation, becomes all at once silent and tranquil, and a deceitful calm succeeds suddenly to the most extravagant exaltation; two or three days after, the countenance is altered, the skin becomes yellow and earthy, the eyes sunk and immoveable, and the whole being seems changed. These symptoms make rapid progress, and they die in stupor and paralysis in a few days.

In this less rapid progress, a superacute inflammation of the brain, instead of being suddenly arrested as in the former case, passes quickly through some of the phases of a more profound decomposition: to the state of sanguineous phlogosis succeeds a slight degree of sanguineous, wine-coloured softening, or even suppuration. The same series of alterations, that these diseases produce in other organs, are developed in the brain itself; that is to say, that an intense irritation is readily changed to inflammation, and disorganization follows. This rapid succession is well calculated to throw light on the intimate relations that exist between these obscure alterations of the brain, and the succession observed in the disorder of its functions. This is still one of the least known points of morbid anatomy: and we shall, on that account, be obliged to get the support of particular facts, before we can arrive at those positive results, which in our opinion will no longer leave any room to doubt as to the seat and nature of acute mania.

CASE 1.—A woman 69 years of age, of strong constitution, was sent by order of the police to the Salpêtrière; she was in a state of extreme violence and agitation; her eyes brilliant, and animated; she shouted incessantly; her delirium extended to all subjects; no information could be obtained as to the cause of the attack. This state of excitement continued without any abatement of intensity for six months, and without any interval of calm, night or day.

The 15th of March, six months after her admission, this woman, so agitated the day before, lies extended on her bed, unable to rise; her countenance is sallow and altered, the eyes fixed and half open, the head reclines on the right shoulder, her breathing is loud, and the pulse hard and frequent: in the evening the fever augments, she has a violent paroxysm, during which she falls out of bed several times. Next day, the symptoms are aggravated; the limbs of the left side are paralysed: on the third day, the coma becomes more and more profound, and the patient expires.

Autopsy.—The bones of the skull are thick and injected with blood; the arachnoid is healthy, but

uplifted by an accumulation of serum. On being removed from the surface of the brain, all the convolutions are observed to be highly injected. Conducting the examination cautiously, the grey substance is of a scarlet hue in the superior convolutions, and presents several ecchymoses in the lateral ones; these dark spots, which are still more livid in their centre, penetrate to the subjacent, white substance. The centre of the right cerebral lobe, and the corpus striatum particularly, is entirely disorganised, diffuent, and like a blackish pap. This same right lobe presents another profound alteration at its posterior part: in this spot it is completely diffuent, and changed into a greenish matter, like pus, which runs off as soon as the membrane is removed; a considerable cavity is thus left in the lobe, the granulated walls of which appear as if formed of portions of the grey and white substance.

All the left lobe presents a different aspect; it is strongly injected; the grey substance is red, but firm, the white substance consistent, and dotted with dark spots; the entire of this lobe, notwithstanding its being inflamed, has preserved a remarkable density.

In the other cavities there is nothing to be remarked.

Reflections.—In this patient, the state of excitement lasted six months, and ended in a sudden calm, speedily followed by death. In comparing the symptoms observed during life with the alterations found in the brain, I find in the general state of injection of the brain, and of the grey substance especially, the traces of a superactive sanguineous congestion, producing that high degree of irritation, of which furious mania is but the external symptom. This irritation persists in the same degree for six months, and then several portions of the brain, already so violently irritated, become completely inflamed, and disorganization after a few days takes place in the right lobe, corpus striatum, and a portion of the posterior lobe. No sooner does this disorganization commence, than we observe the most alarming symptoms, the death-like countenance, coma, paralysis, and death.

It happens in this case, in the brain, as in all excessive irritations, that cerebral phlogosis is suddenly transformed into the inflammatory state, in the same manner as a pulmonary catarrh is converted in the space of a few hours into a true pneumonia. The true character of this sudden termination of mania had not been hitherto correctly made out. It is the same affection that many practitioners still call, serous or nervous apoplexy, for no better reason than this, that, as all the symptoms seem to be the same as those of the ordinary apoplectic seizure from cerebral hæmorrhage, they, although they can find no effusion of blood at the autopsy, prefer to use a name void of meaning, until such time as more precise investigations lead to a more correct explanation of the effect of those sudden alterations of the cerebral pulp.

CASE 2.—Madelaine M., of weak and delicate constitution, had been always strange, though her conduct was correct and reasonable. Towards her critical period, she began to show frequent indications of mental derangement. Having to bear witness on a trial in which her parents were interested, she becomes possessed with the idea that she is about to be prosecuted for crime; this is enough to overthrow her already feeble reason, and in consequence of some extravagance, she was brought to the Salpêtrière, in 1822.

In her delirium, she is always talking of litigation; she is now and then violent, and speaks with great vehemence of verdicts, injustice, condemnation, &c.

More than eight years elapse without any improvement in her state, save a few intervals of tranquillity and depression. In 1831, this state of subacute mania is suddenly replaced by a most violent attack of superacute mania. She cannot bear any article of clothing on her, shouts incessantly, breaks and tears everything she can lay hands on, and in this state passes three months without sleep, without repose, and uttering continual vociferations. On the 3d. of October, 1831, she becomes suddenly tranquil; her state appears to be wholly altered. Her answers to questions

are calm and correct, but very slow, and badly articulated; she labours under discouraging and sinister presentiments; the coma is continual, the skin dry, and the pulse hard and frequent.

On the evening of the seventh day of this febrile somnolency, a violent paroxysm supervenes, marked by redness of the face, brilliancy of the eyes, and shrill and plaintive cries; next day the inferior extremities are paralyzed and insensible; profound coma, and death three days later.

Autopsy.—The skull is thin and white; there are several adhesions between the dura mater and arachnoid, which is raised by a tolerable accumulation of serum, and is easily detached from the surface of the brain. On careful examination, the grey substance externally seems to be riddled with black points, and covered with a white pellicle which is easily removed with the back of the scalpel. The middle layer of the grey substance is of a violet red, softened and dark in some of the lateral convolutions. The two corpora striata are profoundly altered, diffuent, softened, and of the colour of wine lees; all the white substance is strongly injected with dark blood, and in many places it is level and softened, especially at the superior part of the ventricles; all the vessels of the head are gorged with blood. The cerebellum is soft and so white as to render the morbid redness of the rest of the brain the more remarkable. The heart is small, colourless, and firm: the lungs are adherent in several places to the costal pleura; the stomach and other viscera healthy.

Reflections.—In this case, the maniacal delirium became slowly developed in an intelligence already feeble; it manifests itself, however, although concentrated and in a degree indolent, and persists in about the same degree for eight years. After this long lapse of time, a violent attack of acute mania occurs, which preserves its full intensity during three months. This attack ceases suddenly, and is succeeded by a profound calm.

In comparing the succession of these phenomena with the alterations found in the brain, I see in the general redness of the cortical substance, in the black spots with which it is riddled, in the albuminous pellicle that covers it, and in the adhesions of the dura mater with the arachnoid, the ancient traces of the cause of the maniacal delirium, that had lasted so long a time.

During all that time, being limited to a subacute irritation of the cortical substance, the affection all at once is changed into an inflammation of the substance of the brain, manifesting itself during three months as an attack of superacute mania; the cortical substance next becomes disorganized in several places; the disorganization extends to the interior of the brain, softens several of the centres, and produces paralysis of the lower limbs by destroying the corpora striata. This is another well marked example in which the termination of the cerebral irritation in superacute inflammation causes speedy death. We may also remark, that all the vessels of the brain are gorged with blood, while all the other viscera are pale: another indication of the violent congestion of blood in the brain.

CASE 3. Anne D—, aged 46, was brought to the 'Salpêtrière, by order of the police, on the 20th August, 1834, in a state of melancholy, with disordered ideas and imaginary terrors. During a month, her delirium is calm, but after a dispute with another patient, she abandons herself to a transport of rage, which degenerates into an attack of mania; the attack lasts in the acute state for nine days; she then, all of a sudden, becomes quiet, the left side being paralyzed and insensible.

On the 22nd October, she is sent to the infirmary: the countenance is flushed, congested; she cannot speak; the limbs of the right side are agitated; those of the left immovable.

By energetic treatment some improvement is obtained, but the paralysis and maniacal delirium persist in the same degree for two months and a half.

On the 20th January the limbs of the right side, which till now had preserved their perfect power

of motion, are completely paralyzed; the patient is in a state of profound coma, and dies on the 24th.

(To be continued.)

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D.
Editor of the "Cyclopedia of Surgery," &c.

THE views which are attempted to be developed in these papers do not require any thing beyond a very succinct sketch of the various modes of performing the operation of lithotomy. The bladder is accessible to instruments at several points (the perineum, rectum, and hypogastrium), and the formation of an opening into it, by incision, is an operation of great antiquity. From the time of Celsus, who has left a description of it, down to our own times, cutting, in one of its forms, was the only operation employed for the cure of stone; but, in the progress of centuries, it was modified in such a variety of ways as to constitute the different methods which we shall notice hereafter.

In the description of Celsus, the surgeon introduces his finger into the rectum in order to bring the stone forward, and fix it against the neck of the bladder. He then makes a semi-lunar incision in the perineum, until the edge of the knife reaches the stone, which is then extracted through the wound.

Nothing can be more rudimentary than this process, and it is quite obvious that its applicability must have been very limited, either in consequence of the size of the stone, or the condition of parts requisite for fixing the stone in a position so to be cut down upon. By comparison with another method which was employed in course of time, the Celsian operation was distinguished by the name of "Apparatus Minor," from the small number of instruments employed in performing it, viz. a bistoury and forceps. Surgeons are not agreed as to the parts divided in the Celsian incision, some believing that the incision involves the skin, cellular tissue, the transverse muscle, a portion of the levator of the anus, the prostate, neck of the bladder, and even sometimes a part of the inferior portion of this viscus; others, that, in consequence of the manner in which the stone must be fixed by the fingers against the bottom of the bladder, and not, as is supposed, against the prostate or neck, the perineum and lower part of the bladder are divided, and not the urethra or prostate, except very rarely. If the latter opinion be well founded, it is manifest that an operation, liable to such objections as cutting beyond the prostate, wounding the rectum, the seminal vesicles, or their canals, and exposing the patient to extravasation into the cellular membrane, or an incurable fistula, could not, in a progressive state of the art, be persevered in. It is unnecessary to dwell on the dangers and difficulties of a process which has fallen into complete disuse, except in cases where the stone is firmly impacted in the lower part of the urethra, and forms a prominence in the perineum.

The Apparatus Minor was supplanted by another method, in which the perineum was incised vertically, and from before, backwards, the incision being directed from the root of the scrotum to within half an inch of the anus. The line of the incision was close to, but to the left of, the raphé; through this incision the urethra was opened in its membranous portion, and, by dilatation and laceration, a passage was opened into the bladder, through which the stone and the instruments employed for its extraction were passed.

The Apparatus Major, or Median Incision, in its chief points, consisted of a longitudinal incision of the perineum, and, after reaching the urethra, in a dilatation or tearing of the urethra and neck of the bladder to an extent sufficient for the extraction of the stone.

The merit of the modification just described, on the authority of documents discovered in the library at Turin, is attributed to Battista da Rapallo. This method, though practised by Giovanni dei Romoni (Johannes de Romanis), appears to have

been first published by Mariano Santo de Burletta (Marianus Sanctus) in his work entitled *De Calculo à Vesica Extrahendo*. The publication of this method by Mariano conferred his name upon it, and hence the apparatus major has been also known as the Marian section. His successor, to whom Mariano had transmitted the knowledge of his method, was Octaviano da Villa, of Rome.

Notwithstanding the publication of the method in the beginning of the 16th century, it was not known in France till fifty years later, when Octaviano, in a journey into the latter country, became the friend of Laurent Collot, and imparted to him a knowledge of the operation. After the death of Octaviano, Collot, by the invitation of Henri II, left Champagne, to take up his residence in Paris as royal operator; and the practice in this line continued hereditary in his family, until the surgeons and pupils of the Hotel-Dieu got possession of the secret, by cutting a hole in the ceiling of his operating-room, and thus witnessing the diverse steps of the process. About the beginning of the 17th century, the practice had become general, as is shewn in the works of Paré, Fabricius de Hilden, &c., so that, prior to this stratagem of finding out Collot's mode of operating, it is clear that the publication of it by Mariano, more than half a century earlier, had then produced its effects.

The Apparatus Major was so named, from the number of instruments required for the method of operating, and these were: a grooved staff; a double, or single, convex-edged knife; a male and female director, the former of which was furnished with a blunt prolongation, to run in the groove of the staff. Fabricius de Hilden employed only one director, or gorget, in the shape of a wide channel, narrowing, towards its extremity, to a similar blunt prolongation; and, for the purpose already named, a dilator, composed of two parallel blades, to open for the purpose of dilating the wound; also a forceps for extracting the stone.

By the first incision, the skin was divided in a direction parallel and close to the raphé, from the root of the scrotum to within two fingers' breadth of the anus. The next reached the groove of the staff, dividing the muscles of the bulb of the urethra. The rest of the canal was then divided, by carrying the point of the knife, guided by the groove, till it reached the bladder. The knife being withdrawn, the male director was passed by means of the groove into the bladder. This done, the staff was withdrawn, and the female director was passed into the bladder also, and both were then used cautiously and slowly to widen and tear open the whole line of the incision: that is, the membranous and prostatic portions of the urethra, and the neck of the bladder. When Fabricius' gorget was used, the laceration was assisted by the finger being inserted into the wound with it. Both served when the wound was sufficiently enlarged for guiding the forceps to the stone.

So far as related to the incision, the steps of this method are all rational; its chief dangers were incurred by the laceration of important parts, called by the mild name of dilatation. This blind irruption upon parts of such importance as the prostate gland and its duct, the neck of the bladder, and the seminal vesicles, and sometimes proceeding to the length of a complete separation of the urethra, must, as a matter of course, have given rise to violent inflammation, urinary infiltration, fistula, incontinence of urine, inflammation of the testis, sterility, and even death itself, as some of its frequent consequences. Impressed with a strong sense of these dangers, Marechal tried to obviate them by obtaining a larger incision of the parts. He employed a longer and narrower knife, and made his incision by lowering the handle, and elevating the curved end of the staff, while the point of the knife penetrated into the bladder, and its edge was made to descend upon the prostate so as largely to divide it from before backwards. By this plan he was very successful, and was enabled to extract calculi of considerable size; but the evil was that of exposing the patient to the risk of wounding the

rectum, and, as a consequence, to the disgusting infirmity of a recto-vesical fistula.

The Apparatus Major, or median section, has received other modifications, to be noticed in their proper time, tending to obviate, more or less completely, the dangers and inconveniences to which we have alluded; and so far, the historian has to record progress. But what shall we say of a modification of the Apparatus Major, in which it is proposed, in our times, to revive its dangers under the guise of improvement?

MAGIC, MESMERISM, HYPNOTISM, &c., HISTORICALLY AND PHYSIOLOGI- CALLY CONSIDERED.

By JAMES BRAID, (of Manchester,) M.R.C.S.E.

(Continued from page 299.)

In all cases of morbid mental affection, it ought ever to be remembered, that the morbid delusion cannot be banished or overcome by a direct effort of the *patient's will*, in reference to that *over-vivid feeling*. The more he exerts himself directly to banish the idea from his mind, he will only render it the more vivid and engrossing. We must, therefore, act indirectly on such patients:—thus, after inducing the sleep, we must by auricular suggestion excite the mind to the very opposite feeling, or affection; and as it is the peculiar feature of hypnotism, that there is an absolute concentration of attention to the subject in hand, exciting a NEW function or propensity, is equivalent to suspending that formerly in action. The mere temporary suspension would tend to moderate the force of the morbid affection, but we do more; by exciting the ANTAGONIST mental faculty, and bringing the patient out of the sleep, with a lively impression of this feeling on his mind, the influence is sure to leave a favourable permanent impression on the mind of the patient; just as a vivid mental picture or dream may be remembered, and influence our feelings during the succeeding day. By such proceeding, therefore, we render a two-fold benefit to our patient.

This was beautifully illustrated in the following case. A highly intelligent gentleman, amongst other passions and emotions, had that of devotion excited, which I did simply by placing the palms of his hands together, and a little elevated, as in the attitude of prayer. There was no whispering to suggest the expected emotion. He went down on his knees, and gradually progressed in the intensity of his devout adoration, seeming at length to be most intensely affected. At this moment, I was hurriedly summoned to attend to a patient in another room. As this was the first day this gentleman had been so operated on, I could not venture to leave him in the hypnotic state; I therefore aroused him instantly. On returning to the room, some time after, this gentleman expressed himself as overwhelmed by a feeling of the most intense awe; and his appearance testified the fact. I enquired how long he had experienced this feeling. He said ever since he came out of the sleep. This recalled to my mind the fact, that I had aroused him whilst his mind was all absorbed in the contemplation of one of the most sublime scenes ever presented to the sight of man:—he thought he had a visible manifestation of the scene at Mount Sinai, when the Almighty delivered the ten commandments to Moses. I, therefore, told him that he must be hypnotised again, when I should be able to remove the painful feeling immediately. He submitted to the operation, when I excited an antagonist feeling, gaiety and hilarity, under which he was aroused in a few minutes, in the highest glee I ever saw him; and thus he remained for the whole of the evening, as was agreeably manifest to every one present as well as to myself. This is a striking proof of how much good may be effected in this way, in cases of monomania.

I have already entered my protest against any one imagining that either hypnotism or mesmerism should prove a universal remedy. Like medical treatment, its province extends principally to regulating and controlling functional disorder. It does not pretend to restore serious organic lesion: nor can medical treatment do so. In such cases,

by different means, we may excite sluggish, or restrain inordinate, action of the part, and by improving the general health, we may thus put the patient in a more favourable condition for the powers of nature to repair the injury of internal organs; but more we cannot do. In many such cases, hypnotism and medical treatment might prove useful aids to each other in these respects.

However, both hypnotism and medical aid can hasten the removal of many morbid deposits, which produce enlargement and adhesions of organs or parts, and which, if not speedily removed, might terminate in permanent morbid structure and function; and they may also excite the growth and development of such organs, or parts, as are morbidly weak and atrophied. Every medical man is so familiar with this, as regards ordinary treatment, that it is quite unnecessary for me to cite examples; but, in proof of what can be achieved in this way by the hypnotic method, I shall briefly detail a few cases.

In my work on hypnotism, page 173, the following case is recorded:—"The eye was free from pain, but was of no use as an organ of vision. There was an opacity over more than one half of the cornea, sufficient to prevent distinct perception of any object placed opposite the temporal half of the eye, all being seen through a dense haze; and objects placed towards the opposite side were seen very imperfectly, owing to the injury which the choroid and retina had sustained in the points on which the images of such objects were reflected. The opacity of the cornea was not only an obstacle to distinct vision, but was also a source of annoyance from its disfigurement, being obvious even to those at a considerable distance." I must add, that this opacity had existed in the same state for three years and a half, after medical treatment had been abandoned, from the conviction of an able oculist, that the case was hopeless. The only means used by me, in this case, was hypnotising her daily, and the result was, that, besides the restoration of sight, in a very short time I had the satisfaction of seeing the cornea so transparent, that it requires close inspection to observe where any opacity remains." Here was most indubitable proof of the power of hypnotism, in exciting absorption of morbid deposit.

Last July, I was consulted in the case of Jane B—, 17 years of age, for distortion of the neck, and complete paralysis of the recti muscles, and also entire loss of feeling in the neck and shoulders. The chin had been for months resting on her breast, from which she had not the power of separating it by voluntary effort, and the consequence was, that she had an ulcer over the sternal end of the left clavicle, resulting from the continual friction and pressure of her chin against this part. The neck generally was morbidly thick, and all the tissues so adherent that the head could not be elevated for more than an inch, even by mechanical force, and that was attended with great pain. There was also a tumour over the most acute angle of the cervical vertebræ (the size of half of a large lemon), and, at first sight, she had all the appearance of having dislocation of the neck. The affection had existed seven months. For several months, she had been under the care of an eminent surgeon, who prescribed various internal medicines and external applications; amongst others, blistering, cupping over the spine, and a seton in the back of the neck. In spite of all this, the case went on from bad to worse, so that, at length, treatment was abandoned, the case being considered hopeless; and it had been in the state I have described, for more than three months before applying to me.

I hypnotised her, so as to excite the quickened circulation and highly arterialised condition of the blood (see my Treatise on Hypnotism), and directed the attention to the action of the paralysed muscles and morbid tissues, endeavouring thus to excite the recti muscles to action. There was daily a visible improvement; in three days, sensation began to return to those parts which had been devoid of feeling for months; the adhesions and morbid deposits were removed gradually; within ten days, the tumour I have referred to was reduced to one-third its former size, and she could raise her chin, by

her own efforts, five inches from the sternum, within a fortnight.

I shall now give a case, from the October number of the *Zoist*, by W. J. Tubbs Esq. Surgeon, Upwell Isle, Cambridgeshire, in proof of what may be accomplished by hypnotism, for increasing the size and invigorating an atrophied and paralysed limb, or, as he styles it, a withered arm. The case is headed "Withered Arm from Rheumatic Pains in the Shoulder, of two Years' standing, cured by Mesmerism." The parents, presuming that must be a case of dislocation of the shoulder, took her first to a professed bone-setter, who performed some painful manipulations three or four times, and then pronounced all right; but such violent irritation followed as to require leeches, and, when she called on him nine days after, he told her he could not do any more for her. She then applied to Dr. Whited, an eminent practitioner in the neighbourhood "who ordered a repetition of leeches, poultices, lotions, and medicine; he saw the case again that day fortnight, and requested the mother to apply more leeches." She then passed into the hands of a third, but without any benefit. At page 369, he says: "no improvement having taken place in the skeleton arm (for it had not only become powerless, but completely wasted in bulk), her parents gave up all hope of the restoration of her limb, until persuaded to consult Mr. Tubbs, in consequence of the marked benefit which had attended his mesmeric treatment of several obstinate cases. This was on the 29th June 1844, and Mr. Tubbs was requested to operate privately, and by no means to let her father know of it, HE BEING SO OPPOSED TO MESMERISM." Her state was this: "the affected shoulder was tilted and drawn forwards by the rigid state of the pectoral muscle; the muscles about the shoulder flattened, and those of the arm wasted and flabby. The measurement round the sound arm was seven inches and a quarter, that of the withered one five inches; this was taken round the insertion of the deltoid muscle." He further adds: "It gave great pain to raise the fore-arm, which seemed to be spasmodically fixed to the side. The limb was semi-paralysed, though there was power of the extensors and flexors; if she grasped anything long, it gave her so much pain in the elbow, and up the arm, as to cause her to drop it. She was able to touch her chin with her fingers, and nothing relieved the pain, when it came on, but holding her elbow close to her side. Her general health was bad, and from her restless nights she looked haggard." Mr. Tubbs adds, that having read my work on hypnotism he "considered this a fair case to try (my) method of operating;" that he "found her very susceptible, and, in a few minutes, she was in the state of somnolency with her head forwards on her chest." He then describes his mode of procedure, according to the rules I had laid down, in the said treatise, for such cases, and the following is the result: "in the course of twenty minutes, found the arm rigid (that is, the left arm, which had been extended; the right, the withered arm, was left loose, hanging by the side); the legs I had resting on a chair. I now suddenly awoke her when she seemed alarmed, and began rubbing her eyes, and the limber arm. Before she left the room she felt more power of motion, and could raise it higher."

30th. Operated on.

July 2nd. Operated on. Slept all night; much tingling during the day; brushed her hair with the hand.

Operated on, on the 5th, 9th, 10th, and 11th.

13th. Operated on. Can raise the arm over her head been washing the things up (it was her right arm which was lame); shoulder reduced in size; always feels heat and tingling in the centre of the arm, as soon as out of the sleep, until she rubs it.

14th and 19th. Operated on; the muscles have lost their flaccid appearance, and there is great improvement in her looks; eats and sleeps well.

20th. Gone to work, pulling peas for Mr. Good man of Upwell.

21st. Arm weak from yesterday's work.

August 3rd. Operated on; surprised to see the improved state of the arm.

5th. Operated on; quite well.

10th. Saw her at her father's house; has been reaping wheat the last two days; has perfect use of the

arm. Every time I operated, as I did the first time, by letting the affected arm hang down. There had always been some degree of motion, allowing her to raise the fore-arm, and, by depressing the elbow, she had been enabled to feed herself, BUT NOT TO RAISE THE UPPER ARM FROM THE SIDE.

22nd.—The girl came up this morning, and I took the following measurement of both arms: sound arm, $7\frac{1}{2}$ inches; withered arm, $6\frac{1}{2}$ inches, round the insertion of the deltoid muscle."

Here, then, is a case where hypnotism has been fairly tried, as I recommend, and a more satisfactory result could not have been anticipated. It also beautifully illustrates the power we acquire by hypnotism, besides removing pain, and restoring general health, of increasing the bulk, and invigorating the power, of an atrophied and weak member. Whilst the sound arm increased only $\frac{1}{4}$ of an inch in the two months, the withered arm had gained AN INCH AND A HALF; and sufficient strength, to enable her to perform the hardest labour, was acquired in six weeks, from the day she was first hypnotised.

Here I beg to insert a remark, which should properly have been introduced sooner. I cannot help feeling sceptical as to the alleged mesmeric inspiration, which enables somnambules to prescribe, intuitively, in the most perfect manner, for any disease; and that without any adventitious aid from knowledge of such subjects acquired during the waking condition, or by hints and conversations overheard by them during the sleep. The low state of medical science in the East, which I have already referred to, but ill accords with this notion. However, from the exalted state of both mental and physical functions, during the nervous sleep, there can be no doubt that, by a little tuition, they might be rendered most expert in their diagnosis of internal diseases, and equally expert in their prognosis and habits of prescribing for such affections, provided they were aided for some time by the hints and advice of an able and accomplished instructor. All this they might do most adroitly, when asleep, and be entirely ignorant of when awake, according to the well-established law of double-consciousness. This, however, would be mesmeric or hypnotic education, in the second-conscious state, and not mesmeric intuition, or CLAIRVOYANCE, AS COMMONLY ALLEGED.

I shall now briefly detail a case, in which medical treatment and hypnotism were combined.

G. K.—, 25 years of age, of small stature; had suffered severely for four years from a scrofulous affection of the right fore-arm and wrist. At the commencement of his attack, he was for four months under treatment at a public institution; but, not progressing according to his satisfaction, he placed himself for six weeks under a French practitioner, but with equally bad success. Some time after, he came to Manchester, and was induced to commit himself to the tender mercies of a noted character, who shall be nameless, under whose care he remained for seventeen weeks. During this period, he underwent the gentle treatment of having only thirty-two blisters applied to his arm. If this failed to exhaust the disease, it at least succeeded in exhausting the patience of the patient. He now applied to various other parties, and used a variety of means, but still without benefit, which induced him once more to apply to his old blistering friend. On this occasion, he had to go through a still more fiery trial; he had his flesh literally roasted. Caustic was liberally applied, so as to exterminate the enemy, by consuming his local habitation. Of this, the poor fellow will be able to give indubitable evidence till the day of his death, as he can show three large cicatrices on the back of the arm and wrist, and one on the front of it, from the application of the caustic. Each of these had been the work of a month's operation, but still without effect in exterminating the disease. On the contrary, it had never been so bad as when he applied to me, when, besides the general swelling of the arm, which was $1\frac{1}{4}$ inch thicker than natural at the wrist, under and around the last cicatrix there was a large purple swelling, filled with that gelatiniform matter so frequently met with in scrofulous subjects, especially about the joints, and under the fasciæ. To

have destroyed this, would have required a triple sized cauterizing to any he had undergone, for which he felt no way inclined, which induced him to consult me on the 17th Nov. 1844.

I hypnotised him, extending the extremities. On being aroused, his whole body (but especially his hands) was bathed in perspiration; he felt the arm much easier, both to the touch, and when moving the wrist and fingers. The bandage he had used was re-applied; he was ordered to moisten it occasionally with a lotion of mur. ammoniac, and to take, twice a day, a dose of a mixture with pot. hydriod.

23rd.—Called on me; said the arm was much easier; it was much less swollen, and, also, less painful. Hypnotised him again. Immediately after being aroused from the sleep, he had much more motion of the wrist, and it was entirely free from pain, either on motion or free handling.

December 1st.—He feels greatly better; the swelling of the arm, generally, much reduced; the effusion on the fore part of the wrist entirely absorbed, and the integuments assuming a natural appearance. Hypnotised him again, and ordered him to continue lotion and mixture.

At the end of the third week, the swelling of the arm was so much reduced, as to enable him to put on his Sunday coat, which he could not do for THREE YEARS PREVIOUSLY, as the sleeve would not admit the arm. He was, also, entirely free from pain, and had much more strength, and use of the hand and arm. Hypnotised him again, and ordered him to continue mixture and lotion.

He has called on me, and been hypnotised twice since, and has continued his lotion and mixture, and is now quite well.

Let it be remarked, that there was decided relief in this case, immediately after being first hypnotised, before he had taken a particle of medicine, or had any lotion applied; and there was a marked relief again, immediately after the second operation, from what was his condition before it. Moreover, when I state the fact, that he only took five grains of the pot. hydr. twice a day, and that only for four days, out of six or eight, and an eight ounce lotion was all he used in six, eight, or ten days, it must be obvious that the medical means were by no means adequate, of themselves alone, to have produced the rapid improvement. Neither do I think, that hypnotism alone would have been equally successful in this case.

The following fact will throw some light upon the modus operandi of hypnotism, aiding absorption of effusion in the extremities, by inducing the cataleptiform state; and it will also prove the correctness of what I long ago advanced as my opinion, that, during the cataleptiform state, the rigid muscles pressed so on the trunks of the arteries, as to prevent the usual quantity of blood flowing through the extremities during that condition.

I bled a stout man, with large veins, when asleep, and the arm in the cataleptiform state. There was a free opening into the vein, but the blood only came in drops; but the moment I blew upon the arm, so as to reduce the cataleptiform state of the muscles, it flowed in a full stream. As the muscles tended to resume the rigid state, the stream lessened, but blowing upon the arm, so as to reduce the rigidity, made it flow in a full stream again, and thus I took upwards of a pound of blood from him.

I stated, in my last contribution, that a mouthful of beer, or water, or simply drawing the hands over the bowels, accompanied by an audible predication of what the consequence would be, could cause the bowels to move; and that I had tried this, in one patient, eleven times, with the invariable result of causing an alvine evacuation before I left the house. It may be useful and interesting, to state the results of similar trials since. The twelfth time was a failure; but, on enquiry, I ascertained a sufficient reason for this: the patient's bowels had been moved, just before my visit; so that, as might have been expected, we had a proof of the justness of the remark: "Ex nihilo nihil fit." Since that, I have tried the same experiment six times, and, on every occasion, have had ocular demonstration of the success of the experiment, before I left the house.

Having personally experienced the benefits of

hypnotism, I shall briefly give a report of my own case:—

In the middle of last September, I suffered from a most severe attack of rheumatism, implicating the left side of the neck and chest, and the left arm. At first, the pain was moderate, and I took some medicine to remove it; but, instead of this, it became more and more violent, and had tortured me for three days, and was so violent that it entirely deprived me of sleep for three nights successively. On the forenoon of the third day, whilst visiting my patients, every jolt of the carriage could only be compared to several sharp instruments being thrust through my shoulder, neck, and chest. A full inspiration was attended with stabbing pain, such as is experienced in pleurisy. When I returned home for dinner, I could neither turn my head, lift my arm, nor draw a breath, without suffering extreme pain. In this condition, I resolved to try the effects of hypnotism. I requested two friends, who were present, and who both understood the system, to watch the effects, and arouse me when I had gone deeply enough into the sleep; and, with their assurance of giving strict attention to their charge, I sat down and hypnotised myself, extending the extremities. At the expiration of nine minutes, they aroused me, and, to my agreeable surprise, I was quite free from pain, being able to move in any way with perfect ease. I say, agreeably surprised, on this account: I had seen like results with many patients; but it is one thing to HEAR of pain, and another to FEEL it. My suffering was so exquisite, that I could not imagine any one else had suffered so intensely; and, therefore, I merely expected a mitigation—so that I was truly agreeably surprised, to find myself quite free from pain. I continued quite easy all the afternoon; slept comfortably all night, and the following morning, felt a little stiffness, but no pain. A week after, I had a slight return, which I removed by hypnotising myself once more, and I have remained quite well ever since.

I was quite conscious, the whole time, of every thing occurring around me, with two exceptions: I had no correct appreciation of time, supposing only four minutes could have elapsed, when I had been in the condition for nine; and I had no idea that I was perspiring, although I was quite bathed in perspiration. There was no fire in the room.

I shall conclude this paper by one or two brief remarks on points, which it is of the greatest importance to have generally and correctly understood. It is a general notion with patients, that there can be no beneficial effect produced, UNLESS THEY PASS INTO THE TORPID OR UNCONSCIOUS STAGE. The result, in my own case, as well as many others, recorded in my Treatise on Hypnotism, proves the contrary; as many important cures were effected, in affections of very varied character, whilst the patients were quite conscious all the while. Miss Martineau's cure is also a beautiful example in point. She never went beyond the first-conscious state, and remembered all which had happened. The other case, in the same house, again, was a beautiful example of the other variety, where the patient passed to the second-conscious state, so that, on awaking, she had no recollection of anything which had occurred when asleep, but had a perfect recollection of it WHEN IN THE SLEEP AGAIN.

There seems every possible variety in the degrees of susceptibility to the impression. Some become rapidly and intensely affected; others, slowly and feebly so. This seems to have been noticed by the Hindoo Yogēe. It will be interesting to observe, whether there is any correspondence between the intensity of the sleep, and the degree of curative effects. It is, no doubt, more convincing to the patients, when they lose consciousness, that a positive effect has been produced, and may thus produce a stronger MORAL impression; but experience proves, that, in many cases, the altered state of the circulation and sensation, which results from the PRIMARY STAGE (during which the patients may imagine themselves NOT AFFECTED AT ALL), is quite sufficient to cure many diseases which have resisted ordinary treatment. To allege that hypnotism may not act as an alterative, or salutary sedative, or stimulant, unless it is carried to the stage of stupefaction, is analogous to arguing that the patient, who has been recommended to drink

ale, porter, wine, or spirits, cannot be benefitted by them, unless taken to the extent to induce extreme intoxication.

Again, on the point of the different degrees of susceptibility to the hypnotic influence, I beg to offer the following extract from page 12 of the preface to my little work on Hypnotism:—"There is a remarkable difference in the degree of susceptibility of different individuals to the hypnotic influence; some becoming rapidly and intensely affected, others slowly and feebly so. This is only analogous to what we experience in regard to the effects of medicine on different individuals, especially as regards wine, spirits, and opium, and the nitrous oxide. Whilst this is a recognised fact, as regards the latter, it appears to me somewhat surprising to find many, and even professional men, too, who seem to expect that as much uniformity ought to obtain, in regard to the phenomena during hypnotism, as if we were operating on inanimate matter. On the contrary, they ought to be ready to admit, that a variety might be expected to arise, even in the same individual, according to the physical and mental condition of the patient, at the moment the operation is performed.

"The next most important point for consideration, is the fact of all the phenomena being consecutive. We have thus the extremes of insensibility and exalted sensibility, of mobility and rigidity, at different stages, and these merging into each other by the most imperceptible gradations, or in the most abrupt manner, according to the mode of treating the patient. Those unacquainted with such peculiarities will be continually liable to think they discover discrepancies, which, however, only originate from their imperfect knowledge of the subject; just as an unskilful manipulator will be ready to suppose, from his different results, that the observations of other chemists have been erroneous.

"The third point meriting especial attention, is the condition of the mind, at different stages: as we notice this with opium, so also with hypnotism. At one stage, it gives an extraordinary power of concentration of thought, or disposition to rapt contemplation; whereas, at another stage, the discursive, or imaginative, faculties are excited into full play, and thus the most expanded, bright, and glowing scenes and images are presented to the fervid imagination. Such effects are quite analogous to those described as resulting from the use of opium, and detailed by the late Sir Humphrey Davy, as experienced in his own person, from the inhalation of the nitrous oxide. 'I thus felt a sense of tangible extension, highly pleasurable, in every limb; my visible impressions were dazzling and apparently magnified. I heard distinctly every sound in the room, and was perfectly aware of my situation. By degrees, as the pleasurable sensation increased, I lost all connection with external things; trains of vivid, visible, images rapidly passed through my mind. I existed in a world of newly connected and newly modified ideas.'

Now, of the countless numbers who have inhaled the nitrous oxide, I would ask how many have experienced feelings precisely similar to those, so graphically and beautifully described by this great philosopher? Is it, therefore, to be assumed, that he has palmed upon the world an erroneous statement, and that he was a great impostor? And, if others are variously affected, according to the peculiarities of their minds and physical constitutions, are we to hold them for liars and cheats, because they describe and manifest what they really felt, instead of squaring the whole to a certain formula? Now, setting aside all consideration of how far the opiates acted, which Miss Martineau had been compelled to take, in order to assuage her extreme anguish; is it too much to suppose, that such a talented woman—one whose mind is stored, to overflowing, with literary lore, and the brightest of nature's imagery—should, in the excited state induced by this curious agency, feel, and describe her feelings, as more brilliant and ethereal than a milkmaid's? Or can it even be expected, that those with an ordinary modicum of knowledge, and moderately brilliant fancy, should have the same refined flow of vivid suggestions passing through their

minds, as happened to that lady? They might just as reasonably expect that, during the waking condition, they could write with the same ease and elegance as she does. And is she to be held as guilty of mendacity, because she described her own individual sensations and ideas? And is no person to be considered under a sanative influence of nervous sleep, unless they experience precisely the same mental and physical feelings as she did? Those, who have attended to what has been advanced in the previous remarks, will be prepared to perceive the folly of such assumptions.

[To be concluded in a future number; when a detailed account of the modes of procedure adopted at the interment and exhumation of the Fakirs, referred to in the 272nd Number, shall be given.]

EXPERIMENTS CONCERNING THE GAS EVOLVED BY PLANTS,

By Dr. HERMANN HOFFMANN,

Professor of Physiological Chemistry and Botany, in Giessen. Translated, at the Author's request, for the MEDICAL TIMES, by Dr. SHERIDAN MUSPRATT, Fellow of the London Chemical Society.

ON account of the important light which Liebig has thrown on the vegetation of different plants, the study of their respiration has acquired a new source of interest. I have, thereby, been prompted to undertake further researches on this subject, and, especially, upon the class of cellular plants, which, up to the present time, have been so little investigated. My attention has been directed, in these experiments, to the quantity of expired carbonic acid, the reason for which will be readily comprehended in the sequel. The method of the investigation was as follows: I took the mushrooms at the time of their most luxuriant growth, and having plucked them off as near as possible to the root, freed them from earth, and placed them in a cylindrical glass, capable of containing about three pints; then covered the whole with a glass-plate, and cemented. The air, passing in, was conducted through a tube filled with chloride of calcium, and caustic potash; the air, passing out, went through a tube, which nearly extended to the bottom of the vessel, over a chloride of calcium apparatus, then into a double potash apparatus—the one containing potash-ley, while the other was filled with caustic potash—in order to arrest any moisture. The difference in weight of the potash apparatus, before and after the experiment, gave the quantity of carbonic acid. To the end was affixed an aspirator, provided with a small stop-cock. The experiments were all performed during the last autumn.

1. *Agaricus detonsus*.—The mushroom weighed, in a moist state = grms. 31.062 (5.8 per cent. solid residue = grm. 1.8 dried mushroom); was allowed to repose in a beaker-glass, whereby a considerable quantity of carbonic acid collected. The experiment, in the morning, lasted 195 minutes, during which time the volume of air in the beaker glass was changed about six times; temperature 66° F. Quantity of carbonic acid = grm. 0.165. Therefore, there is produced from 100 grms. of moist mushroom, in 100 minutes, carbonic acid = grm. 0.272; or, from dried mushroom, at about 230° F., carbonic acid = grms. 15.111.

2. *Hydnum repandum*. L.—Collected two evenings before. The experiment, in the morning, lasted 195 minutes. Other circumstances, the same as in No. 1. Weight of the mushrooms = grms. 154.3 (30.9 per cent. residue = grms. 47.6) carbonic acid yielded = grm. 0.099.—I obtained, therefore, from 100 grms. of moist mushroom, in 100 minutes, carbonic acid = grm. 0.032; ditto, from dried substance, grm. 0.067.

3. The same mushrooms had remained over night in the same close vessel: experiment in the morning: weight as above. The light, as in the foregoing cases, was that of a dull, autumnal day. Carbonic acid = grm. 0.889.

100 grms. moist mushrooms gave, in 100 minutes, 0.258 grm. carbonic acid. This surprising increase of the carbonic acid was owing to the commencing decomposition of the plant, as also to the collection of carbonic acid, which occurred during the experiment.

4. *Agaricus puniceus*.—Grows in the sun a very aqueous, readily-decaying mushroom, and therefore, capable of affording much ammonia plucked the preceding evening; experiment in the morning lasted 360 minutes; weight of the mushroom = grms. 202.2 (9.8 per cent. residue = grms. 19.8.) Light, as in the preceding case temperature 66° F. Gave of carbonic acid = grm. 0.117. Therefore, 100 grms. of moist mushroom yielded in 100 minutes, carbonic acid = grm. 0.015. Ditto, dry, carbonic acid = grm. 0.078.

5. The same mushrooms, from the last experiment had reposed in an open beaker glass from the preceding day. The experiment in the morning lasted 285 minutes: temperature 52° F. Light and weight as above: carbonic acid = grm. 0.080. There resulted from 100 grms. of moist mushrooms, in 100 minutes, carbonic acid = grm. 0.013. Ditto, dry = grm. 0.065.

6. *Russula Emetica*.—Plucked two days and a half previously, of a good aspect, but somewhat injured, almost fully grown; experiment in the morning lasted 165 minutes; light, clear, and, for about an hour, weak sunshine; temperature, 52° F. weight, = grms. 112.4 (12.7 p. c. dry substance = grms. 14.274); carbonic acid = grm. 0.060; carbonic acid produced from 100 grms. in 100 minutes = grm. 0.032; ditto, dry = grms. 0.224.

7. *Agaricus Nitens*. Batsch.—Grows on slopes, almost fully grown; a very moist fungus; plucked 16 hours previously; the experiment, in the morning, lasted 135 minutes; light, clear, without sunshine; weight = 138.7 (12.07 residue = grm. 16.6); temperature, 59° F.; carbonic acid = grm. 0.078. Produce of carbonic acid from 100 grms. in 100 minutes = grm. 0.042; dry, = grm. 0.253.

8. The same mushrooms had, during the day, stood uncovered in a beaker-glass; the experiment in the evening, when dark, lasted 120 minutes; the quantity of the changed air was similar to that in the morning; temperature, 59° F.; weight, (as in 7), carbonic acid = grm. 0.030. Resulting carbonic acid from 100 grms. in 100 minutes = grm. 0.016. This gives for the action of the light, at the same temperature, an excess of carbonic acid.

9. The same mushrooms, on the following evening had the appearance of beginning decomposition, in spite of the low temperature to which they were (like all the others) exposed; the experiment in the morning lasted 90 minutes; light was wanting; temperature and weight as in the preceding case; carbonic acid = grm. 0.075; 100 grms., in 100 minutes, yielded carbonic acid = grm. 0.059; there results a plus of carbonic acid on account of the state of decay—vide below.

10. *Cantharellus Cibarius*.—Plucked 14 hours previously; the experiment, about mid-day, lasted 135 minutes; weight = grms. 73.6 (14.8 per cent. residue = grms. 13.8) carbonic acid = grm. 0.022. 100 grm. in 100 minutes = carbonic acid, grm. 0.017. Dry = 0.123.

11. The same Species.—Some days old, and kept perfectly fresh in a tin box; the experiment, at noon, lasted 185 minutes; light, clear, without sun; temperature 55° F.; weight = grms. 124.3; carbonic acid = grm. 0.075; 100 grms. moist mushroom, yielded, in 100 minutes, 1.00 carbonic acid = grm. 0.032.

12. The same mushrooms as in 11. The experiment was performed on the same day, in the evening; weight as above; carbonic acid = grm. 0.019; lasted 130 minutes; 100 grms. moist mushroom afforded, in 100 minutes, carbonic acid = grm. 0.012; there results a deficiency of carbonic acid compared with the experiment by daylight.

13. The same mushrooms, on the following day; the experiment, in the morning, at feeble sunlight (10th October), lasted 120 minutes; temperature 50° F.; weight as above; carbonic acid = grm. 0.030; 100 grm. moist mushroom, in 100 minutes = carbonic acid, grms. 0.020. There appears an excess of carbonic acid, which is owing to the action of the light.

14. *Boletus Luteus*, L. grows on the borders of forests; plucked about 24 hours previously; of a good aspect, most of them pretty young; the experiment, at mid-day, in rainy weather, lasted 90 minutes; temperature 50° F.; weight = grms. 129.1 (6.6 per cent. residue = grms. 8.5); 100 grms. moist mushroom, in 100 minutes = carbonic acid, grm. 0.032; dry, = grm. 0.376.

15. *The same mushrooms*, on the same day, stood for some time uncovered; experiment in the twilight, lasted 80 minutes; weight as heretofore; carbonic acid = grm. 0.053; 100 grm. moist mushroom in 100 minutes = carbonic acid, grm. 0.051. The difference here is readily explained by the frequent change of the volume of air in the beaker glass.

16. *Lycoperdon Coelatum*. Bull.—Grows on sunny slopes; the mushrooms were plucked two days antecedently, and were, at the intersection, purely white; the skin not torn; the experiment, in the morning, by feeble daylight, lasted 90 minutes; weight = grms. 73.01 (7.40 per cent residue = grms. 5.4); 100 grms. moist mushroom, in 100 minutes = carbonic acid, grms. 8.006; dry, = grm. 0.111.

17. *The same mushrooms* remained uncovered until the following day. In this, and all the following experiments, the volume of air was constantly changed, for which reason they are adapted for comparisons. This precaution had not always been attended to in the preceding experiments.

The experiment at noon.—Dull daylight; the volume of air, which passed through, during the experiment, is expressed by 9½ pints, which is equal to 3 1-6th times the volume of the beaker glass; lasted 140 minutes; carbonic acid = grm. 0.008; 100 grms. moist mushroom, in 100 minutes, = carbonic acid, grm. 0.009.

18. *The same mushrooms* as before; it was already seen, that they had almost attained maturity, as their exterior coat showed signs of exuberance; the experiment, in the afternoon, lasted 150 minutes; weight as above; carbonic acid = grm. 0.014; 100 grms. moist mushrooms, in 100 minutes = carbonic acid = grm. 0.013.

19. *Agaricus Virgineus*.—Pers. Upon sunny slopes; plucked about eight hours previously; somewhat torn in the stalk by the plucking; the research at night lasted 135 minutes; weight = grms. 99.6 (6.1 per cent residue = grms. 3.87); carbonic acid = grm. 0.020; 100 grms. moist mushroom, in 100 minutes = carbonic acid, grm. 0.014; dry = grm. 0.238.

20. *The same mushrooms* on the following morning; the experiment, in clear sunshine, lasted 120 minutes; temperature, in the shade, 56° F.; weight as above; carbonic acid = grm. 0.028; 100 grms. moist mushroom, in 100 minutes = carbonic acid, grm. 0.023; dry = grm. 0.391; there appears an excess of carbonic acid, owing to sunlight.

(To be continued.)

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c.

(Continued from page 296.)

The following is the process of analysis which I have employed in the investigation of pus:—

1.—Act upon the fluid with successive quantities of sulphuric ether until everything soluble in that menstruum has been removed. The ethereal solution will be found to contain fatty matter, with cholesterine and lactate of potash, or soda, if these latter substances were present in the pus.

a. The ethereal solution having been carefully evaporated to dryness, its residue is to be exhausted with cold distilled water; this will remove the lactate. The remaining portion must then be treated with liquor potassæ, (1) which will separate the

(1.) Weak cold alcohol will answer nearly as well, for it dissolves the fatty matter easily, and

fatty matter, and leave the cholesterine. The fat must be precipitated from its alkali by an acid, re-dissolved in ether, and obtained free by evaporation.

2.—Determine the proportion of water contained in the pus by evaporating to dryness. (2)

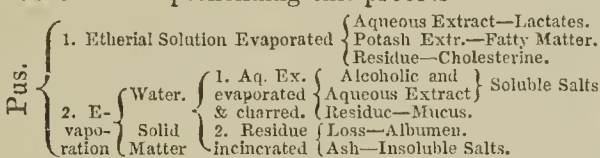
3.—Exhaust the dried residue with cold distilled water. This removes the mucus (3) and the soluble salts.

b. The aqueous fluid is to be evaporated to dryness, and its solid matter weighed: this must then be slightly charred, and treated, first with alcohol, and subsequently with water. These solutions will contain the saline matters, the weight of which, having been deducted from that of the previous residue, gives the proportion both of saline matter and of mucus.

4.—Carefully dry the mass left after the action of the distilled water; weigh, and incinerate. The loss gives the proportion of albumen.

c. The residuary insoluble saline matter may be examined in the usual way.

The annexed diagram will sufficiently assist the reader in comprehending this process



The following are the results of three analyses; and, though the specimens of pus presented no difference of aspect or of other physical character, yet, as will be seen on reference, the numerical ratio of their constituents was very dissimilar.

Pus from a vomica.

Water.....	894.4
Fatty Matter.....	17.5
Cholesterine.....	5.4
Mucus.....	11.2
Albumen.....	68.5
Lactates, Carbonates, Sulphates, and Phosphates of Soda, Potash, & Lime	9.7
Iron, a trace.....	
Loss.....	3.3

1000.0

Pus from Psoas Abscess.

Water.....	885.2
Fatty Matter, with Cholesterine.....	28.8
Mucus.....	6.1
Albumen.....	63.7
Muriates, } Soda, } Sulphates, } Lime, } Phosphates. }	13.5
Loss.....	2.7

1000.0

Pus from Mammary Abscess.

Water.....	879.4
Fatty Matter, with Cholesterine.....	26.5
Albumen.....	83.6
Lactates, } Soda, } Muriates, } Lime, } Phosphates. }	8.9
Loss.....	1.6

1000.0

has little or no action upon cholesterine. There is some difficulty, however, in determining the proper strength of the alcohol to be used; and if it be not sufficiently diluted, it takes up a small quantity of cholesterine along with the fatty matter. But for practical purposes, the intermixture is of little consequence.

(2.) I prefer to determine the proportion of water in pus, after having separated the fatty matter by ether, in preference to making the calculation previously, as many analysts have done. I find the process of drying, how carefully soever conducted, to change materially the appearance and properties of the fatty matter, and somewhat to lessen its solubility in ether.

(3.) Mucus is not soluble (strictly speaking) in water, but is readily diffused through it, and consequently, by virtue of such property, can be easily removed from substances upon which water exerts little or no action.

From various and multiplied observations, I am satisfied that no specific composition can be assigned to pus. Without deviating from a natural and healthy standard, it is susceptible of extreme variety and modification; and, again, many of its diseased states are capable of being discovered only by careful analytical investigation. Its pathological condition, however, is so extensive and variable, that any attempts to classify it accurately must necessarily be fruitless. (4)

In cachectic, dropsical, leucophlegmatic, and debilitated subjects, pus, (though it may be in all respects healthy,) generally contains a disproportionate amount of liquor puris to the number of globules. (5) In these cases, again, and also in serofulous diatheses, pus ordinarily contains a superabundance of saline matter, especially muriate of soda. In healthy and sanguineous subjects, the reverse happens; the pus secreted by such people is usually very rich in fatty matter, and often contains iron:—it is conversely in the above examples.

The situation, in which pus is formed, frequently influences its appearance and composition. Pus from the brain, even when no cerebral matter is mixed with it, has a characteristic aspect which no other variety of pus resembles. Its consistence is thick, gross, and sometimes cheesy; its colour greenish, bluish, or reddish-yellow; and it always contains albumen, fatty matter, and cholesterine, in excess.

Pus secreted by the tonsils, or in their immediate neighbourhood, has a peculiarly offensive odour, faecal, and very persistent. This odour resides in the fatty matter, which constantly abounds in this variety of pus.

Pus formed in the axilla, in the labia, and between the toes, always emits the distinguishing odour of these parts. Abscesses which form contiguously to the rectum, in any part of its extent, invariably contain pus, the smell of which is peculiarly faecal. This is very seldom owing to an actual admixture with faeces. The offensive matter is volatile and capable of being separated, per se, by distillation, or in conjunction with fatty matter by ether.

Pus formed in the substance of the testicle generally contains a free alkali, (soda,) and when the epididymis is implicated, dead spermatie animalcules are often detectable in the matter.

Abscesses of the liver, and of neighbouring parts, are remarkable for the constancy with which cholesterine enters into the composition of their pus; it often, also, contains biliary resin. These ingredients are commonly met with in the pus (no

(4.) The classification of pus has, nevertheless, frequently been attempted.* Dr. Pearson reduced it to the following varieties:—

1. The cream-like, and equally consistent.
2. The curdy, and unequal in consistence.
3. The serous, and thin kind.
4. The thick, viscid, or slimy.—(Phil. Trans. 1810, part 1, p. 294-317.)

To these, says Andral, many authors have added a fifth,—“pus concret ou couenneux.”—(Precis D'Ant. Path. tome 1, p. 389.)

Bonnet gives these as the varieties of pus:—

“Creamy; serous; tuberculous; mucous; and pus mixed with milk.”—(London Med. Gazette, 1837-8, vol. 1, p. 440.)

Druitt classifies the varieties of pus as follows:—

“Healthy pus; serous pus; clotty or curdy pus; mucous pus, or mucopurulent matter; concrete or lardaceous pus; putrid pus; and specific pus.”—(Surgeon's Vade Mecum, 3d ed. p. 49-50.)

(5.) Mason Good observed, with characteristic sagacity, that, “the perfection of pus seems to depend upon the large proportion which its globules bear to its other parts.”—(Study of Medicine, 4th edition, vol. 2, p. 21.)

* Arctæus was the first to specify its different states and appearances: “Semi-transparent, white, ash-coloured, livid, yellow, green, and black; foetid or odourless; dense or diffuent; smooth and round, or rough and angular; diffusible through water, or glutinous and compact.”—(Cap. 9, De Empyicis.)

matter where secreted) of bilious or jaundiced subjects.

In the pus of mammary abscess, the lactic and phosphatic salts are always abundant, and caseum is often met with in considerable quantity. "Mr. Key having once received, for the purposes of experiment, some remarkably good-looking pus, obtained from an abscess in the breast, was disappointed in most of the chemical tests he employed, but ascertained that coagulation was caused by rennet. Here, the properties of pus were undoubtedly masked by the milk with which it was mixed." (6) Frequently, however, the peculiar character of caseum is modified, either during its formation, or by its intermixture with pus, and it reacts upon tests like the albumen common to that fluid.

Pus, which is secreted by mucous surfaces, often contains more fatty and saline matter, and almost constantly less albumen, than the pus of serous surfaces; the former is also generally mixed with the secretion peculiar to mucous membranes.

Pus, discharged from the lining membrane of the stomach, is usually acid, from the presence of muriatic, acetic, or lactic acid. Pus, from the nose, contains an abundance of muriate of soda; pus, from the ears, yields, on the action of ether, a yellow and very bitter fatty matter—probably owing to the presence of cerumen; pus, from the urinary bladder, generally contains an abundance of mucus, and of lactic and phosphatic salts.

The pus of caries, and of periosteal inflammation, contains a large quantity of phosphate of lime, which is often the only salt present in it. Gendrin says, that muriate of lime is commonly met with in this variety of pus.

In the suppurative inflammation of gouty joints, urate of soda has been detected in the pus.

In the contagious or specific pus of small pox, syphilis, gonorrhoea, &c. there is, no doubt, contained some matter peculiar to each variety, and upon which its properties depend, though the detection of this active constituent is still a desideratum in analytical chemistry.

For the production of good pus, it is requisite that the accompanying inflammation be of a healthy kind. When otherwise, as is often noticeable in subjects of a serofinous or cancerous diathesis, in cachectic and typhoid states, and in severe lacerated or contused wounds, the inflammatory action does not succeed in converting the cytoblast into the pus globule, and the organic germ consequently stops short at the first stage of its development, and degenerates into the *ichor corpuscule*. The matter thus discharged is termed *ichor*, *ichorous fluid*, &c.; when mixed with uncoagulated blood, it is called *sanies*, or *sanious fluid*; if the blood be clotted or coagulated, the mixture is denominated *grumous*.

Pus, then, is a *genuine secretion*, the result of undue vital action in the parts, wherein it is produced. *Ichorous fluid* is a consequence of *depraved action*, which may either be *normal* or *abnormal*, in respect of *force*. Celsus was not very wide of the truth, when he gave the following as the distinctions, in character and origin, of blood, sanies, and pus.

"Sanguis omnibus notus est. Sanies est tenuior hoc, variè crassa, et glutinosa, et colorata. Pus crassissimum albisimumque, glutinosius, et sanguine et sanie. Exit autem sanguis ex vulnere recenti, aut jam sanciente. Sanies est inter utrumque tempus: pus ex vulnere jam ad sanitatem spectante." (7)

Ichor generally decomposes spontaneously, with considerable readiness, and often implicates, in its own destruction, the contiguous tissue. It is sometimes, as in cancer, exceedingly corrosive, and may be strongly acid, or alkaline, from the presence of ammonia, or its hydrosulphuret.

As I have before stated, when *good pus* is introduced by absorption, or by injection, into the blood vessels, the mischief resulting from its presence is due: firstly, to the size and resistance of its globules, which are liable to obstruct the capillary circulation in delicate organs, where such obstruc-

tion may prove speedily fatal (in the lungs, for example, producing asphyxia); and secondly, to the tendency which collections of pus in some organs (in the liver for instance) have, to decompose after a certain period of stagnation, and to promote their discharge by exciting suppurative inflammation in the surrounding integuments. But, genuine pus in nowise affects the vital properties and functions of the blood; it exerts no more action upon this fluid, than does pure olive or almond oil, or the albumen of an egg. Mr. Gulliver, however, entertains a different opinion. He says: "a small quantity of pus, introduced into the blood, into the cellular tissue, or into a serous cavity, generally predisposes in a remarkable manner to the suppurative action, although other foreign bodies, as iron nails, or common shot, do not produce this effect. I have made many experiments on this subject with dogs and cats." *

In fine, it appears to me to follow, from the experiments just mentioned, that the contact of pus with the blood, or tissues, predisposes to suppuration generally.—"A little leaven leaveneth the whole lump." (8)

I am sorry to be compelled to say, that the results of my own observations and experiments are completely at variance with those of Mr. Gulliver. As regards the "predisposing to a suppurative action", by the introduction of pus into the "cellular tissue, or into a serous cavity," I need not remind the pathologist that these are situations which are peculiarly favourable to the spontaneous decomposition of pus; nor does Mr. Gulliver require to be informed, that the consequence of such decomposition would be contiguous inflammation, without which no pus could possibly be generated. Sometimes, however, in experiments like those referred to by Mr. Gulliver, the introduced pus fails to decompose, no inflammation consequently results, and no fresh pus is formed. This is what often occurs when foreign bodies, such as bullets, shot, &c., find their way into the tissues or cavities of the animal frame. If they do not excite suppurative inflammation, (9) they may either be harmlessly and unobtrusively retained for an indefinite length of time, (10) or they may induce just so much healthy inflammation as suffices to cover them with plastic lymph, either free or attached to the neighbouring structure. (11)

I have never been able, however, to produce the effects mentioned by Mr. Gulliver, by injecting pus into the blood. The results of my own experience lead me to conclude, that the only way in which pus, introduced into the circulation, could give rise to the formation of other pus, would be by itself undergoing *spontaneous decomposition*. But this can never happen so long as pus circulates freely and in intimate mixture with the blood.

But *impure pus*, or *ichor*, may, by being absorbed or injected into the circulation, give rise to the formation of pus in the blood. This action, though, is not a catalytic one (as occurs in inoculation with the matter of small pox, in vaccination, &c.), for neither impure pus, nor ichor, is the result of such action (which must of necessity be the case, were the action dependent upon the law of catalysis); but *only genuine pus is produced*, just as happens when *any irritating matter is injected, under favourable circumstances*, into the circulation.

The formation of pus in the blood, then, by the

(8.) Translation of Gerber's Anatomy, p. 104-5. Note.

(9) As they generally do, the abscess pointing to the surface, and so preparing the way for the discharge of its contents.

(10.) Bullets, for instance, have lain in the brain, in the substance of muscles, and in the intermuscular tissues, for years, without producing inconvenience or sensible injury. Needles have been found in the heart, in the liver, and in the muscles of locomotion, though no evidence of their presence existed during life.

(11) Examples of these several results of the presence of foreign substances, in any part of the body, are often found in the local effects produced by vesical calculi.

introduction into the latter of impure pus or ichor, is due to no peculiar properties which these fluids possess, but *simply to the irritation and consequent inflammation which they excite in the blood and in the coats of its vessels*.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 2nd, 1845.

On Fissure of the Anus.—Of late, the attention of the profession has been directed towards this painful affection, and various modes of treatment have been adopted; thus, Professor Tronseau prefers injection of a solution of extract of Ratanhia (vide *Medical Times*, vol. xi. p. 7); Professor Velpeau, *Dict. de Med. Verbo Anus (Fissures)*, expresses himself as follows: "In theory, as well as in practice, incision presents the greatest chance of success; but this operation is not entirely free from danger, though in general very easy, being as it were a simple division of the sphincter; and if Boyer never witnessed a failure, others have been less fortunate, and I myself have seen two cases in which it proved fatal. Prudence, therefore, indicates the utility of having recourse to the usual topical remedies, and even dilatation, ere incision is employed." Dr. Lisfranc considers hemorrhoids as a very serious complication, for they render the fissure more difficult of cure, and increase the danger of the operation, which is sometimes followed by fatal phlebitis. It ought never to be performed when inflammatory symptoms are present, and even when they do not exist, it should be done only in cases where the pain is excessive; finally, this anatomical fact must ever be borne in mind, that, after 35, there is considerable development of the veins in the anal region. Dr. J. Guérin, in the last number of the *Gazette Médicale*, published a case, in which the cure was obtained by the subcutaneous division of the sphincter ani. This affection, in his opinion, is a symptom, and, contrary to the ideas generally received, which attribute the retraction of the muscle to the irritation of its fibres produced by pain—it is an effect, and not a cause. To be convinced of the exactitude of this assertion, it is sufficient to remark that, in cases carefully observed, the following circumstances were noticed:—1st. The patients experienced, long before the lesion of the mucous membrane appeared, considerable difficulty in evacuating their fæces.—2d. Sometimes the fissure was partially cured, though defecation still remained difficult.—3d. A radical cure was obtained by the division of the sphincter. As to the cases which were permanently relieved, without having recourse to any operation, this may be easily explained by reflecting on the difference which exists between *contraction* and *retraction*: the latter being formed by an old and organic shortening of the muscle; the former being nothing more than acute, momentary, spasm. The operation was performed, in the cases about to be related, in August 1840, and referred to in a work published in 1841 (*Essais Sur la Méthode Sous-Cutannée*), and since then repeated with success by several surgeons, and among the number by Professor Blandin. It is necessary to observe the two following rules to obviate all accidents:—1^o To avoid making a direct opening; 2^o To divide the sphincter obliquely from before backwards, and from within outwards, so as to avoid wounding the hæmorrhoidal externa.—Case. M. B—, a student in medicine, ætät 28; strong constitution; sanguineous temperament; has always experienced considerable difficulty in voiding his fæces. About ten years ago, after having suffered several months from constipation, the alvine evacuations became entirely suppressed, a state which, from a free use of diluents and proper diet, was, after a fortnight, ameliorated. His health for many years subsequently was good, though the stools were constantly relaxed (three or four per diem), scanty, and difficult; at length, about a year ago, the symptoms reappeared; the fæces were of a ribband-shape, expelled with considerable difficulty, and followed during four or five hours by a burning pain at the anus—This was M. B's

(6.) Hodgkin's Lectures on Mucous Membranes.

(7.) De Re Medica. Lugdun. Batav. 1592, p. 491-2.

condition, when he consulted Dr. G.; being examined, the anus was found to be so contracted, that it was almost impossible to introduce the little finger; the stricture extended about an inch into the interior of the intestine, producing the sensation of a thick cord surrounding the inferior extremity of the rectum; no tumour; mucous membrane not thickened. The various symptoms indicated evidently, that the stricture was caused by a retraction of the sphincter, and that a cure could be obtained only by its division; consequently, the operation was decided on, and performed on the 7th of August, 1840, in the presence of Drs. Donbowitsky, Zablotzki, Knlin, and some others. The patient was placed in the position for lithotomy, the left ring finger introduced into the rectum, and a puncture was made with a narrow perforator on the left side, about half an inch from the edge of the anus, the instrument being pushed in obliquely to the depth of about three-quarters of an inch in a direction from below upwards, and from without inwards, and somewhat from behind forwards. It its passage, it touched the inferior and external edge of the sphincter without cutting it, and the finger, being placed in the rectum, protected the mucous membrane, and hindered it from being wounded. By the opening thus made, a probe-pointed narrow *myotome*, about three-quarters of an inch in length, was introduced, and when it had reached the *cul-de-sac* formed by the perforator, it was directed upwards, by lowering the handle, and made to penetrate the cellular tissue situated between the external and internal sphincters. This period, the most difficult of the operation, was nevertheless accomplished without any accident, the fibres of the muscle being cut from within outwards, until the whole of the stricture was divided, which permitted the finger to enter the intestine quite easily. During the operation, a great number of small vessels were divided; about $\frac{3}{4}$ viij. of blood—arterial and venous—escaped, and when the *myotome* was withdrawn, a large tumour was found in the interior of the rectum. Ten minutes after, a small canula was placed in the wound, and the tumour half emptied by gentle pressure, with the finger introduced into the rectum; a bit of sticking-plaster was then placed on the opening and a tent *in ano*, but the pain it caused obliged the patient to remove it soon after. A smaller one, being introduced the next day, was with difficulty supported for a few hours; there was, however, no redness, nor heat; no timefaction, nor fever; very little pain, except when the tents were introduced. On the third day, a sanguinolent difficult stool took place, and a second on the fifth day, but without blood; at this period, there was little or no pain, and the tent could be supported all day. The state of the patient continued to ameliorate; so much so, that on the fifteenth day he left Paris, and travelled upwards of three hundred miles without any inconvenience. The cure has since remained perfect, though the anus has not quite attained its normal dimensions. Dr. Issartier, in the *Journal de Medecine de Bordeaux*, has just published an article, in which he states that it is chiefly to the precise spot affected with fissure that the attention of the surgeon should be directed, and quotes two cases in support of this opinion.—1st. A young woman was affected with luxation of the foot, complicated with syphilitic blenorragia and fissure of the anus; this last was aggravated by the passage of the venereal pus on its surface, all the time the patient was obliged to remain in bed. The cure was here obtained by weak astringent injections, hip baths, great cleanliness, and frictions with the following ointment:—R. Ung. Hydrargyr. fort., Extr. Belladonnæ aa. $\frac{3}{4}$ ss. M. Ft. Unguentum. Three weeks after the commencement of this treatment, the fissure was healed, and the blenorragia in the course of a month.—2d. Three fissures here existed, and were cured by three weeks' treatment with an ointment formed of—Extr. belladonnæ, and Ceratum plumb. Acetatis;*

tepid baths, and gentle purgatives (small doses of Seidlitz water). According to Dr. Issartier, when the fissure is above the sphincter, it is generally caused by the laceration of the swollen mucous membrane, or of a hemorrhoidal tumour, from hardened feces, or a foreign body taken in with the food, and the cure may, in all probability, be obtained by means of astringent injections, appropriate regimen, &c. But, when it is situate on a level with the sphincter, deeply hidden in the folds of the mucous membrane covering that muscle, a continual spasm is produced; here the incision, as recommended by Boyer, may be had recourse to, but not until all other means have failed.

On the Treatment of Tenia by Pomegranate Bark.—Dr. Merat states that, when this substance is properly administered, it never fails; the mode he recommends is the following: "Whenever a patient has evacuated portions of tænia, he must take on the same, or the next day, a decoction of two ounces of fresh bark of the pomegranate root, in lb. iss. of water, reduced to lb. j., in three doses, leaving half-an-hour between each dose; the worm will constantly be evacuated at the utmost in twenty-four hours, and no relapse need be feared. The want of success is owing to the fact that sometimes the dry bark is employed, and sometimes it is adulterated with other kinds of bark; also, because it is taken too long after the portions of tænia have been expelled, or because the dose was too weak, or combined with purgatives, &c. In countries where the pomegranate is scarce, it may be replaced by the polypodium felix mas, in the dose, for the recent powder, of $\frac{3}{4}$ j. to $\frac{3}{4}$ j.; in this case, a purgative is necessary, whereas it is not requisite with the pomegranate bark.—(*Revue Medicale.*)

On the Therapeutical Action of Iodide of Potassium.—Dr. Lisfranc now obtains great success from the administration of this substance, in white swellings, necrosis, ulcers of the legs, engorgement of the breasts and testicles, chronic syphilis, and some diseases of the skin. When a patient is about to be submitted to this mode of treatment, certain precautions are necessary, since some persons may take $\frac{3}{4}$ j., without experiencing any inconvenience, whereas others cannot take gr. iv., and even grs. ij., without offering untoward accidents. Formerly, Dr. L. added from $\frac{3}{4}$ ss. to $\frac{3}{4}$ j. of iodine to the iodide, but, having remarked that it gave rise to intestinal irritations, he omitted it, and now employs the following formula:—R. Aq. distill. tilix Europ. $\frac{3}{4}$ v., syrup. aurant. $\frac{3}{4}$ j., ioidid. potas. $\frac{3}{4}$ j. M. Ft. mist. cuj. cochl. mag. mane nocteque sumend. ex aqua, decoct. sapon. offic. vel infus. humul. lup. This quantity is usually taken in the space of a week, and, on renewing the draught, the dose of iodide is raised to $\frac{3}{4}$ ss., and an equal quantity is added to each succeeding one, until the patient takes $\frac{3}{4}$ iiss., $\frac{3}{4}$ iij., $\frac{3}{4}$ ss., and even $\frac{3}{4}$ v., which last, Dr. L. very seldom surpasses. The advantages resulting from the administration of this substance are: amelioration of the general health, especially in lymphatic patients affected with necrosis, and abundant suppuration, or marasmus, caused by an old white swelling. The inconveniences are: an astringent, metallic taste in the mouth, with some patients, very disagreeable, every morning on waking; this may be remedied by the use of the tooth-brush, or gargles, with water alone, or water to which, for every half tumbler, a tablespoonful of the spirit. cochlear. is added; a cutaneous eruption, similar to urticaria, and when the remedy is continued, resembling eczema, or prurigo; when the face is the seat, the subcutaneous cellular tissue is swollen, and forms small tumours, like tubercles. These accidents ought not to prevent the administration of the remedy, when the disease is very serious; but when it is slight, the medication must be ceased for a time, and then recommenced. As to the iodic salivation, observed by Mr. Wallace, Dr. Lisfranc, in upwards of one hundred patients, never witnessed it once. The diseases in which Dr. L. has advantageously had recourse to it, are: tertiary syphilis, and that in spite of irregularities in regimen and excess of drink; this was especially manifested in one of the lesions produced by the affection, which is seated in the rectum, and resembles cancer; so much so, that he always commences by adminis-

tering the iodide, and it is only when that substance, aided by compression, &c., has failed, that he decides upon operating. In necrosis of the bones of the extremities, and for which amputation seemed to be the only means of obtaining a cure; the parts, thus affected, were the femur, the tibia, the phalanges, after whitlow. *White swellings: Ulcers of the legs:* for instance, in those of an atonic nature, or in wounds which, on individuals of a lymphatic temperament, from want of attention and cleanliness, or from friction, have become covered with vegetations, bleeding with the greatest facility, and, in every respect, analogous to a cancerous ulcer. The cicatrix, thus obtained, is, from its very formation, white, firm, resistant, and allows the patient to move about at a very early period. *Cancer of the uterus, and of the breast:* In the pain caused by these affections, opium is administered in some cases; at first, it soothes, but very soon becomes inefficacious; nor does it ever prevent the disease progressing; their cure may then be attained with the iodide of potassium. In engorgements of various organs, chronic orchitis, tumours of the breast, &c.

It sometimes happens that, when this substance has been given a few days, the accidents above described appear; in such cases we must cease to administer it for eight or ten days, and then recommence it, to be ceased again, should the accidents re-appear; and it is very rare that, after having prescribed it thus, it is not tolerated on the third or fourth trial. Again, in diseases which require it to be taken for a very long time, certain peculiarities may be observed; for instance, when the iodide is administered to a patient affected with white swelling, at first a notable amelioration manifests itself, but very soon after the disease becomes stationary, and anorexia and insomnia declare themselves. Such a state is what Dr. L. calls iodic saturation; here, the continuation of the remedy is not only useless, but even hurtful; it must, therefore, be discontinued for a time, the patient be ordered to amuse himself, to take a nourishing diet, some tonics, &c., and to go into the country, if possible. Finally, when the system has thrown off the iodine, it may be prescribed anew, and with the same success as at first.—(*Annales de Therapeutique.*)

On Cataract.—The following articles are published in the *Annales d'Oculistique*: 1^o *On a New Method for Reclination and Depression of Cataract.* By M. de Abren.—This article contains the opinions of Professor F. Cunier, on this subject, and is from the pen of one of his pupils. The modifications proposed are relative to the shape of the needle,—the part of the sclerotica by which it is made to enter,—the manner in which the crystalline lens must be depressed. The needle, the blade of which is about ten lines in length, diameter from the handle to the lance-like extremity never surpassing half a line; at about three-fourths of a line from its origin, there is a circular eminence; the lance commences at about nine lines from the handle; sharp on both edges; in its centre about half a line in diameter; it offers on its concave side a longitudinal ridge, rendering it somewhat thicker at this spot; its curve is about one-tenth of an inch in length, with a radius of about three-fourths of a line, crooked like that of Adams', but smaller. The part of the sclerotica, by which the needle is made to enter, is about three lines from the edge of the cornea, and half a line, at most, below the rectus superior. This mode of superior puncture, highly vaunted by Richter, has been adopted by Professor Cunier, who considers it very advantageous in facilitating depression, especially when it becomes necessary to crush the lens, or break up its adherences. The mode by which depression is performed:—as soon as the instrument has penetrated into the camera posterior, it is made to turn on its axis from within outwards, so that its concavity is directed upwards, its convexity downwards. The latter is thus placed on the upper posterior edge of the crystalline lens, which is then depressed below the pupil, its posterior part becoming superior, its anterior, inferior. During this process, the needle is made to change its position, so that its concavity, instead of its convexity, is applied on the surface of the lens when depressed. The patient

* Ceratnm plumbi acetatis (*Cerat de Saturne.*) R. Cerat. Galen. (Ol. Amygdal. dul. $\frac{3}{4}$ v. Cer. alb. $\frac{3}{4}$ j. aq. Rosæ $\frac{3}{4}$ iij.) $\frac{3}{4}$ j., plumb. acetat. $\frac{3}{4}$ j. M. Ft. unguentum.

is then requested to look upwards, and this in general is sufficient to place the lens in the lower and external part of the vitreous humour; should it, however, fail, it must be done with the needle. Of 44 operations performed, 39 were successful; in two, the crystalline lens rose again after violent vomiting; in one, the lens was slowly absorbed, necessitating a second operation; in one, there was a secondary capsular cataract; only one failure. These advantageous results must be attributed to the skill of the operator, and to the line of conduct adopted before and after the operation. Professor Cunier never operates by this method in patients affected with acute or chronic choroiditis, as it may give rise to neuralgia or glaucomatous amaurosis; in these cases, keratonyxis or extraction must be had recourse to. After the operation, the patient is never placed in complete darkness, as this increases, to an extraordinary degree, the sensibility of the retina; all draughts of air must be carefully avoided, but the bed must have no curtains. During the first twenty-four hours, cold water must be given by table-spoonsful at a time, so as to prevent vomiting; venesection, except when the patient is very weak, must be performed an hour or two after the operation, and that when no pain exists, or without waiting for the precursor-symptoms of reaction. Immediately after the operation, cold applications must be made on the eye, and continued for thirty-six or forty-eight hours, after which the band and compress must be replaced by a bit of silk, made to hang down before the eye; towards the eighth or ninth day, the light of the room is increased gradually. Finally, the patient must wear coloured glasses, and go out only when the sun is above the horizon; convex glasses must never be made use of, until five or six weeks after the cure is complete, when the eye must be again accustomed to see. (The Editor of the *Annales* remarks, that this method exposes the patient to two kinds of accidents: 1° The passage of the lens into the camera anterior during the operation. 2° The production of the same accident, when afterwards the lens rises).—2° *Case in which the Lens Rose and Passed into the Camera Anterior, twenty-two months after Depression of the Cataract.* By M. de Abren. M. Mahieux was operated on by Professor Cunier, according to his method, for a hard lenticular cataract; the capsule was torn into several pieces, which were speedily absorbed, and sight was restored. Twenty-two months after, while gardening, he made a slight effort, and felt a pain in the operated eye, with loss of sight (the other eye was affected with cataract); when examined, immediately after, by several persons, a spot was perceived, which Professor Cunier recognised as formed by the lens, which had passed into the camera anterior. The lens had lost about one-sixth of its primitive size, and its change of place had caused no accident, save loss of sight. In such cases, the extraction of the lens is generally indicated; but as no disturbance had taken place, Professor Cunier determined to wait, and as absorption took place rapidly, all idea of extraction was finally abandoned. 3° *Letter on Secondary Capsular Cataracts:* by Dr. Mirault, of Angers.—According to the author, they are of two kinds; the one produced by inflammation, which invades subsequently a capsule, transparent before the operation, and therefore denominated *phlogistic*; the other resulting from the mediate or immediate union of the portions of a capsule, *primitively* opaque. This distinction is especially useful, in a practical sense; it shews the surgeon what he ought to do during the operation, when he wishes to depress these secondary cataracts. Those resulting from the re-union of bits of a capsule, previously opaque, are the most difficult to cure; sometimes they are thin, escaping from the instrument when introduced to seize them, and tearing, in all directions, without changing in position; at other times, on the contrary, they are thick and easily seized, but resist all the efforts made to depress them. The *phlogistic* capsular cataract is not so refractory, for, like all tissues which have been recently, or which are actually, inflamed, it is easily torn to pieces. This friability is manifest, not only by the action of the instrument on the membrane, but sometimes by a pecu-

liar sensation experienced by the operator, similar to what is felt on tearing a bit of muslin. Now, since inflammation renders the capsule more friable, and, consequently, easier to destroy, on the introduction of the needle, the opaque bits of the capsule may be placed in the same advantageous conditions as those caused by recent inflammation. This was proved by a case operated on by Dr. Mirault; the first time it was impossible to seize the capsule; on the second occasion, it was partially removed, and, on the third, it was easily torn to pieces.

Number of Persons Practising in Paris.—The following statistical table has just appeared, in a work (*Almanach Général de Médecine*) published by M. Domange. The number of Doctors in Medicine and Surgery, on the 1st January, 1845, was 1430; in 1833, there were 1090; in 1836, 1220; in 1839, 1310; in 1841, 1360; in 1843, 1423. Of the 1430, 1323 are of the Faculty of Paris; 50 of that of Montpellier; 31 of that of Strasburgh; 26 from foreign universities, authorized to practise by *ordonnance royale*; 15 are Doctors in Surgery; 8 Doctors in Medicine and Surgery; 10 are dentists; 14 oculists; 16 homeopaths; 4 magnetisers; 320 are members of the Legion of Honor (4 commanders, 50 officers, and 266 knights); 42 do not practise, some from age and infirmities; others, because exclusively occupied with scientific objects; and others, again, because they have taken to different careers. The mean number of deaths was, from 1834 to 1840, 20 per annum; and from 1840 to 1844, only eighteen. Finally, the number of officers of health is 168; pharmacists, 326; and midwives, 450.—To complete this table, I will add the number of inscriptions, or entries, taken on the 15th of Nov. 1844, at the Faculty of Medicine, Paris: they amounted to 800; in 1843, they were only 749. Of the 800 inscriptions, 251 were new students, viz.: those commencing their medical studies, 199; those coming from the different preparatory schools, 43; those coming from other Faculties, 6.

Tria juncta in uno.—One of the most curious peculiarities of Merino, who has just died at Alençon, was the mode in which he made use of his threefold character of soldier, physician, and priest. Thus, after having led, as a general, his soldiers to the field of battle, he attended them when wounded, as a physician, and, when he found all human means unavailable, he gave them, as a priest, all the consolation religion could offer.

Academy of Sciences. Sitting of the 30th Dec.—Baron Ch. Dupin in the Chair.—Received: "Philosophical Transactions of the Royal Society, London," 1844. Part 2nd.—"Magnetical and Meteorological Observations made at the Royal Observatory, Greenwich, 1842, under the direction of Geo. Biddell Airy, Esq., M.A., Astronomer-Royal," offered by the Royal Society.—"Athenæum," August, Sept., October, and November.—"Quarterly Review," vol. 84, June and October, 1844.

Researches on the Products obtained by the Dry Distillation of Butyrate of Lime: Memoir read by M. Gust. Chancel.—In order to obtain substances perfectly pure, and boiling at a fixed temperature, eight or ten distillations are requisite. The products, thus obtained, are of three kinds:—1°. A limpid, colourless liquid (*butyral*) distilled completely at 203° F.;—2°, a limpid, colourless liquid (*butyrone*) boiling and distilled at 291°;—3°, a liquid not so limpid as the preceding; always slightly tinged with yellow; boils between 437° and 482° F.; probably a hydro-carburet. To obtain easily a certain quantity of these substances, the butyrate of lime must be put in an iron matras, and the products condensed with great care in several recipients; they are with difficulty liquefied, but when once so, are easily distilled again and condensed. When the butyrate is anhydrous, no traces of water are to be found; but, when water of crystallization is present, it passes over simultaneously with the other products, and, perhaps, it produces partially the re-action by which one of the compounds is produced (*butyraldehyde*). Five pounds and a half of butyrate of lime furnished from five to seven ounces of the first product;—from twenty-one to twenty-five ounces of the second;—and from three and a half to five ounces

of the third. The different combinations, of which aldehyde is the type, vary not only in their origin, but by several of their properties. Most are neutral; one only, *salicylamide*, is acid, and urea performs the part of a base with the acid; all represent a salt of ammonia, less two atoms of water, and all possess the power of absorbing this quantity of water, and being converted into a salt of ammonia. An analogous relation unites the different compounds of the aldehyde type; they are of a similar composition to the acid, from which they originate, containing merely two atoms less of oxygen, and, even, under certain circumstances, they can absorb this quantity of oxygen to form the acid. Butyral is to butyric acid what aldehyde is to acetic acid; it is liquid; limpid; colourless; of a burning taste; lively penetrating smell; boils, and is distilled, at 203° F.; density, at 72° F.; when pure = 0.821; absorbs a small quantity of water, and is slightly soluble in that liquid; soluble in all proportions of alcohol, æther, *esprit du bois*, and oil obtained from the potatoe; very inflammable; burns with a bright flame, bordered with a blue edge; explodes when mixed with chromic acid; submitted to the cold, produced by a mixture of ether and solid carbonic acid, it remains fluid (*butyrone*, in similar circumstances, is congealed, and crystallizes in long, transparent, layers); in pure oxygen, it remains colourless, but becomes acid; and the mixture, when water is added, is partly dissolved, and partly decomposed, the butyral, set free, collecting on the surface; boiled in water with the oxide of silver, the latter is dissolved, but the compound is not a butyrate, but one containing probably less oxygen than butyric acid, perhaps *butyrous acid*; kept in hermetically closed bottles, it is not decomposed; chlorium and bromine disengage chlorhydric and bromhydric acids, and peculiar compounds containing chlorine and bromine; nitric acid disengages vapours; formula: $C_4 H_8 O_2 + 4$ volumes of vapour.

		Equivalents.	Calculation.	Found.
Carbon	.....	8 = 600	66.67	66.59
Hydrogen	....	8 = 100	11.11	11.31
Oxygen	.....	2 = 200	22.22	22.10
		900	100.00	100.00

The author, finally, studies the action of sulphuric acid on butyral.

Memoir on the Nature and Treatment of Typhoid Fever; by Leopold Turek, M.D., of Plombières.—In this memoir, the author seeks to demonstrate, giving cases in proof of the validity of his opinions:—1° That the lesions of the ileum, usually met with in this disease, are but of a very secondary nature, and are produced by chemical action, because the chyme is acid instead of neutral. 2° That the increase in size of the spleen is as frequent as the lesions of the intestines, and is of far greater pathognomonic importance, since it leads to the conclusion that typhoid fever has a great analogy with intermittent fever, where this lesion is found. 3° That the greater part of the cases, related by modern authors, as examples of typhoid fever, are double pernicious tertians, or febres larvate, described by Torti, at the beginning of the last century. 4° That this disease has become so frequent and so destructive, because practitioners overlook the remittent character and its special remedy.

Memoir on the structure of the lungs in the healthy state, and when affected with certain diseases, examined microscopically; by J. A. Rochoux, M.D., M.A.M., &c.—This memoir is divided into two chapters; the first purely anatomical, in which the author, after quoting at length the different writers who have studied the subject, gives the result of his own researches;—the second, pathological. The three diseases, in which the condition of the pulmonary organs was examined, were: emphysema, tubercles, and empyema; and the conclusions are: 1st. Emphysema, produced by dilatation of the pulmonary cells, as described by Lacnec, not only does not exist, but is impossible; as to the hypertrophy, or atrophy, of the walls of the pulmonary cells, admitted by several authors, it is far from being demonstrated: all that can be stated as

positive, is, emphysema by infiltration of air into the tissue of the lungs.—2d. That tubercles, like all accidental products susceptible of degenerescence, ought to be studied in the first stage; they are formed at first of a filamentous tissue, of a pale orange colour, but which undergoes the various stages of degenerescence described by authors.—3d.—That the presence of a fibrous membrane, or, at least, of a peculiar texture of the membranous tissue of which the lung is formed, is the principal cause of the retraction, which this organ experiences, in the effusion produced in the generality of cases by the portion of pleura covering the lungs; whence the precept: operate in these cases at an early period, and ere the pulmonary tissue has undergone that species of retraction which prevents its assuming its normal size, though no longer compressed by the liquid.

On the Development of Annelides.—M. Milne Edwards, M.A.S., terminated his memoir, commenced in the former sitting, on the mode of development of annelides, genus *terebella*. The young individuals of this species are, at first, formed of two segments, the one for the head, the other for the anus; and as they increase in size, other segments are formed between the two first. The mode of development is what has been remarked in all the species composed of rings. The primitive formation of the embryo differs from that of the vertebratae, inasmuch as the first part that appears is a white line, constituted by the cerebro-spinal axis. Dr. Serres remarked, that this white line was not the cerebro-spinal axis, but merely a fold of the *blastodermis*. It is true that the nervous system appears subsequently on this spot, and afterwards the vertebræ, the heart, &c.; yet it can not be said that the nervous system formed the line, since it does not exist at this period of the development of the embryo.

Academy of Medicine. Sitting of the 31st. Dec. Dr. Ferrus in the chair.—Proceedings of the former sitting adopted.

Epizootia.—M. Renault informed the Academy, that he had received from a correspondent some details relating to the epizootic typhus mentioned in the former sitting. The letter, dated 27th Dec., states, that it reigned in Poland and Bohemia; report says, that it has reached Austria and Bavaria, but the fact needs confirmation; as to its being in Wurtemberg and Baden, it is positive that such is not the case, since no sanitary measures have as yet been adopted, which is always done as soon as the slightest contagious disease declares itself.—Dr. Pariset stated, that he had written to one of the corresponding members residing at Metz, but had not yet received an answer.

The Academy then proceeded to name the members for the different committees, for 1845. 1^o *Epidemics*; Drs. Bricheateau and Melier, instead of Drs. Louis and Martin-Solon. 2^o *Mineral waters*; Drs. Prus and Martin-Solon, instead of Drs. Ferrus and Rayer. 3^o *Secret remedies*; Dr. Adelon and M. Caventou, instead of Dr. Villeneuve and M. Guibourt. 4^o *Vaccine*; Drs. Devilliers and Gaultier de Claubry, instead of Drs. Bousquet and Cornac. Dr. Gaultier de Claubry said, that he regretted to be obliged to decline, as his time would not permit his attending the Sittings of the Committee. Dr. Bousquet, the next on the list, was therefore named. Dr. Merat remarked, that no member ought to be re-elected, but the contrary opinion, supported by Drs. Pariset, Thellaye, and Forestier, prevailed. 5^o *Topography*; Drs. Ferrus, Jolly, and Burdin, instead of Drs. Nacquart, Burdin, and M. Bouillon-Lagrange. 6^o *Comité de Publication*; Drs. Reveillé, Pariset, Bousquet, Cornac, Laugier, Lecanu, instead of Drs. Bousquet, Segalas, Lagneau, MM. Bussy and Huzard.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

Mr. Toynbee has written to the *Morning Chronicle* recommending baths and wash-houses for the poor.

An epidemic among cattle is raging in Lancashire, Cheshire, Shropshire, and Staffordshire.

A public meeting is to be called at Edinburgh, for forming a council for supervising the public health of the city.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

Experiments on the Effects of Magnetism, on the Nervous System.—The effects of electricity on the nerves have been amply studied, but those of magnetism have been almost entirely neglected. The author, assuming light to be the cosmico-individualising principle, and that magnetism is to the earth, what light is in a cosmical sense, believes that in organic life the nerves correspond to light and magnetism, the blood to heat and electricity; and that magnetism exerts a higher influence on life, than is generally imagined. He formerly endeavoured to magnetize his fingers, hands, and arms, through induction, by means of an electric current, passed through spirally arranged wires. Repeated experiments have shown that, according to the arrangement of the spires, and the direction of the electric streams, north, or south, polarity could be communicated at will. The author constructed an apparatus for the purpose of ascertaining the direct action of magnetism on the nerves. (See *Schmidt's Jahrbücher*. Nr. 11. Bd. 44. 2 Heft.) A frog was then taken, and the spinal marrow cut through near the head; the thigh was next denuded of the skin, and the ischiatic nerve being laid bare, the soft parts were divided, so that the nerve was the only connecting medium between the leg and the trunk. The ischiatic nerve was now placed in contact with one of the poles, and the muscles of the lower part of the leg with the other, and the galvanic circle was then closed. The muscles of the leg and foot were invariably contracted, more or less, according to the vital powers of the frog; being constantly weaker on opening the circle, than on closing it. Even in the first experiments, it was observed that, when the nerve was exhausted by a continuous stream in one direction, the contractions became stronger so soon as the current was reversed. By the above, and other similar experiments, it is shown that the magnetic stream operates upon the nerves, in the same manner as electricity, and that the same results can be obtained from the magnetic, as from the electric, agency.—(Dr. Heidenreich in *Neu. Medicinisch-chirurgische Zeitschrift*.)

Preparation of Perfectly Pure Proto-ioduret of Iron.—It is well known that the proto-ioduret of iron cannot be obtained pure, in a solid state, by the usual mode of procedure. For the clear and colourless solution absorbs oxygen from the atmospheric air, so that the iron is partly oxidized, whilst, at the same time, some deuto-ioduret of iron is formed; the preparation, thus, consists of proto-ioduret, deuto-ioduret and tritoxide of iron. On dissolving it in water, a yellow or reddish solution will be obtained, according to the greater or smaller quantity of deuto-ioduret, or of free iodine contained in the liquid, which has been rendered turbid by tritoxide of iron. The authors succeeded in obtaining perfectly pure proto-ioduret, in the following manner: take 4 parts of iodine: dissolve it in a large vessel, with 2 parts of distilled water, and then admix quickly 1 part of fine iron-filings. After a few moments, the temperature rises considerably, and vapours of iodine are given off. Sometimes (particularly at a low atmospheric temperature) the heat generated, during the mixture, is insufficient for the development of iodine-vapours: in such cases, the mixture is to be subjected to a gentle heat after the addition of the iron filings. The composition is at first liquid, but soon becomes solid. In the proto-ioduret of iron, prepared according to the above method, a very small quantity of pure iron is contained, which, however, can easily be separated by filtration. A clear, colourless, solution is then obtained, without any admixture of deuto-ioduret, and without free iodine. This preparation may be also employed (with the necessary additions) in the form of pills. (M. A. Kop of Rotterdam, in *Schmidt's Jahrbücher der Medicin*.)

Schwann's Experiments, as to the Action of Bile on the Organism.—Some ascribe to the bile the conversion of chyme into chyle, while others entirely deny its importance, and only consider it as an excrementitious substance. The author, therefore,

abstracted the bile by artificial means, so that it could not reach the intestines. This experiment has been performed before, but by tying the biliary duct, and thus preventing the biliary secretion passing downwards. Schwann, however, after tying the biliary duct in dogs (below the junction of the hepatic and cystic ducts) created an opening in the gall bladder, taking care that the bile did not flow into the abdominal cavity. To prevent the biliary duct again becoming permeable, he cut out about two-thirds of its length. The dogs (upon which the experiments were performed) were weighed mostly every day after the operation. Those, which lost much in weight, at the very commencement, generally suffered much from the operation, and usually died very soon. In others, however, which bore the operation well, the weight altered very little during the first three days, for the want of bile did not produce emaciation before the lapse of several days. The author divides his experiments into three classes, according to their results: 1^o those in which reunion of the biliary duct, and, at the same time, renewed nutrition took place; 2^o those in which death ensued in consequence of the operation itself, invariably within the first seven days; 3^o and lastly, those where death took place later, viz.: on the 7th, 13th, 17th, 25th, 64th, and even on the 80th day, and which could only be explained by the absence of bile in the alimentary canal. Death, here, always ensued under symptoms of irritation. We are thus justified in concluding, that bile performs an essential office in the animal organism, and that the liver serves other purposes than to excrete excrementitious substances from the blood. Besides this chief result, the following minor facts were deduced:—dogs can bear the absence of bile, at the utmost for three or four days, without loss of weight; emaciation is generally perceived on the third day. Death ensued even where the dogs licked up the bile flowing from the fistula: and thus it is shown, that bile, received in the stomach, cannot supply the absence of that which, in the regular way, arrives in the duodenum. At the same time, the bile, thus swallowed, was shown to exert no injurious influence on the digestion. In adult dogs, death ensued after two or three weeks, but sooner in those that were younger. The symptoms of inanition, preceding death, are the more distinct the longer the animal has survived the operation. Weak convulsions appeared during the agony, which usually lasted for several hours. The author proposes to institute further experiments, with a view of ascertaining whether certain aliments require bile for the purpose of being dissolved, or whether bile serves merely for the transformation of aliments already dissolved. The analysis of the blood, urine, lymph, &c., will greatly assist in ascertaining these facts.—*Schwann in Muller's Archiv*.

On the Analysis of the Flesh of different Animals: by Julius Schlossberger, M.D., late Assistant-Physician to the Catharinen Hospital at Stuttgart.*—From an extended series of analyses of the flesh of many different animals (ox, calf, hog, deer, fowl, fish, crab, &c.), the author found:—

1. In every species, fibrine, cellular tissue, uncoagulated albumen, animal matter soluble in alcohol, extractive substance soluble in water, and salts. All displayed, when fresh, acid re-action in a greater or less degree (Lactic acid?).

2. The uncoagulated albumen was chemically identical in all. But the coagulable material differed: a., according to the quantity of cruor;—b., according to the age of the animal; the younger the animal, the less was the coagulum coloured;—c., according to the temperature to which it was exposed; the albumen of fish, and of the calf, coagulated soonest;—d., according to the odour which it diffused while drying; this was generally peculiar to each individual species of flesh;—e., according to the nature of the admixed colouring matter; this was mostly absent

* The Medical Faculty of the University of Tübingen, a few years ago, proposed, as a prize question:—"Give a Chemical Analysis of the Flesh of various Animals."—Dr. Schlossberger's Treatise upon which was declared to have obtained the prize,

in fishes; in the crab, there was a peculiar, almost resinous, substance, identical with the pigment found by Racaine and Lassaigue in crab-shells, and becoming red at a temperature of 70° R.

3. Pigment: wanting in most of the fish, or only found in individual muscles. The so-called gold-trout, and others, have a peculiar pigment. The *hæmosine* (crucor, without albumen) is, according to Lecanu's, and the author's, experiments, perfectly identical in all classes of animals, where it exists at all. The relative quantity of crucor seems to increase with the age.

4. If *osmazome* imply a brownish-yellow, non-gelatinous, extractive substance, of an aromatic smell and hot taste, soluble in water and alcohol, all investigated species of flesh contain this principle. In general, the proximate component elements of osmazome are very similar to those found, by Berzelius, in beef. With the age, the quantity, and especially the acrid taste, seem to increase; smell and taste are somewhat different in the individual species of flesh.

5. The *watery extract*, insoluble in alcohol, is met with in all species of flesh, though in different proportions; and generally abounds in phosphates, and a substance displaying a urinary smell, when heated.

6. *Fibrine* seems to be chemically identical in all, and to offer physical variations, only as regards shape, consistence, &c. With respect to the quantitative analyses, we must refer to the author's Treatise (*Comparative Investigations of the Flesh of different Animals*, Stuttgart), or to the latest annual report of the Progress of Chemistry by Berzelius, (now giving in the *Pharmaceutical Nos.* of the *MEDICAL TIMES*). The author, also, had an opportunity, in the year 1844, of analysing, in the laboratory of Giessen, the flesh of a crocodile—an animal from the class of Amphibia—whence he obtained similar results to those of the analysis of fish. He particularly noticed the albumen to coagulate at 30°—35° Réaumur. Lastly, he discovered, in the flesh of the crocodile, the crystalline substance which Chevreuil found in broth, but which Berzelius and Simon could not succeed in demonstrating. It contains much nitrogen, and seems only an accidental constituent: Chevreuil called it *kreatine*. The author only obtained 0.150 gramme, so that he could not undertake a complete elementary analysis, for want of material.

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

(The last number of the *Lancet* contains four original communications, of which the following are abstracts.)

CHEMICAL PATHOLOGY.—Dr. Ayres has published a paper, in which he expresses his gratification at the rise of a rational humoral pathology, based on the examination of the fluids of the body during life, which, he contends, is capable of evolving important physiological facts; and he illustrates his remarks, by detailing the chemical analyses of blood, drawn before and during profuse salivation. The result of these analyses showed, while the ptialism continued, a morbid diminution of two of the most important constituents of the blood, fibrine, and albumen, or, as Mulder has shown, the proteine compounds. The quantity of water present was, also, diminished, while that of hæmosine was increased.

ECZEMA RUBRUM.—Mr. Acton narrates the case of a little child, nine weeks old, labouring under an aggravated form of eczema rubrum, principally affecting the nates and scrotum, which was mistaken by another practitioner for a syphilitic disease. It was cured by placing the child night and morning in a bran bath, and keeping the parts damp with Goulard's lotion.

LUMINOUS BREATH.—Dr. Watson mentions a singular occurrence, which took place in the West Derby poorhouse, near Liverpool. A man, about 47 years of age, a drunkard, was admitted into the house, labouring under hæmorrhage from the bowels, with cough and expectoration. A short time, about twenty minutes, before death, the

attendant nurses observed a red-hot coal-like streak on the mouth, playing on the right cheek and upper lip, and continuing till death took place. The flame was persistent with the breath of expiration, and not at all lambent. This extraordinary circumstance was not reported for a day or two, as the nurse looked upon it as a proof of divine vengeance, and, consequently, the body was not examined.

LUMBAR ABSCESS.—Mr. Jones describes a case of encysted abscess of the right lumbar region, which had been mistaken for diseased kidney and deep-seated abscess of the liver. Mr. Jones made a valvular incision, evacuating the pus, with considerable relief. His patient afterwards improved much in health, and became convalescent.

INJURY OF THE THIGH, AND RUPTURE OF THE GRACILIS MUSCLE.—Mr. Wells, in the *American Journal of Medical Science*, describes the case of a negro, who had, while engaged in felling trees, been accidentally caught under a falling tree, and badly injured. The superior maxillary bones were fractured in three places; the inferior, in two places; the front teeth, together with the corresponding alveolar processes, were detached from the lower jaw; the soft parts of the face cut, and shockingly lacerated; his right thigh was bruised and swollen, but the skin not broken. The injury of the head claimed Mr. Wells' attention solely, and little was thought of the injury of the thigh, of which he scarcely complained. Everything went on favourably for rather more than a fortnight, when the thigh was very much swollen, and had become inflamed and painful. On examination, it was evident that there was a large quantity of fluid collected in the thigh, under the fasciæ, extending from the knee to the groin. A puncture was made with a broad lancet on the inside of the thigh, an inch above the condyle, and between three and four pints of serous fluid slightly tinged with blood drawn off. This fluid, on standing a short time, coagulated into a thin jelly. A roller bandage was applied to the thigh as tightly as it could be borne without pain, in the hope the cavity might be closed by adhesion. Two days afterwards, about two pints more were drawn off, and the cavity was injected with a stimulating fluid. The discharge soon became sero-purulent, from six to eight ounces a day, and hectic fever was lighted up. The constitutional disturbance increased daily, and Mr. Wells at last introduced a bistoury through the puncture into the cavity, and made an incision between eight and ten inches in length on the inside of the thigh, in the course of the gracilis muscle. There was no appearance of living tissue in the exposed cavity—the whole surface was of a dirty, ashy colour. It was found that the gracilis muscle had been ruptured at its inferior extremity, and that the lower half of the muscle was in a state of decomposition, nothing remaining but shreds of cellular membrane; the cellular tissue throughout the cavity, was in a state of disorganization. The cavity was filled with lint wetted with port-wine, and a light bandage passed around the thigh. In the course of three days the coating of the entire cavity was thrown off, and the surface assumed a healthy granulating appearance; the appetite returned, and the hectic paroxysms gradually disappeared; convalescence was uninterrupted; and in the course of four weeks, the wound in the thigh had nearly cicatrized. The man continued to enjoy the perfect use of his leg for ten years after, but for the last six or seven years it has gradually failed him, when exposed to hard labour, and is subject to attacks of cedematous swelling, two or three times in the course of the year. The cicatrix resulting from the incision on the inside of the thigh, has contracted longitudinally, to about one-half its original length, and in its middle seems attached to the deep-seated parts, leaving a considerable fissure in that part of the thigh; he is otherwise in good health.

REPRODUCTION OF BONE IN NECROSIS.—Mr. Syme, at a meeting of the Medico Chirurgical Society, reported in the *London and Edinburgh Medical Journal*, exhibited some specimens to show that new bone was formed by the periosteum. In the first place he produced specimens of the imperfect reproduction which occurs in cases where a

portion of bone is removed by mechanical violence, as in the operation of trepanning the skull. The loss of substance here is not completely supplied, but only lessened, by a scanty growth of new bone round the margin of the aperture, diminishing in thickness from the circumference towards the centre, where there is usually a portion of the space occupied merely by a ligamentous membrane. He further illustrated this, by showing the result of experiments on dogs, performed in the way that Sir A. Cooper suggested, by removing a part of the radius, while the ulna was left entire. Here, too, the vacancy is very imperfectly provided with a substitute, by a conical shaped process of new bone, from each extremity of the old one, extending from the cut surfaces of the breach, and tapering towards each other, so as to leave a deficiency, occupied by a ligamentous texture. He next showed a similar result from disease in the human subject, nearly the whole shaft of the tibia having died and been discharged without the formation of a successor; the appearance presented being precisely like that of the dog's bone just alluded to, and the imperfection of the limb so great as to require amputation several years after cicatrization of the sores. He then contrasted this preparation with one of necrosis in its ordinary form, where the old bone lies surrounded by a new shell ready to take its place in the event of removal. It is obvious, that this effectual reproduction cannot proceed from the remaining old bone, since it should in that case never be wanting, as there is always part of the shaft left entire, while it had been found, that the bone possesses in itself very limited power of reproduction. The ample investing shell in question, therefore, not being attributable to the injury of the bone that retains its vitality, must be referred:—1. To separation and thickening of a lamina separated from the bone previous to its death. 2. To the ossification of organizable substance effused from the bone previous to its death. 3. To ossification of the periosteum. 4. To ossification of the neighbouring textures, whatever they may be. The arguments in support of these explanations being very plausible, it has always been considered most desirable to ascertain the truth, by examining the process which usually takes place. But where patients require amputation for necrosis, or sink under it, the disease is almost always either so recent or so far advanced, that the source of ossification cannot be recognized with certainty. In the course of fifteen years' hospital practice, Mr. Syme has met with only three cases that afforded an opportunity of dissection at the instructive period of formation, *i. e.*, from three to six weeks after the commencement of the disease. Simple inspection of the preparations so obtained seems sufficient to satisfy all eyes, not obscured by preconceived opinions, that the new bone was formed on the inner surface of the periosteum. The osseous substance was deposited in crusts of uniform thickness, which implied an equality of reproductive action on the surface. The subjacent dead bone was perfectly smooth, which it could not have been if a lamina, however thin, had been detached from it. The periosteum was distinctly traced out and preserved, except at those parts where it had been destroyed by the disease; and it would have constituted the cloacæ or defective portions of the osseous shell. In the early stage of the process the new bone was distinctly deposited in separate masses, which were plainly seen to be insulated from each other when surveyed between the eye and a light.

MALPOSITION OF THE UTERUS AN IMPEDIMENT TO LABOUR.—Dr. Perfetti attended a woman in labour who had complete procidentia of the uterus. She had suffered more or less from prolapsus uteri ever since she was fifteen years old, and on any great exertion the organ appeared externally. Having become pregnant at the age of twenty-two, she was relieved from her ailment until the seventh month of utero-gestation, when it began to return; at the beginning of the eighth month the uterus reached more than six fingers' breadth beyond the external parts, and during labour it projected still further. After being four days in labour, Dr. Perfetti visited her, and found the os uteri so hard and undilatable as to

require incisions to be made into it. He then introduced the forceps into the uterus, and extracted the child. The mother recovered, but the prolapsus of the natus rendered it necessary for her to wear a pessary. Dr. J. Ledesma, of Salamanca, has recorded the history of a woman, aged forty-two, the mother of six children, who was affected with inguinal hernia on the right side. In the third month of her seventh pregnancy the hernial swelling suddenly increased in size; and continued progressively to enlarge up to the period of labour, utero-gestation being undisturbed by this accident. When labour began, the hernial tumour measured twenty-four inches in length, and twenty-six in circumference at its broadest part; its base reached to the crural arch, and its weight had drawn the right labium considerably downwards. When labour-pains came on, which were attended with a slight discharge of liquor amnii from the vagina, an incision was made into the tumour, and a living female child, twenty-two inches in length, was extracted. The patient would not submit to the division of the adhesions by which the uterus was confined to its abnormal position, and consequently the hernia was not reduced. In forty days after the operation, the patient was sufficiently well to attend to her household duties.

PARTUS SICCUS.—A case of this is detailed by M. Matthysen, in which the patient was delivered of her first child after a quick labour, but in which no discharge of liquor amnii either preceded or followed its birth. The placenta came away naturally, the uterus contracted well, and though the lochia were exceedingly scanty, no accident occurred in the puerperal state. The child was born alive, full grown, but extremely thin, and its skin was covered by a thick coating of vernix caseosa.

PROCESS OF SECRETION.—Mandl says that the greater number of the fluids, which constitute the basis of the different secretions—such as the gastric and intestinal juices, the saliva, tears, milk, mucus, wax of the ears, fat, &c.—proceed from a gradual dissolution of the substance of the very glands which are generally supposed to eliminate them. The blood no doubt furnishes certain elements for each secreted fluid; but that which constitutes the characteristic constituent of each secretion, is the fluid contained in the microscopic cells, which enter into the formation of every gland:—this fluid is poured out in consequence of either the bursting, or the dissolution, of the cellular envelopes. The cells, which along with the blastema, constitute the parenchymatous substance of glands, are developed within the minute secreting canaliculi. When they have attained to a certain degree of maturity, they detach themselves from the interior, and are carried along in the secreted fluid.

POISONING BY PAINTS.—Dr. Lewensten witnessed the poisoning of a child from biting a cake of green ink, which, when analysed, proved to be composed of arsenite of copper. A child in Paris amused itself by attempting to make pictures with the colours in a paint-box, and, as is quite common, effected this by moistening the end of the cake in his mouth. It was shortly after seized with all the symptoms of poisoning, from which it was relieved by early remedies. The parents, desirous of ascertaining the cause, requested M. Regnard to examine the paints. He ascertained that the one used by the child, which was a dark green, consisted of cyanuret of iron and chromate of lead; two others consisted of arsenite of copper. M. Regnard adds that the yellow paints are thus coloured by gamboge or chromate of lead; the red with einnabar, or the red oxide of lead, the white with white lead; the blue with carbonate of copper; while the green are coloured, as above stated, with arsenite of copper, (Schcele's green,) or a mixture of Prussian blue and chromate of lead.

CORPORA LUTEA.—A reviewer in the Edinburgh Medical and Surgical Journal, after analysing the observations of M. Raciborski on the periodical deposition of ova, by women and the mammalia, thus sums up the results, and which, if correct, settles a question of very great magnitude in forensic medicine. The cases, given, fully bear out M. Raciborski in the view he had adopted, viz., that in uniparous animals one ovum, and in multiparous animals several ova, are de-

veloped every time the animal comes into heat, and thrown off independantly altogether of the animal having access to the male; that the same occurs in women, every time they menstruate; that Graafian vesicles, therefore, are to be found in the ovary, whenever the animal is at the rutting season, or when women are menstruating, and that corpora lutea follow the bursting of the vesicles in every case. Neither the presence of corpora lutea, nor of Graafian vesicles in the ovaries, are therefore any proof of the loss of virginity, or of a female having had access to the male. Nothing but the presence of a fecundated ovum in the uterus can prove this.

QUININE IN INTERMITTENT FEVERS.—In administering quinine between the paroxysms of intermittent fevers, some prefer giving it in repeated small doses, others in one large dose shortly after the previous paroxysm is over; while others, again, give the same quantity an hour or two before its expected return. Dr. Thomas Stratton, of the British Navy, states in the *Edinburgh Medical and Surgical Journal*, that he treated a number of cases of intermittent fever, at Port Maitland, Canada, and remarks that after considerable observation of the comparative rapidity of cure by repeated small doses, or by a single large one, he gives a decided preference to the latter.

UNUNITED FRACTURE TREATED BY ACUPUNCTURATION.—A case of ununited fracture, thus treated, is recorded in the *Giornale per servire ai progressi*. A man of a good constitution, ætat. 26, met with a simple fracture of both bones of the forearm. Five weeks after the accident no union had occurred, and the apparatus was again applied, and the limb kept in a state of perfect rest during four weeks longer. At the end of this time, finding the fragments still ununited, M. Wiesel determined upon the employment of acupuncture, which he did in the following manner:—Between the fragments of the ulna he introduced two needles long enough to pass completely through the false joint, and allowed these to remain in place during six days, by which time they had produced great tumefaction of the part and caused much pain. Fifteen days after this, a similar operation was done upon the radius, which, after a few days, was followed by acute pain and slight suppuration. After the application of the needles the arm was carefully supported in splints, and at the end of six weeks, consolidation was found to be complete.

SUSPECTED INFANTICIDE.—Dr. Thompson, in the *American Journal of the Medical Sciences*, narrates a case of suspected infanticide, confirming, in some degree, the value of the hydrostatic test. A domestic in service was believed to be pregnant, but positively denied the charge. At daylight, on the morning of July 20th, 1843, her mistress discovered that she had been delivered. She had left her own room and gone to an unoccupied one in a distant part of the house. When asked for the child, she said it was still-born, and that she had taken it into the garden, where in fact it was found having been concealed under some bushes. These facts having been made known to the coroner, a jury was summoned, and Dr. Thompson was requested to conduct the post-mortem examination. He found the child to be a male, of the average size; the nails perfectly formed; the head covered with hair; plump, and, in short, every appearance of maturity. It was nineteen inches in length, and weighed six pounds ten ounces. No marks of violence were found upon the body. The cord had been cut about five inches from the umbilicus—no ligature applied. The surface of the body moderately pale; slight lividity of the lips and face. The chest, on external inspection, was rounded and evidently of full size. On opening the thorax, the lungs were seen nearly filling the cavity of the chest. They were of a general rosaceous appearance. After being very carefully removed, together with the heart and thymus gland, they were placed in spring water of the ordinary temperature, and floated with great buoyancy. They were separated, and the right lung was cut into a number of pieces; on being returned to the water they floated as buoyantly as before. Although there was not the slightest appearance of putrefaction, (the birth had taken

place eight or ten hours before the examination; the weather beside was cool for the season, the thermometer at noon being 72° F.) and no probability that artificial inflation had been attempted, Dr. Thomson placed one of the pieces in a strong linen cloth, and compressed it with all the force he was capable of exerting. On throwing this again into the water it did not appear in the slightest degree to have lost its buoyancy. The lungs appeared to be in every respect perfectly healthy—they crepitated when cut. The relative weight of body and lungs was 49.5, which is considerably greater than Ploucquet's average estimate, and is also greater than that given by Dr. Beck. There was however a slight degree of inaccuracy in weighing both the body and the lungs, which doubtless affected the result. The ductus arteriosus was not larger than one of the branches of the pulmonary artery. It was contracted in the middle, presenting somewhat of a hour-glass appearance. The verdict of the jury was that the child was born alive, and that its death was owing to neglect on the part of the mother.

MEDICO-LEGAL OBSERVATIONS ON FOOT PRINTS.—M. Mascart presented a paper on this curious subject to the Royal Academy of Medicine of Belgium. After some remarks on the conformation of the plantar surface, covered either with a shoe or boot, and on the mechanism of walking in man, and the application of the foot to the ground, he asserts that, owing to various causes, the footprint on the ground is generally smaller than the foot which has made it. If this be so, many serious errors must have been made formerly, since the prevailing opinion is, that they should exactly correspond. He ascribes this shortening principally to one of three causes: the consistence of the soil to which the foot is applied, the shape of the foot, or of the boot or shoe covering it, or lastly, the manner in which the foot is placed in walking. He allows, however, that this result is not invariable, and it may occur from the peculiar shape of the shoe, boot, or slipper, or from the depth to which the foot has gone. M. Delahaye suggests that there may be instances in which the footprint will be even larger than the foot itself. Thus when walking on a light soil, the print of the foot in its forward motion may throw before it so much of the ground as to enlarge the front of the point. The foot, in walking, is not applied perpendicularly, but from behind, forwards or downwards. Hence, a certain quantity of the ground is carried along with it, and, on measuring the mark, it has, under such circumstances, been ascertained, to be some lines longer than the sole of the boot.

VALERIANATE OF ZINC.—This new preparation is extolled by some of the Italian physicians as a very powerful remedy in several nervous affections. It is formed by adding the protoxide of the metal to the vegetable acid to saturation, and then slowly evaporating the solution. It is administered in the form of pill in the dose of one or two grains. In the *Bulletino delle Sc. Mediche* some cases of neuralgia successfully treated by it are recorded.

CURE OF NÆVI MATERNI BY INOCULATING WITH CROTON OIL.—M. Lafargue recommends the following method of curing nævi materni. Five or six punctures to be made on and among the nævi, with a lancet dipped in croton oil, just as in vaccination. Each of these punctures, he says, causes immediately a pimple, which, in thirty-six hours, is developed into a little boil. These boils unite, and form a red-hot painful tumour, covered with white crusts, and resembling a small carbuncle. Two days afterwards the scabs separate, and in lieu of the nævus is seen an ulcer, which is to be treated on general principles. It would be dangerous to make more than six punctures on a very young infant, as the irritation and fever are considerable.

THE CURABILITY OF CEREBRAL AND SPINAL SOFTENINGS.—Though numerous observations have fully demonstrated the possibility of this occurrence, Dr. Bennett, in a paper published in the *Edinburgh Medical and Surgical Journal*, observes that he considers that the anatomical marks or appearances, by means of which pathologists have endeavoured to demonstrate the fact, are very fallacious. The slight indurations occasionally met with in the nervous substance are

spoken of by some authors as *ciatrices*—a term wholly inapplicable to them. Durand-Fardel alludes to the softening resembling chalky milk as a proof of the passage of the lesion into a state of cure, and Dr. Sims speaks of the fawn-coloured cavities as evincing the same fact. In one case of hemiplegia of long standing, in which the chalky milk softening was found, the granules of the exudation corpuscles were seen to be large, equal in size, and very transparent; in fact presenting a very unusual appearance. It is not improbable, therefore, that the granules were undergoing absorption; and, consequently, the opinion of Durand-Fardel may be correct. On the other hand, the appearances described by Dr. Sims were met with in one case, but here, on the application of the microscope, numerous exudation corpuscles and granules were found, precisely similar to those seen in parts undoubtedly affected with acute inflammation. Intense rigidity of the opposite side of the body also existed, without any other lesion than this which could at all account for it. Dr. Bennett's opinion, therefore, is, that the fawn-coloured spots described by Dr. Sims are no evidence of the cure of inflammatory softening.

IMPERFORATE HYMEN.—Dr. Smith relates in the "Northern Journal of Medicine," the case of a girl, between seventeen and eighteen years of age, who consulted him in consequence of her having become affected with severe pains in the lower part of the back, occurring in paroxysms, and attended with a sense of bearing down within the pelvis, the feeling being as if the bladder was distended, while the pain was caused by her fruitless endeavours to empty it. When free from pain, little or no uneasiness was felt in the hypogastrium, but an attempt to pass urine brought on the pain, which was increased by pressure. The bowels were constipated, and the abdomen of late was observed to be fuller than formerly. Two months previously to her applying to him she experienced a similar, but not so violent attack, and for several months she had been subject to periodical attacks of headache. With some difficulty, from the state of the parts, Dr. S. drew off, by means of a catheter, two ounces of urine, and ascertained the complete occlusion of the vagina from imperforate hymen; he discovered an elastic tumour between the labia, attached around to the entrance of the vagina, which contained fluid, and became more tense during the paroxysms of pain. The hymen appeared very vascular, and somewhat deepened in colour, from the effused catamenial fluid shining through it; in its centre was a small spot where the mucous coat was abraded, as if by ulceration. An incision was made through the membrane, about half an inch in length. A pint of dark treacle-coloured fluid escaped, followed by relief of all the symptoms. To prevent the edges of the incision from closing, a small rectum bougie was constantly worn for several days at first, and afterwards only during the night time; since which, the catamenia have flowed without difficulty, and the previous ailments have disappeared.

PARACENTESIS THORACIS.—Mr. Wells, in the *American Journal of the Medical Sciences*, says, that in paracentesis—an operation which he has performed a great many times—he invariably uses a lancet, or a lancet-shaped scalpel, to make the opening into the hydroptic cavity, whether of the thorax, the abdomen, or the tunica vaginalis; and a catheter with a large eye, either metallic or gum-elastic, as the tube through which to draw off the fluid, in preference to the unsurgical and awkward trocar and canula; he thinks that the former have the advantage over the latter, in being more accurately used by the surgeon—less painful, as well as less frightful to the patient, and certainly attended with less risk of injury to the contained viscera. In paracentesis thoracis, for chronic empyema, where the operation has to be often repeated, the blunt, elastic tube has other advantages over the trocar and canula—it is more readily reintroduced through the puncture—the end of the tube introduced may be directed to any part of the cavity without danger—and by giving the free extremity proper curve, all, or nearly all, the fluid may be drawn off at any time when desirable. On the

contrary, where a simple puncture is made with a trocar, it is difficult to keep the orifice open for any considerable length of time, even by the introduction of a tent; and few patients will submit to have the trocar daily plunged into the chest for some months, while the treatment is in progress. But should one succeed, in this way, in establishing a permanent fistulous opening in the side, a fungous excrescence is liable to spring up around the orifice, attended with morbid irritability and inconvenience.

CYANOSIS.—The following lesions, defects, and alterations of structure of the heart and its great vessels, are stated by Dr. Stillé in the *American Journal of Medical Sciences*, to have been found in persons who were, during life, affected with cyanosis. Dilatation and hypertrophy of the right cavities of the heart; contracted state of the left cavities; a heart consisting of but one cavity; a heart with two cavities, an auricle and a ventricle; a heart with two auricles and one ventricle; persistence of the foramen ovale, or a cribriform condition of the auricular septum; deficiency of the ventricular septum at its base, or an entire absence of it; dilatation of the aorta; a rudimentary condition of the pulmonary artery, contraction of it, adhesion of its valves, deficiency of one or more of them, cartilaginous or other growths at its orifice, or complete closure of it by membranous septa; persistence of the ductus arteriosus; contraction of the right auriculo-ventricular opening; transposition of the aorta and pulmonary artery; the aorta and pulmonary artery arising from one ventricle; the aorta and pulmonary artery arising from a common trunk; the aorta giving off branches to the head and upper extremities, and the pulmonary artery forming the aorta descendens; the aorta giving off two pulmonary branches.

NOTICES TO CORRESPONDENTS.

We have ascertained that the Medical Times, uses weekly about ten times the stamps consumed by our former rival the Lancet. It will be recollected, that last August, Mr. Wyse, at our request, called upon Ministers for the Stamp returns, and that Mr. Wakley violently opposed himself to their grant. Since that period our comparative superiority, we are happy to say, has considerably increased. In the next session we shall endeavour, again, to have the subject brought before Parliament, and trust that we shall escape, this time, the awkward circumstance of an M.P. shrinking, in Parliament, from a Public return which would test the accuracy of some loose statements published by him elsewhere. We pledge ourselves to our readers, if we get the returns granted, to prove beyond a doubt, that a contemporary has been endeavouring to avert a hastening doom, by statements not only false, but extravagantly so. The Medical Times enjoys a circulation far beyond that ever enjoyed before by any Medical Journal.

An Admirer.—A penicilling will for the future appear fortnightly. One will be given next week.

A Student.—Four years' Study is required for the Degree of M.D. in the University of Edinburgh.

A vast number of communications have been received, which shall receive due attention.

M. D.—The extra Licentiate of the London College has the privilege of honourable practise, is eligible for most public offices, can be registered under the new bill as Physician, obtains (by examination at the College) his license, which costs him £17. 9s.

Medicus.—Of course the Pharmaceutical Numbers are extra. As a general rule, Gentlemen, who subscribe to the Medical Times, take the "numbers;" where, however, not required, our subscribers have only to give us the intimation by directing them back to us, on the same cover. We have given this notice before.

Gentlemen have written to us, expressing some difficulty in getting back numbers of the Medical Times. Complete sets may be had of all the numbers published during the present management, namely, during the last five volumes.

A Constant Subscriber.—The Appointment is hardly worth a word's mention.

We must decline accepting the invitation of the Editor of the Medical Directory, to interfere in any way in the dispute between him and a contemporary work. A Court of Law is the best place to try the question of piracy.

Castleblaney.—We have received a money note from this town, dated Jan. 7, no name coming with it. Will the writer favour us with his name?

Dr. Gilligan.—The Gentleman so situated will undoubtedly register under the New Bill as a Physician: possibly, also, if he so pleases, as a Licentiate of Surgery.

M. R. C. S.—Next week if possible.

Communications by Dr. Rigby, Lecturer on Midwifery, to St. Bartholomew's Hospital, Mr. Wilkinson King, Lecturer on Pathology, to Guy's Hospital, and Mr. Tosswill of Leicester, will appear next week.

Any communications from our Correspondent in Newmarket on Fergus, will receive careful attention.

The whole of P. D.'s letter is grounded on a mistake of facts.—In the reign of Henry the Eighth, there was a Bill passed distinctly to allow Quacks the unmolested liberty of Practice. It appears that a preceding Act had been used against them with much severity by the Physicians and Barber-Surgeons, and provoked a great popular outcry. The same error has been committed by the Apothecaries' company, which states, in its recent pamphlet, that Sir James Graham's Bill was the first proposal in Parliament to give tolerance to Quackery.

A Surgeon (Manchester)—declined. The facts do not warrant the censures. The tone, too, is below the writer.

X.Y. (A Subscriber).—The Bill provides that Practitioners, aged 40, may be examined by the College of Physicians, and forthwith registered as Physicians. It is understood that Sir James Graham proposes that a wide door shall be opened to General Practitioners, of a certain number of years' standing, in all the colleges of medicine, to enable them to take rank as Physicians.

W. S.—The Fellows of the Edinburgh College of Surgeons do not number much above sixty.

A Country Surgeon.—The taking or using any "title or name," that falsely implies a person to be registered, is a misdemeanour by the New Bill. "Physician," "Licentiate," and probably "Surgeon" or "Apothecary," would involve the penalty.

The immense influx of new subscribers visiting us with the new year, precluded—though we had the aid of three extra hands, working each day to midnight—our entering names and forwarding Numbers, for the first week, in time in every case. Gentlemen are requested to accept this explanation, as our apology for any delay.

THE MEDICAL TIMES.

SATURDAY, JAN. 11, 1845.

—Acerba fata Romanos agunt,
Scelusquo fraternæ necis, &c.

Unde et quo Catiis? Whence and to what region steer we, gentlemen, Medical Reformers of LONDON? To what point of the moral compass is drifting this brave movement of Medical Reform?

Furorne cæcus, an rapit vis acrior?

An culpa? Responsum date!

There was a time when Medical Reform was equality of Educational competency: equality of Collegiate fees: more or less representative Medical Government: every Licensing College and corporation coerced to justice by one grand central supervision. Is it still?

There was a time when deliverance from the Company of Drug-venders, in Blackfriars, and an honourable position in the National Colleges of the kingdom, was Medical Reform. Is it so still?

There was a time when the names of Grant, Hastings, Grainger, Granville, Clark, Farr, Forbes—and, for a while, even Webster—were "familiar in our mouths as household words," and told what Medical Reform meant. Do they still?

Alas! in our metropolis, all seems the bewildering confusion and obscurity of its November fogs. A universal metamorphosis is before our

eyes: neither we nor those about us, are the same men. We seek not the same things, breed not the same thoughts, feel not the same emotions: we are like the bewildered subjects of some magnificent hoax, played off on us in the dark! We know not what *we* are doing, or what is doing with us: Medical Reform is playing our puzzled senses the pranks of some Protean imp. As if to exhaust even ingenuity of her wonders, she gives us the veritable Examiners of Apothecaries' Hall as the Reformers of 1845, and the Reformers of 1844 as "the infamous intriguers" and "malignant *illegal* Practitioners" of to-day! No Christmas pantomime ever shewed more whimsical or startling transformations.

But there is at least one Journal that will ring out no hosannahs, to-day, to the monopolists it crucified yesterday; and which will dare to ask the General Practitioners of London—in the topmost paroxysm of their fevered madness;—why, in phrenzied hostility to all they have hitherto prized as most dear, they seek to divide their lot from that of their brethren in the provinces—or to make the Godless aim of their deplorable policy, the division of a Profession whose perfection is its union?

Shame, say we—shame threefold and quadrupled—on the men who will so desert their brethren who have laboured and suffered for them;—who say, "it is not for the Profession we struggle, but ourselves; not for all, but a section!" Such men—if not many—may *individually* better their position; they may rise from agitators to corporators—they will secure *justice* to nobody. They must be men far indeed below the level of the glorious work before them. The enlarged, the generous thing, is a lodger their minds and hearts have no room for. Statesmen, or scholars, or gentlemen, they cannot be: they are tradesmen—no more; and the small space that skirts a counter is their only proper region. It can be there only where fair *measures*, or honest *scruples*, can make their acquaintance!

"A general incorporation of Medical Practitioners, under the London guild of Apothecaries!" And is it to this base end, that the high and lofty question of Medical Reform has at length shaped itself? To this conclusion descended all the learning of our erudite, the philosophy of our wise, the oratory of our eloquent, the yearnings of our high-minded, the sufferings of our lion-hearted? "To what base uses we may return, Horatio!" Shame! shame!

In heaven's name, what is a General Practitioner, that he shall rend the seamless garment of the Profession?—hold no communion with the Surgeon or Physician, friend or foe?—proudly or abjectly separate his fate from theirs? Is he not himself a Surgeon?—is he not himself a Physician? An integral member of the sacred brotherhood?—Their fate and his one and indissoluble? An internal conflict—the house divided against itself—one disciple of Hippocrates at war with another—in a state of society not favourable to either—is it not insane? suicidal? fiendish? God forbid that we have any such horrid warfare.

*Necque hic lupis mos, nec fuit leonibus,
Nunquam nisi in dispar feris,*

Besides: who when Medical Reform was a danger, not a decoration, wore it, but Physicians and Surgeons? Who have sacrificed the fortunes of a life, the comforts of a high position, against the injustice of monopolist Colleges, but Physicians and Surgeons? And shall we say "Away! we are not of you?" We allow assistants to pre-

scribe drugs, which *you* touch not; and the justice, therefore, that you and we seek is hateful to us, if shared with you. We leave you unaided to the mercies of those you defied for us." Like the man, is the society ungrateful; it can have no faults but one. "All other crimes must pass for virtue in it."

What again is the monstrous aim? Let us again face it: "the General Practitioners incorporated under the Apothecaries, and for ever *under* the Physicians and Surgeons; just as the Solicitors under the Special Pleaders and Barristers!" And this is the glorious object for which a learned Profession, that *essentially* excludes all invidious distinctions, is to make the struggle of death. Was ever madness more palpable? What, would the insolent Physician, or ill-minded Pure Surgeon, save such an humbling demarcation? In sober—rather in *mad*—earnest, and at our own request, we would be a body selfbadged as below him, and kindly relieve him of even a moment's study to keep rank above us! Was ever self-sought degradation so phrenzied as this before? The General Practitioner is now the member of the Apothecaries' Company—*i.e.*, is all the New Incorporation would make him: and, in addition, is member of the College of Surgeons. At this moment he is better accomplished to meet the competition of the Physician or Surgeon, than if he had all the demands conceded which his *friends* now make for him. Sir James Graham—going farther—would make him a member both of the College of Physicians and the College of Surgeons—a Practitioner appealing to general confidence by one more title than either Physician or Surgeon: but we *humble*—very *humble*—London Practitioners as we are, feel that this would be too great an advantage: and prefer to be rated as *simple*, very *simple* "Incorporated Apothecaries," Mr. Thomas Wakley's "old hags" at our head! Those *who stir in the matter* should *certainly* have the post of honour which our brethren will pay for so dearly—should *certainly* be rulers of the *third-rate* College they seek! They would need—quite need—a *little* puerility, to give themselves and brethren up to such voluntary degradation—for NOTHING.

We protest energetically against any attempt, no matter from what quarter, to make the General Practitioners occupy a *rôle*, with reference to Physicians and Pure Surgeons, analogous to that played by Solicitors to Barristers and Special Pleaders. It is, first of all, a scheme we would not bear from their foes, and still less can we accept it from their friends. It comes, too, a little late in the day. A great many General Practitioners have received educations in no one whit unequal to that of either the Surgeon or Physician. Sir Benjamin Brodie had his *surgical* competency attested by no better examination than nine-tenths of the members over whom he now presides; and in *medical* science, many of our Practitioners have undergone ordeals of skill and knowledge equal to those which have constituted two-thirds of our present body of Physicians. With precisely the same studies, under the same teachers, with the same fees, and nature of practise, the distinction, separating Barrister and Attorney, can no more be found between one medical man and another, than between Sir William Follett and some less fortunate brother at the bar. Our knowledge and its application being precisely alike, we may have titles to designate different degrees of merit—none to designate different avocations; our calling is identically one. Be he who he may, therefore, the man

who would raise an institution to eternally badge General Practitioners as a third social grade, by study and avocation a class *distinctly under* Surgeons and Physicians, is guilty of a serious crime against the well-being of Medicine. He divides what is essentially one; and makes dissention where there can be no happiness and no good, but in harmony.

We know that we shall hear that a General Practitioner is *more than* a surgeon, and knows something about Pharmacy and Midwifery. But what of so paltry a ground for either *honour* or *disgrace*? The *Surgeon*, who is not a midwife, is a miserable bungler in his profession; and the question whether a patient shall have his drugs from his doctor's house, or his grocer's shop, is about as important in the estimate of a medical man's scientific status, as the point whether an opinion shall be copied by the barrister's clerk, or sent to the nearest stationer, is to the social consequence of a counsellor. We say then, General Practitioners of London! seriously weigh what you are about. If you voluntarily put your head into that Apothecaries' noose, so adroitly weaved for you in 1815 by the worse part of the *Physicians*, you will infallibly fall under the ridership it is your best desire to escape.

And, pray let us hear of no more nonsense about Surgeons and Physicians lowering the educational attainments of the future members of our body. At the best, it is but an unlikely contingency,—and to rush to degradation to avoid a millionth chance of a hostile collision, is surely not wisdom. Besides, the College of Surgeons have *now*, as they have always had, all the interest they *can* have in pouring into our ranks a body of half-educated men. The more rivals they give us in practice, the more do they add to their private income and corporate wealth. At this moment, nineteen such examining bodies (the Hall one) are struggling which shall tempt most candidates (with diploma money in their hands) to present themselves at their wickets; and it is only their underbidding and underselling each other, in all possible manners, for years past more than we can number, that can fully explain the frightful superabundance of medical men in reference to their duties. But the Apothecaries' Company, of course, say *they* have as great an interest in raising our social status, as the Surgeons and Physicians have in depressing it. How, then, stands the fact? *For the last 20 years, no M.R.C.S. has ever thought of boasting of his Hall license, or, of omitting to make the most of his College diploma.* The Apothecaries, with every interest, as they falsely say, to raise the General Practitioner, have lowered him; the Surgeons, with every interest to lower him, have raised him! This, too, when the College of Surgeons—the great enemy—was wholly irresponsible and despotic! Now, the New Bill subjects both it and the College of Physicians to the control of another body, responsible to the Government and the country: and if, under a despotic *regime*, the *interested* College of Surgeons did not *lower*, but *raise*, the education of General Practitioners, it is not unfair to presume that under a responsible management—an useful compulsion aiding their own good-will—neither they nor the College of Physicians will venture on the public audacity of a different course.

And one word for your cool headed man of sense, who knows that no political agitation—whatever other good it did—ever put bread in the mouth of a man who had not the good luck to lead the move. Much of our discontent arises from

that portion of medical misgovernment, which has made us *too* many for our work; which has given the Profession—so to speak—more pigs than *teats*. Will the admission of a new incorporation—a young, raw, greedy, hungry College—into the medical begetting market, lessen the great evil, or cut off the *fons et origo mali*? How shall the new body live without *funds*?—how get funds but by many new candidates? How get many new candidates save on the penny postage plan of getting “a muckle out of many mickles,” or the railroad philosophy of securing most passengers by cheapest fares? Besides, the new licence venders will not destroy the *old* shops. Though injured, these will yet keep open. But how? By giving high titles on low terms! They must have *eash*. The more there are of them, the more new medical men they must make; and in the fierce competition between the old and the new shopkeepers, God help the poor Profession! Go, then London Practitioner—throw up thy cap for a new College; and when the shoe of poverty that now *pinches* (through over-rivalry), reach the bone in that rivalry's greater increase, remember what the MEDICAL TIMES told thee in January, 1845!

But, say you, “how submit to the Colleges? What power have we to bring them to reason?” If one *good* answer suffice as well as a dozen, it offers itself in plenteous potency. What “power” have you to force on Government and Parliament your grand new College, despite an antagonism from the old bodies, fifty fold severer than any they would make even to a reasonable reform? *The power that can do the greater can do the less*. If corporators in embryo tell you no, take our modest advice, and believe them not. Amid all the bewilderment of sense, the protean metamorphoses of Medical Reform now cause in our metropolis, (thank God! they have not reached the provinces) the old truth remains yet tolerably correct, “the greater contains the less.” If the “little” is too much for you, the *great* is in a very fair way of accomplishment!”

“And but for thee
Nature would sicken, Nature soon would die.”

In our last article upon the subject of respiration, we stated that, all other things being equal, animals are healthy and energetic in proportion to the capacity of their chests—that is, in proportion to the amount of oxygen which they are enabled to receive into their lungs in the act of breathing. It being understood, of course, that the fittest medium, for respiration, is our common atmosphere, containing not less than 21 per cent of oxygen gas, and not more than 1,000th of carbonic acid gas. We stated that animals, with large chests, had more vigorous appetites, and better digestions than the opposite class:—now, as there is a distinct and definite correspondence between respiration and combustion, as regards the production of heat, it follows that the more oxygen an animal consumes, the higher will be its temperature. Accordingly, it is found that if an animal be placed in pure oxygen, its heat speedily rises many degrees above the natural standard; but here the process of combustion goes on with unnatural activity, and like a taper burning under similar circumstances, the energy and expenditure are too great for long endurance. Birds, in proportion to their size, have larger lungs, or rather, larger receptacles for air, than any other living creatures. They have, consequently, the highest temperature of any animals. There is also a relation between their heat and their habits of exer-

cise. Birds that fly with the greatest rapidity, and therefore offer the greatest amount of carbon for consumption in the capillaries, are, of course, the warmest blooded. The temperature of the swallow, for example, averages 111°. The same observation applies to insects. Animals, on the other hand, that consume very little oxygen, are of a proportionately low temperature. Fishes and many reptiles, for this reason, are cold-blooded. But the whale, although an inhabitant of water, has the temperature of a mammal, because it breathes the same atmosphere as the mammalia.

As these rules are of universal application, it should follow that people with capacious chests have a higher temperature, and more easily maintain it, than people with small chests. And such is the case. Give a large chested healthy man a sufficiency of food, and freedom of exercise in a chilly atmosphere, and he will never complain of the cold; place a man of opposite configuration under like circumstances, and it will be next to impossible for him to keep warm. People of the latter class always require the adventitious agency of external heat and abundant clothing to preserve them from starvation. The capillary circulation of their system comports with the capillary circulation of their lungs, and whilst a due share of nutriment fails to fatten them, so also does its imperfect combustion fail to supply them with necessary warmth. They constantly complain of cold feet and hands, and the least exposure of these members is followed by cramps and chilblains. Hence it is, that as the lungs become obstructed or destroyed by disease, in that very degree does the unhappy subject suffer from cold. It often happens to consumptives to express a complete loss of all sensation of warmth for days and even weeks prior to dissolution. In cases of deadly injury affecting the respiratory organs, the poor victim will lie with the aspect and feel of death for hours before life has actually departed. Analogical reasoning also explains to us the well known fact that, whilst we are often unable to become warm by remaining in-doors, even with the agency of a fire, yet a little exercise in the open air will shortly set us in a glow. Such will ever be the case so long as the respired air is not sufficiently pure: that is, contains an insufficiency of oxygen to answer the necessities of the system. The chief, perhaps the only, source of animal heat is, in “the mutual action between the elements of the food, and the oxygen conveyed by the circulation of the blood to every part of the body.” If food be regularly supplied and properly digested, nothing is required, but the respiration of pure air, to ensure an equable and continuous temperature. If, however, after the ingestion of food, the individual breathe an impure air, more inflammable material circulates in the blood than there is oxygen enough absorbed to consume in the capillaries, and the issue of this secret combustion, viz., *heat*, is wanting. The comparison of such circumstance, with its opposite, is just that which holds between *coal laid for lighting*, and *coal lighted*. If an individual be not supplied with food, then the materials, that have already been deposited and appropriated, are re-absorbed, and carried through the system, like fuel, to supply it, by combustion, with warmth. The fat is the first to disappear in this way; and hence it is that hibernating animals, which, before the commencement of their winter sleep, are plump and corpulent, awake from their dormitude in the spring, thin and emaciated. During the intermediate time, they have been subsisting upon themselves. The fatty matter, with which they

became clothed in the feeding season, was afterwards consumed in supplying the blood with nutritive substance, and the whole system with heat. But, the state of sleep, modifying and diminishing the energy and activity of most of the animal functions, lessens of course their expenditure, and makes the drain upon the entire fabric comparatively small. A hibernating animal, that will sleep for months and subsist during that time upon its own fat, would not be able to exist, for as many weeks, in a state of daily wakefulness. And this more rapid waste, in the one case than in the other, is chiefly owing to the quick and constant consumption of the carbonaceous materials of the blood in the process of respiration. It is for this reason, that people better endure hunger in hot than in cold weather, and that, in the winter season, starvation so quickly succeeds want. In summer, the air is greatly rarified by the heat, and the amount of oxygen taken into the lungs is comparatively small;—the carbonaceous matter of the blood, therefore, is slowly burned, and a return of hunger as slowly follows the gratification of the last appetite. In so far we resemble our fires—they burn slowly and feebly, because there is not a sufficiency of oxygen to encourage their blaze. In winter, the air is more dense, especially in clear frosty weather, and every inspiration we make conveys into the lungs a maximum quantity of oxygen, which, acting there, and throughout the capillary system, carries off with remarkable rapidity whatever material it can combine with. The waste being rapid and abundant, it follows that the supply must be proportioned to it, and hence, in healthy and vigorous subjects, hunger is an almost constant claimant in cold weather. If this hunger be not satisfied, the body wastes with fearful rapidity. In fact, the analogy is sufficiently close for us to say, that the body, in respiring this dense pure air, consumes as much faster than in respiring a heated and expanded air, as does a fire on a clear frosty morning burn more brightly and rapidly than in the full sunshine of a hot summer's day. These facts, and their reason, explain to us why there should be such difference, both in appetite and digestive powers, between the inhabitants of the town and the country. We have before stated, that the former are especially liable to dyspepsia from the impurity of the air which they habitually breathe;—the latter class, for an opposite reason, are not only vigorous in their hunger, but in their digestion also. When the stomach craves, it scarcely matters what kind of aliment is put into it;—materials, that would sicken the city valetudinarian for weeks, are swallowed by the countryman with impunity and advantage.

Nothing so foreign but the athletic hind
Can labour into blood. The hungry meal
Alone he fears, or aliments too thin,
By violent powers too easily subdued,
Too soon expelled. His daily labour thaws,
To friendly chyle, the most rebellious mass
That salt can harden, or the smoke of years;
Nor does his gorge the luscious bacon rue,
Nor that which Cestria sends, tenacious paste
Of solid milk.

This also explains what we said at the commencement of this article, that people with large chests eat more, and digest better, than such as are less fortunately constructed; and for the simple reason, that, the two breathing the same atmosphere of mixed oxygen, the former will employ, and appropriate at each inspiration, far more of that material than the latter can.

Large chested people, again, are more cheerful, courageous, and enduring, than those of a different class. That this configuration confers its advantages mainly through the facilities afforded by it of

oxygenizing the system, is proved from a variety of circumstances.

Nothing refreshes the town resident like a walk in the clear country air—nothing cheers his spirits, freshens his appetite, and sweetens his sleep, like this. The man oppressed by real troubles, or frightened by fancied ones, is better relieved of his terrors and suspicions by country air and exercise, than by anything else. Take the man apprehensive of bankruptcy, from his counting house and closet, to the stirring breezes of a seaside, and in a short while he will tell you, if his fears be well grounded, that he will meet his trouble "like a man;" and if those fears were imaginary, he will soon laugh at the folly and prejudice which led to their apprehension. The writer of this article once attended a lady, of very pious and excellent character, who, from constantly communing with herself upon gloomy, religious matters, at last became possessed with a belief that she had committed the sin against the Holy Ghost. She was a most intractable patient, for she would describe only one feeling, and refer to only one cause of it, and hopelessly set all remedies at defiance. Week after week, did she brood over her misfortune, in a close ill-ventilated bed-room, experiencing no appetite, and therefore easily persisting in her punishment of intentional starvation;—she would take no medicine, and would receive no comfort. All effort at relief seemed useless, for she could not be persuaded to stir from her chair, or to have the window opened, lest a demon should enter, and a mad-house was the only prospect for her. At last, however, it was deemed advisable to suggest to her, as the melancholy impression first occurred in that fated room, that it might be an unlucky room, and under the influence of demoniac agency. In a moment, she caught the alarm, and expressed her willingness to be "transported," so that she might be removed from that "dread spot." She was forthwith conveyed to a north-east watering place, where she was treated with only exercise and cold bathing, and she returned home, in six weeks, utterly free from any mental or physical complaint.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS." Evidence of Dr. Southwood Smith.

No. II.

We have already intimated our intention of submitting the "Report" to a more minute and searching analysis than it has yet been honoured with at the hands of Reviewers; and we now enter upon our task. This has been somewhat simplified by the division of the first publication in folio into two octavo volumes, of which, the first is entitled "Causes of disease, and means of prevention," and the second, "Evidence on supply of water, drainage, and surveys." This division is very convenient; for while the first volume displays the physical condition of the inhabitants of our large towns, the second exhibits the material defects upon which they depend; and thus the broad subject of the labours of the commission is very naturally and usefully parcelled out.

We propose to direct our attention mainly to the first volume, which contains facts of the highest interest to members of the medical profession and to the public; but we shall extend our analysis also to the second volume, which forms a natural, and by no means unimportant, supplement to it.

The plan that we propose to adopt is this: we shall give, in successive numbers of our journal,

short abstracts or analyses of the evidence of the several witnesses, and of the reports sent to the commission from some of the largest provincial towns; and we shall then present a synthetical view of the most important results contained in the preceding abstracts. This done, we shall proceed to the second volume, which we shall handle in the same way; and lastly, we shall attempt to justify the tone of satire in which we indulged in our introductory notice, by displaying, to the best of our ability, the waste of health, life, and money, which has so long disgraced a nation piquing itself, and not altogether without reason, on its sound sense and practical wisdom. It is because we believe that it possesses these attributes, though in a dormant state, that we are not without hope of arousing it to a sense of the long course of criminal neglect of health, life, and true economy of which it has been guilty.

We have said that the entire "Report" divides itself naturally into two parts—the causes of disease, and means of prevention; and evidence as to supply of water, drainage, and surveys—the first volume, with which we have now to do may also be split up with equal propriety into two parts, the first of which contains the evidence of several medical men residing in London, and, as far as their evidence is local, referring to the metropolis; the second consists of reports from provincial towns.

The metropolitan witnesses, whose evidence fills the first 120 pages, are Dr. Southwood Smith, Mr. N. B. Ward, Dr. Neil Arnott, Mr. Toynbee, Dr. Guy, Mr. John Liddle, Dr. C. J. B. Aldis, and Dr. Rigby. We proceed to analyze the evidence of these witnesses in the order in which their names stand in the Report, and in this enumeration.

The first name on the list is that of Dr. Southwood Smith, a veteran in the science of public health, and one who has waged a long, and let us hope, not a useless warfare, against the giant physical evils which oppress the poor of our large towns. As physician to the London Fever Hospital, and to the Eastern Dispensary, he has enjoyed the best opportunities of inspecting the places and houses in which fever is most prevalent, and of forming a judgment as to the physical conditions on which that fearful scourge depends. On this subject, then, his evidence is invaluable.

He reiterates what he had previously stated in a report presented to the Poor Law Commissioners, that "the records of the London Fever Hospital prove indubitably that there are certain localities in the Metropolis and its vicinity, which are the constant seats of fever, from which this disease is never absent, though it may prevail less extensively, and be less severe in some years, and even in some seasons of the same year, than in others;" that in former years, in some localities, "there was not a single house in which fever had not prevailed, and in some cases not a single room in a single house in which there had not been fever;" and that the districts in which fever prevails are as familiar to the physicians of the Fever hospital as their own names.

Some idea may be formed of the number of cases of fever constantly occurring, by the fact that during the epidemic, as many as 500 patients were removed into the Fever Hospital, in the four months from January to April inclusive, and that as many as from thirty to forty patients a day have been rejected for want of room.

What a picture does this simple statement of facts present to any mind capable of thought, fancy, or feeling. 500 fever patients in four months! From 20 to 30 hopeless applicants a day! What scenes of fearful suffering! What sudden and blighting distress.

Let us try to understand all that this little word *fever* means. Utter prostration of every faculty of mind and body, debility continually increasing, the body becoming every day more and more loathsome, the mind more and more disturbed, death always imminent, recovery, where it takes place, slow and painful—a foundation too often laid for chronic diseases—in a word, a loathsome pestilence. And who are its victims? Not the child, whose death, painful as it is to the parent, is always attended by many obvious alleviations, but the

adult—the father and the mother—on the continuance of whose health and strength the well-being and the very existence of so many helpless children depends. It is well known to all medical men that fever is in a peculiar manner a disease of the adult. Thus, Dr. Southwood Smith informs us that very nearly one-half of all the cases of fever occur between 20 and 30 years of age, and "that the period of human existence during which fever can alone be said to be prevalent, is from the age of 20 to 40." Its fatality also increases with the age, so that it is nearly twice as fatal at 31 as at 11 years of age. This is a fact worth noticing.

But there is another very significant fact, viz., that for every death that occurs from typhus fever, there are, on an average, no less than 11 attacks which do not prove fatal; so that if we multiply the number of deaths occurring in the metropolis by twelve, we shall be able to form some idea of this malady. Now, on turning to the Mortuary Register of the metropolis for 1842, appended to the fifth annual report of the Registrar General, we find the number of deaths from typhus fever to be 1174 which number multiplied by twelve, gives as the number of attacks, 14,088.

Upwards of 14,000 attacks of typhus fever, and nearly 1200 deaths in one year! Let the philanthropist imagine the misery, and the economist calculate the expense of these 1200 deaths, and 14,000 lingering illnesses. If they find the problem difficult we will help them by and by.

We have said that this pestilence has many favourite lurking places as well known to our learned physicians of the Fever Hospital as their own names. Where are they? In the aristocratic vicinity of Belgrave or Grosvenor Squares? Alas! no. Would to heaven the fever would follow the fashion and migrate westward, if only for a single season.

Imagine but one fashionable street or square in the predicament of a fever district in Whitechapel, with not a house, nor a single room in a single house without its fever patient. What a sensation it would produce! What learned consultations as to the cause, what paragraphs in the newspapers, what searching inquiries into the state of the drainage, what indignant denunciations of the Commissioners of Sewers, what abuse of the landlords! The patriots of both houses would lose no time in bringing the matter forward, and we should have a second edition of the *qui tam* actions. The witty divine who wished to immolate a member of the Episcopal bench to stop a railroad abuse, would be delighted with such a practical application of his principle.

But, unfortunately for the cause of social improvement, the fever has vulgar tastes and loves obscure localities, such as Rosemary Lane, and other low parts of Bethnal Green and Whitechapel. "The streets, courts, alleys, and houses in which fever first breaks out, and in which it becomes most prevalent and fatal, are invariably those in the immediate neighbourhood of uncovered sewers, stagnant ditches and ponds, gutters always full of putrefying matter, nightmen's yards, and privies, the soil of which lies openly exposed, and is seldom or never removed. It is not possible for any language to convey an adequate conception of the poisonous condition in which large portions of both these districts always remain, winter and summer, in dry and rainy seasons, from the masses of putrefying matter which are allowed to accumulate." This description, though written some few years since, still remains true to the letter. Again: "In every district in which fever returns frequently, and prevails extensively, there is uniformly bad sewerage, a bad supply of water, a bad supply of scavengers, and a consequent accumulation of filth; and I have observed this to be so uniformly and generally the case, that I have been accustomed to express the fact in this way. If you trace down the fever districts on a map, and then compare that map with the map of the Commissioners of Sewers, you will find that, wherever the Commissioners of Sewers have not been, there fever is prevalent; and, on the contrary, wherever they have been, there fever is comparatively absent."

The close dependence of typhus fever on the condition of the drainage is clearly proved by a

fact stated by Dr. Southwood Smith, and confirmed by other medical men, namely, the frequent occurrence of fever in houses situated opposite gully-holes. "I have observed," he says, "that when fever once attacks any one member of a family in such a situation, it commonly attacks several individuals, and that the disease is generally severe—that is, it becomes in its progress typhoid." "Instances," he adds, "are recorded in which servants, sleeping in the lower rooms of houses so situated, are invariably attacked with fever. We have constantly coming to the Fever Hospital, servants from good families who have slept in such rooms, often no other member of the family having been attacked." One of the witnesses examined by the former Committee on the Health of Towns, confirms these statements of Dr. Southwood Smith, by affirming "that of all cases of severe typhus he had seen, eight-tenths were either in houses in which the drains from the sewers were untrapped, or which, being trapped, were situated opposite gully-holes." We can, ourselves, confirm this statement by a remarkable instance in which a most severe form of typhus attacked an entire family, without spreading to nurses, medical men, or servants of the establishment, and proving fatal in two out of seven cases. It was a very large house, very completely drained, but on examining into the state of the sink-traps, not one of several was found covered, and in wet weather they were complained of as giving out most offensive odours. The house was scarcely ever free from sickness, the family generally ailing, and they were never exempt from the epidemics prevailing.

Dr. Southwood Smith's theory of the cause of fever is a necessary result of the facts just stated. This theory he expresses in the following terms. "I conceive the immediate and direct cause of fever to be a poison generated by the decomposition of animal and vegetable matters." The correctness of this theory may be called in question, but, for our present purpose it is of little moment whether such a condition of the air is the parent or the nurse of fever. On any theory, it is a condition necessary to its existence in an epidemic or endemic form, and this is the practical question for the legislator.

A word or two, now, on the economic question connected with the prevalence of fever. Nearly 1200 deaths per annum, and upwards of 14000 lingering illnesses must be very costly. Let us see what light Dr. Southwood Smith throws upon this phase of the question.

He tells us that: "the Bethnal Green and Whitechapel Unions incurred an extra expense for fever cases for the quarter ending Lady-day, 1838 respectively of £216. 19s., and £400; altogether £616. 19s.; "being at the rate of no less than £2467. 16s. a year; and that during the same year, "of the total number who received parochial relief in most of the districts, a very large proportion received it in consequence of their being ill with fever; but in one district, namely, St. George's, Southwark, out of 1467 persons who received parochial relief, 1276, that is the whole number, with the exception of 191, are reported to have been ill with fever."

We have no ready means of ascertaining whether the extra expense for fever cases in the Bethnal Green and Whitechapel Unions included the cost of burying the victims of the pestilence; but, at any rate, the sum is large enough to open the eyes of the parish authorities, and, if the cost to all the parishes of the kingdom were added into one total, we think that it would appear, even to our legislators, in the light of a slight extravagance.

Such is a specimen of the direct and immediate expense, which fever entails upon parochial funds; but we may rest assured, that there are other indirect expenses, which are not so easily calculated. Let each man among us try to form his own estimate of them. The attempt will not be without its advantage. A suspension of work during from two to three months, the expense of medical attendance, of nursing, and of the little delicacies which the poor will make an effort to procure, even by a sacrifice of the most necessary articles of furniture and clothing; are some of the items in

the account, even where the disease does not prove fatal. But suppose it to destroy its victim, we have to add the cost of the funeral; and if that victim be the head of the family, on whose labour a wife and children depend, what resource have the survivors but the workhouse? All this misery and waste of means, for want of a few feet of brick-work, a gallon or two of water, a day, and a moderate supply of fresh air! And this in the nineteenth century! Said we not truly that our Statesmen require much teaching. There are several interesting questions connected with the cause, nature, prevalence, and spread of fever, which are noticed in Dr. Southwood Smith's evidence, but which we shall not touch upon here, as not being essential to our present object. Many important observations and suggestions are also thrown out, relative to the influence which the causes of fever exercise on the health, and general well-being of the poor, but these we must reserve for a future number.

In the present abstract, we have contented ourselves with an analysis of the more striking facts referring solely to fever, namely, that it is very loathsome, very prevalent, very fatal, that it attacks chiefly the adult, that it depends on causes which admit of removal, and that it entails a very heavy expence upon the community. In our next number we shall complete our notice of the very valuable evidence of Dr. Southwood Smith.

REVIEWS.

Researches and Observations on the Causes of Scrofulous Diseases. By J. G. LUGOL, Physician to the Hospital of St. Louis, &c. Translated from the French, with an Introduction, and an Essay on the Treatment of the Principal Varieties of Scrofula, by W. HARCOURT RANKING, M.D., Cantab. Physician to the Suffolk General Hospital.

SOME little delay has taken place in our notice of this work, which we should regret, but that it has given us an opportunity of confirming our own first impressions by the perusal of more than one most favourable, but well-merited, review in the pages of our contemporaries. To those who have read those notices, it will be sufficient for us to state, that every word of the praise they have bestowed has our cordial concurrence. To say that Dr. Ranking has performed his task in a most unexceptionable manner, would be mere negative praise; but, we think, that we run no risk of contradiction when we state, that his work must take the very first place among the class to which it belongs. The style of the translation is as easy and flowing as the original part of his work, and this deserves the highest commendation. Every page bears the impress of scholarship and good taste, and the practical summary with which the work concludes, is highly creditable to his judgment and good sense. No one can read the work without a double advantage to himself and to the translator. Dr. Ranking has fairly established himself in the good opinion of his professional brethren, and shown himself equal to much higher achievements than those of translation. Let him give his attention to this important subject—scrofula, and we will venture to predict, that he will produce a much better work than that of M. Lugol, and succeed in correcting some of the errors into which that experienced observer has fallen. In saying this, we would not be understood to speak slightly of the work of a man who has enjoyed such ample opportunities of experience as M. Lugol, and who has given such close attention to his subject. His treatise is a most valuable addition to our knowledge of the causes, nature, and treatment of scrofula, and improved, as it is, by the useful additions of the translator, ought to be on the shelf of every medical library. Nevertheless, we must confess, that we do not place entire confidence in

the general principles established by any observer, however gifted he may be, if he do not bring large numbers of facts to support those principles. The defect in M. Lugol's work is, the absence of numerical, or, as they are vulgarly called, statistical data. We would strongly recommend the translator, when a new edition of his work is required, to endeavour to supply this defect.

We shall conclude our notice of Dr. Ranking's work by quoting a single passage from his Essay on the Treatment of Scrofula. After insisting upon the importance, to the scrofulous child, of a free supply of air, he makes the following judicious observations on the choice of a nursery:—"The nursery should be an up-stairs room, but not the uppermost story, as it will, in that case, be subject to great variations in temperature; it should be well ventilated, but not exposed to currents of air. Especial care should be taken that the sleeping apartment should be of this character. On this subject, parents are generally very neglectful; they are careful to have an airy day nursery, but do not reflect that all the good effects of the latter are neutralized by obliging the infant to pass twelve hours out of the twenty-four in a smaller room, occupied, perhaps, by a nurse and several other children. I consider, that the bed-room is of far greater consequence than the day-room, and would strongly urge the necessity of supplying a delicate child with pure air during the night. To the neglect of this precaution must be attributed, in a great measure, the development of the scrofulous constitution with children of the rich; for in them we cannot admit the agency of insufficient food, cold, dampness, &c." These observations are judicious and well expressed, and deserving the attention both of parents and of medical men, and we are glad to find, that throughout his remarks, Dr. Ranking acknowledges the full importance of those simple measures which, in combination with judiciously administered medicines, are not less efficacious in the cure of disease, than, when taken alone, they are in its prevention. We take our leave of Dr. Ranking with a hearty and sincere commendation of his work to all our readers.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

EXAMINATION PAPERS FOR THE FELLOWSHIP. (Senior Candidates.)

December 3, 1844.—1. What are the structures divided in the lateral operation of lithotomy? 2. Of what structures does the spermatic chord consist? 3. Whence do the spermatic arteries derive their origin? 4. Where do the spermatic veins terminate? 5. In what part of the urethra is the orifice of the vas deferens situated? 6. What is the origin of the epigastric artery? 7. What is the relative situation of the epigastric artery to the spermatic chord? 8. Where does the protrusion of the oblique inguinal hernia take place? 9. Where does the protrusion of femoral hernia take place? 10. What is the relative situation of femoral hernia to the femoral vein, the spermatic chord, and the epigastric artery? 11. What parts cover the femoral artery in the upper third of the thigh? 12. What parts cover the femoral artery in the middle third of the thigh? 13. What parts cover the popliteal artery? 14. Where are the ciliary processes of the eye situated? 15. What is the situation of the lachrymal gland? 16. What course do the tears take in their passage from the lachrymal gland to the nostril? 17. What parts cover the common carotid artery below the omo-hyoides muscle? 18. What parts cover the common carotid artery above the omo-hyoides muscle? 19. What important parts, which it is necessary to avoid injuring in operations, accompany the common carotid ar-

tery? 20. What muscle is interposed between the subclavian vein and the subclavian artery? 21. What is the relative situation of the brachial artery to the muscles of the arm? 22. By what structures, which it is essential to avoid injuring in operations, is the brachial artery accompanied? 23. In what manner is the superficial palmar (arterial) arch formed? 24. Where is the deep-seated palmar arch situated, and how is it formed? 25. Where is the median nerve situated in the forearm? 26. What fingers are supplied by the median, and what by the ulnar, nerve? 27. What are the muscles principally concerned in inspiration? 28. What are the muscles principally concerned in expiration? 29. In what respect does the air which is expired from the lungs differ from that which is inspired? 30. In what manner does strangulation occasion death? 31. In what manner does a severe injury of the spinal chord in the upper part of the neck occasion death? 32. Enumerate the abdominal muscles. 33. What are the attachments of the external oblique muscle of the abdomen? 34. How is the vena portæ formed, and where does it enter the liver? 35. From what parts does the vena portæ return the blood? 36. What are the other vessels of the liver? 37. How is the ductus communis choledochus formed? 38. Where does the ductus choledochus terminate? 39. What muscles are divided in the operation of amputation of the thigh near the knee? 40. What muscles are divided in the operation of amputation of the leg a little below the knee? 41. In what respect does the structure of the fœtal differ from that of the adult heart? 42. Where are the intercostal arteries situated? 43. If a small foreign body be accidentally introduced into the trachea, into which bronchus does it probably fall? 44. What are the principal muscles which elevate the larynx? 45. What are the principal muscles which depress the larynx? 46. Where is the recurrent nerve situated in the neck? 47. What nerves pass out of the cranium in company with the internal jugular vein? 48. Through what opening does the middle meningeal artery enter the cranium, and what course does it take afterwards?

December 5, 1844.—1. What are the principal diagnostic marks of dislocation of the head of the femur on the dorsum of the ilium? 2. In what manner do you distinguish a fracture of the neck of the femur? 3. In what manner do you treat the last-mentioned accident when it occurs in a person of advanced age? 4. In what manner would you reduce a dislocation of the humerus into the axilla? 5. What are the diagnostic marks of a dislocation of both condyles of the lower jaw? 6. What kind of fracture is sometimes mistaken for a subluxation of the wrist-joint? 7. In what manner do you treat a fracture of the bones of the leg? 8. What are the principal diagnostic marks of inflammation of the synovial membrane of the knee? 9. What are the principal remedies to which you would have recourse in cases of the last mentioned disease? 10. What is the usual condition of the articulating extremities of the bones in cases of scrofulous disease of the joints? 11. In what respect do the effects of inflammation of a serous membrane differ from those of inflammation of a mucous membrane? 12. What is the first effect of a ligature applied on an artery with a view to interrupt the circulation, and what changes take place afterwards? 13. What are the principal characteristic symptoms of a scirrhus tumour of the female breast? 14. What lymphatic glands are liable to be affected in a case of scirrhus of the breast? 15. What circumstances contraindicate an operation for the removal of a breast affected with scirrhus? 16. In what manner do you perform the operation of castration? and what arteries in the spermatic chord usually require to be secured after the testicle has been removed? 17. What remedies do you usually prescribe in a case of chronic inflammation of the testicle? 18. In what part is the stricture usually situated in a case of strangulated inguinal hernia? 19. What kind of constitutional treatment do you usually have recourse to in cases of erysipelas? 20. What treatment would you have recourse to if the inflammation of erysipelas had extended to the cellular membrane, causing suppuration and

sloughing? 21. What is the nature of the red or brown sand which is sometimes deposited by the urine? 22. What plan of treatment as to medicine and mode of life would you prescribe where the patient is liable to the last-mentioned disease? 23. Having failed to reduce a strangulated inguinal hernia, are there any remedies to which you would have recourse before you proceed to an operation; and if so, what are they? 24. What treatment do you usually have recourse to after the operation for strangulated hernia? 25. Describe the operation of amputation of the leg. 26. What symptoms would lead you to suspect the existence of a calculus in the bladder? 27. Is there any case of extravasation of blood within the cranium in which the operation of the trephine may be had recourse to with advantage; and if so, what case is it? 28. What are the principal diagnostic symptoms of iritis? 29. What treatment is most successful in cases of iritis? 30. If, in a case of retention of urine from stricture of the urethra, the urethra should give way behind the stricture, causing an extravasation of urine into the cellular membrane of the scrotum, perinæum, &c., what treatment would you have recourse to?

December 10, 1844.—1. Give an account of the composition of the blood. 2. Describe the structure of muscle, explaining the difference between the muscular fibres of organic and those of animal life. 3. What are the principal facts proving the truth of the doctrine of the circulation of the blood? 4. Describe the structure of the arteries; explain the cause of the pulse, and the use of arterial anastomoses. 5. In what manner is the action of the heart affected by strangulation, and in other cases of death from suffocation? 6. Describe the course of the subclavian, axillary, and brachial arteries, and their relations to the principal structures in the neighbourhood. 7. Describe the course of the femoral and popliteal arteries, and their relations to the principal structures in the neighbourhood. 8. What are the changes produced in the air by the process of respiration? 9. Describe the parts immediately connected with inguinal hernia. 10. Describe the parts immediately connected with femoral hernia. 11. Give an account of the structure of the spinal chord exclusive of its membranes. 12. State the views which are at this time generally entertained of the functions of the spinal chord. 13. Describe the origin, and give a general view of the distribution of the fifth cerebral nerve. 14. Describe the origin, and give a general view of the distribution of the pneumogastric nerve. 15. What are the effects produced in a warm-blooded animal by the division of the pneumogastric nerve in the neck? 16. Explain in what manner the picture of a visible object is formed on the retina. 17. Describe the structure and physiology of the kidney. 18. Describe the structure and functions of the skin. 19. Give an account of the parts observed in the dissection of the perinæum. 20. Enumerate the principal nerves which are observed in the dissection of the neck, and their relations to the structures in the neighbourhood.

(Junior Candidates.)

December 12, 1844.—1. What has been observed respecting the condition of the capillary vessels, and the blood which they contain, during the existence of inflammation? 2. What are the immediate, and what are the ultimate, changes which inflammation of the synovial membrane produces in a joint? 3. What are the immediate, and what are the ultimate, changes which scrofulous disease of the bones produces in a joint? 4. Describe the changes which inflammation of the iris may produce in the eye. 5. Enumerate the principal diagnostic symptoms of iritis. 6. Describe the treatment which is most successful in cases of iritis. 7. In what parts may the stricture be situated in cases of strangulated inguinal hernia; and what are the effects produced by the stricture, 1. on the intestine in the hernial sac, and 2. on the intestine within the abdomen? 8. Give an account of the symptoms which occur in a case of strangulated inguinal hernia. 9. What treatment would you have recourse to in the first instance in a case of strangulated inguinal hernia? 10. Describe the operation for strangulated oblique inguinal hernia. 11. Enumerate the diagnostic

marks of dislocation of the head of the femur on the dorsum ilii. 12. Enumerate the diagnostic marks of dislocation of the head of the femur into the foramen ovale of the ischium. 13. Explain in what ways the shortening of the limb may be produced in cases of disease of the hip-joint.

PRACTICAL REFORM.

(To the Editor of the "Medical Times.")

SIR,—Having struggled, for years, to obtain a bare subsistence, by moderate remuneration for my professional services, as a General Practitioner, against men ever ready to undersell me, and even *work for nothing*, blighting my prospects, hemming me in on every side, taking the bread from my mouth, and the cup from my lips, I have looked almost with disgust on the clamour about Medical Reform, as a *vox et prætereia nihil*—mere moonshine—something like the lullaby of a stepmother to a starving child. Your first number for the new year, however, has bid me be of good cheer, by recording within a short period of each other *two important facts*: The Editor of the *Medical Times* boldly, and in a straightforward manner, refuses to supply his journal *gratuitously* to a medical society very well able to pay for it; and the Board of Guardians of Marylebone parish courteously decline gratuitous medical services, on the ground that they can pay for what they want. These, Sir, are indications of a *substantial* reform in our profession, such as I could scarcely have ventured to hope for, and about which there can be no mistake. Let the public once learn to estimate the *gratuitous supply* of medical journals, and *gratuitous tender* of medical services, at their proper value, and accept them at the same—that is (as you suggest) at nothing, when worth nothing, then honest men might chance to thrive in an anxious and wearisome calling, albeit a *profession*. For my own part, cramped as are my means, by such unworthy practices, I can cheerfully, and conscientiously, forward my subscription to the *Medical Times* as for "value received."

Your obedient servant,

QUID PRO QUO.

[Our correspondent has hit a nail directly on its head. Gratuitous services are at this hour ruining the profession, and making it unfit for a gentleman's cultivation. For your true, open-hearted charity—for humanity sake, and no other (no witness but heaven, no gainer but the patient)—we have the warmest eulogiums: for your benevolence, by one hand, to a wretch, whose pocket you pick with the other; and for your benefactions (at the expense of the comforts and honourable emoluments of your brethren) to persons whose only pauperism is one of spirit and soul—we have the utmost disgust and detestation. There are charitable institutions for the sick, studious the whole country: nurses, beadles, porters, secretaries, attorneys, barristers, everybody in them, or about them, is paid but the medical assistant: if the funds will pay all others, why shall they not pay him also? Simply because he is not true to himself, or to his order, and sacrifices for a favourable prominence, a fundamental axiom of every profession, without which even the clerical body must be extinguished; i.e.:—"The labourer is worthy of his hire." He gives for nothing that which his brethren must live by or starve. Had we but the 30,000 subscribers we are now hastening to, we would, if sustained by the profession, uphold a code of honour which would make this calamitous underbidding a very rare crime.—Ed.]

REMARKS ON MEDICAL REFORM.

(To the Editor of the "Medical Times.")

SIR,—Numberless plans for the better regulation of the profession have been suggested, by those who should be competent judges of the evils which it is proposed to remove, and of the manner in which they might best be obviated; but from the little success with which they have met, we may infer that, had their authors been placed in a situation to carry out their own suggestions, the

satisfactory settlement of the *reata quæstio* of medical reform would have been, at least, as distant as it is likely to be now under the auspices of Sir James Graham. There are, however, certain points upon which as much unanimity prevails as can be expected upon any subject in a profession hitherto so divided. Let us, then, take these principles, upon which all are agreed, as our guide, and see how far a measure embodying them would differ from that proposed by Sir J. Graham.

The profession desire, and Sir J. Graham proposes, the establishment of a governing body or council, appointed partly by the crown, partly by the profession through the colleges.

To this part of the bill it is objected—

1st, That the regulation of the profession should be left in the hands of its members, without the interference of the Government: an objection somewhat inconsistent with the declaration of the objectors, that it is the duty of the state to ensure the proper qualification of those to whom the care of the public health is entrusted.

2ndly, That the great majority of the profession would be unrepresented in the council. This objection applies, not to the bill which acknowledges the principle of representation, but to the colleges which are to have the right of electing members of the council, and can be remedied only by an alteration in the constitution of those bodies (of which there appears little probability), or by the incorporation of those members of the profession, who would still remain unrepresented, into a distinct college, having, like the others, the privilege of electing councillors.

Upon this council, Sir J. Graham proposes, should devolve the duty of regulating the education and examination of candidates for a license; for the registration of his bill will virtually be a licensing, since none but those registered are to be regarded as qualified practitioners, eligible to public offices.

To the proposed system of registration, which includes regulations for the education of the various grades of the profession, many objections are entertained; among others, that it will have the effect of degrading the class of general practitioners in the eyes of the public. There appears, however, to be some doubt as to the position on the register which is to be occupied by the possessor of the double qualification of the diploma of the College of Surgeons and the license of the Apothecaries' Society. These objections might all be obviated by confining the council to simply conferring a license to practise on those who had been examined by one of the colleges, in accordance with the rules of the council, leaving the distinctive title and its concomitant advantages to be derived from the college before which the candidate had presented himself for examination, and of which he proposed to become a member. There would then be no more interference with those bodies than was necessary to ensure uniformity of education and efficiency of examination, and those on whom the license had been conferred would be registered as Fellows of the Royal College of Physicians, Fellows or Members of the Royal College of Surgeons, or of the proposed College of Medicine and Surgery.

Having ensured an adequate supply of highly qualified medical men, it becomes necessary for the protection, not only of the public, but also of those who have incurred a great expenditure of time and money to qualify themselves for the practice of their profession, to prohibit, under effective penalties, ignorant and unqualified men from tampering with the health and lives of the credulous, and, by dishonest competition, depriving the licensed practitioner of the just reward of his labours.

Upon this point, Sir J. Graham is at direct variance with the whole of the profession, and I believe it will prove, with a sufficiently numerous and influential portion of the public, to prevent his carrying out this most injurious principle of his bill.

If modified in accordance with the suggestions of the majority of the profession, as expressed at the various meetings which have been held through the country, the bill would then provide a governing or licensing council, representing fully and fairly both the profession and the public; it would

interfere no more than is necessary for the general good with existing interests, and would effectually promote the dignity and utility of the profession, while it would, by removing existing causes of discontent, allay the jealousies and heart-burning, and end the agitation by which we have so long been distracted, and which are so inimical to the best interests of science.

If you think that these remarks can in any way serve the cause for which we are now labouring, your publication of them will oblige,

Sir, your obedient servant,

G. D. HEDLEY.

GOSSIP AND NEWS OF THE WEEK.

Mr. White, the foreman of a jury, empanelled by Mr. Wakley, has recently written to the *Times*, complaining that that functionary kept back the evidence of a medical witness, Mr. Rawlinson, who should have been called. Most of the jury agreed with Mr. White, in the necessity of calling in the surgeon, but Mr. Wakley overruled their opinion. The circumstances were these: The deceased, Jane Crump, was a servant in the house, 45, Park-street; had been a monthly nurse; was seized with a fit of vomiting on the night of the morning on which she was found dead in bed. She had not been complaining previous to the attack. Mr. Rawlinson had been sent for, and his assistant attended, and he, without being very positive as to the cause of the vomiting, had ordered some medicine, with the injunction that she should not be left during the night. She was, however, left, and found, in the morning, dead in bed.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Members admitted to the Fellowship on the 24th December, 1844, after passing the required examination:—Anderson, Alexander, York-place, Portman-square; Barron, Edward Enfield, St. Thomas'-street, East; Birt, Hugh, Arundel, Sussex; Bushell, Richard, Horley, Surrey; Chessman, Thomas, Sheffield; Coote, Holmes, Argyle-street; Cotton, Charles, Lynn, Norfolk; Critchett, George, New Broad-street; Cundy, Osbert, Fish-lake, St. James's-street; Eddison, Booth, Nottingham; Furley, Edward, Town Mall, Kent; Hall, John, Duke-street, St. James's; Holden, Luther, Old Jewry; Lee, Henry, Dover-street, Piccadilly; Martin, Robert, Holbrook, Ipswich; Millar, John, Enfield, Middlesex; Norris, Henry, South Petherton, Somerset; Rix, Joseph, St. Neotts, Huntingdon; Roberts, Henry Pratt, Great Coram-street; Rumsey, Henry Wyldbore, Gloucester; Soden, John, Bath; Tucker, Edward Enoch, British Iron Works, Pont-y-pool; Walsh, John Henry, Worcester; Ward, William, Huntingdon.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, January 3rd, 1845: E. W. Pettigrew; E. Jeffery; T. M. Girdlestone; T. M. Leak; R. Allsop.

Mr. John Lucas Grierson, a lecturer on phrenology, was charged this week with stealing a suit of clothes, from a tailor.

Dr. Garrod, of Charter-house-square, has offered himself as a candidate for the physicianship, vacant in the Aldersgate-street Dispensary.

A workman recently died in a composite candle manufactory, belonging to Messrs. Le Paige and Co., in the Borough. Arsenic was freely used in making the candles, and the gradual absorption was affirmed by the coroner's jury to have caused death.

NAVAL APPOINTMENTS.—Dr. C. P. Blake is promoted to Surgeonship, for services in China; Mr. T. N. Jewell has been appointed to the convict-ship William and Henry; Henry Edwards to the *Actæon*; Henry Willan to the *Mutine*; G. N. M. McClure, M.D., and John Jack, Esq. to the *Actæon*, as Assistant Surgeons.

Dr. Fraser has been elected to the Assistant Physicianship of the London Hospital.

A general meeting of the Tower Hamlets' Medical Association was held at the London Tavern, on Thursday evening week. A resolution condemnatory of the Bill was passed; and a strong expression of opinion given in favour of a General Incorporation of Medical Practitioners.

A General Practitioner writes to the *Times* a deplorable account of the ruin brought on him, and the mischief done to numerous persons, by the extensive medical practice acquired in his neighbourhood by an uneducated quack. The sufferer—who in the present state of law—has been made poor by his rival's successful competition, applied to the Apothecaries' Society, which has declined to prosecute. The quack having heard of the application, stuck "Surgeon" on his door, and is exulting beyond measure, in the impunity the present state of the law gives him.

Most of the practitioners in the rural parts of Surrey have signed a protest against the operation of the New Charter of the College of Surgeons. They very properly treat the invitation to come and be examined again as an insult.

We understand, from a correspondent, that for a recent vacancy in the Nottingham District Hospital, three-fourths of the candidates spoke in their letters of having received their information from the *Medical Times*. The vacancy was advertised in all the medical and local journals.

MENSTRUATION.—Mr. Girdwood observes, from microscopic observation and chemical analysis, that the catamenia appear in the lower animals as well as in the human female; and that whilst the discharge is characterized in them, as in her, by a periodicity peculiar to each separate genus, it is, at least in the higher order of animals, equally sanguineous as it is observed to be in woman. The discharge is indicative of the maturation of an ovum, and of its being on the point of elimination from the ovary; the capability for impregnation is during menstruation, as it might be concluded, that the periodicity of menstruation, indicative of this maturation and impregnability of the ovum, is precisely that quality, which allies these phenomena to most of the leading phenomena of nature, vital as well as physical, dependant upon heat; and, like them, even in a being, so far removed by civilization from physical influences, as man; in him, they are, as in other animals, affected by the seasons.

EXCISION OF A GREAT PART OF THE ULNA.—Mr. McEwen was consulted by a lad, who had disease of nearly the whole extent of the ulna, resulting from the fall of a heavy stone on the limb. The soft parts around were ulcerated, and his general health failing under the continued irritation. Under these circumstances, Mr. McEwen disarticulated the bone at the wrist, sawed it through, a little below the olecranon, and removed the part that was diseased. The patient bore the operation well; he afterwards occasionally progressed and retrograded, not finally recovering until he had been to the sea-side. He can now pronate and supinate the hand, can flex and extend the fingers readily, and has free motion at the wrist.

Metropolitan Mortality for the Week ending Saturday, January 4th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1417	1039	963
Zymotic, or Epidemic, Endemic, and Contagious Diseases	260	472	184
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	163	114	106
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	196	167	159
Diseases of the Lungs, and of the other Organs of Respiration	417	347	292
Diseases of the Heart, and Blood-vessels	45	25	24
Diseases of the Stomach, Liver, and other Organs of Digestion	91	64	71
Diseases of the Kidneys, &c.	11	6	5
Childbirth, Diseases of the Uterus, &c.	13	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	10	6	6
Diseases of the Skin, Cellular Tissues, &c.	1	2	1
Old Age	100	89	70
Violence, Privation, Cold, and Intemperance!	66	27	26

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SUMMARY.

JAN. 18.

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

By C. J. B. WILLIAMS, M.D., F.R.S.,

Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We now come to *hæmorrhage of the kidney*. This affection has also been called *hæmaturia*. I have noticed that hæmorrhage often occurs in attacks of inflammation of the kidney, resulting from nephritis, and especially from calculus, which is apt to produce rupture of the structure of the kidney, accompanied with a great amount of inflammation. There is usually a great deal of pain, in these cases, of a neuralgic character. Sometimes, there is hæmaturia, independently of these conditions. There may be determination of blood to the kidneys, constituting active or passive hæmorrhage, vicarious with menstruation, or with hæmoptysis. Sometimes it is the result of irritation, from irritating diuretics, especially turpentine and cantharides. Passive hæmorrhage may result from various circumstances that cause congestion, as, for example: exposure to the cold, after the kidneys have been much excited by stimulating drinks. It occurs in connection with congestive fever, and the hæmorrhage in these cases is often considerable. It takes place after scarlatina, in which case it is sometimes accompanied by albuminuria. It may arise from what is called a scorbutic state of constitution, in which there is a disposition to hæmorrhage, from some ill-defined condition of the blood itself.

The treatment will vary, according to the complications: when combined with neuralgia, and other symptoms of irritation of the kidney, it may require the same treatment as the early stage of nephritis itself; therefore, depletion is to be used under such circumstances. So, likewise, if it be connected with determination of blood, and increased strength of the pulse, with other febrile symptoms; for, it is pretty certain that, if this state does not pass into actual inflammation, there is, at least, a great tendency to it; and, therefore, it should be treated by depletion. Again, if it is connected with albuminuria, we must have regard to the latter disease, on which the hæmorrhage probably depends. In case of the mere passive hæmorrhages from the kidneys, small doses of turpentine have been found useful; and in the more congested state of the vessels, henbane or opium, employing purgatives, at the same time, have been often found an effectual mode of treatment. The muriated tincture of iron has, also, in some cases, restrained the hæmorrhage.

The next affection is *albuminuria*, and we shall find this in connection with many diseased states of this organ; but various circumstances seem to point out that it is not purely inflammatory, and this is proved by the general characters and the nature of the affection. I, therefore, am disposed to place it under the head of congestive diseases of the kidney, affecting the cortical structure. There are two forms in which it may occur; the acute, and the chronic. In the former case, the presence of albumen will be readily detected in the urine by nitric acid; but, perhaps, there may not be a single symptom marking a state of inflammation. In cases of obstructive diseases of the

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heart, more particularly where they are attended by a great amount of congestion in the venous circulation, I have found, not unfrequently, that the urine becomes albuminous for a time. The same thing occurs if any febrile affection supervenes on this congestive state of the vessels; but, as the affection is removed or diminished, the albuminous state of the urine disappears. This shows that mere congestion will suffice to produce it. The acute form, therefore, may exist in but a slight degree; when, however, it is excessive, being attended not only by the presence of albumen in the urine, but, likewise, by the absence of urea, it then becomes a serious disease, and may prove quickly fatal; or it may, under more favourable circumstances, pass into the chronic state. Now, acute albuminuria, as I have stated, may occur from a congested, or diseased, state of the heart, but it may also arise from congestive fevers; and we find in the paroxysms of some fevers, whether eruptive or not, that the urine does become albuminous, and returns to the natural condition when the fever passes off. Scarlatina produces this state, more, perhaps, than any other fever, but not in proportion to the eruption itself; for I have known it to occur again and again, when there has been no rash at all; sometimes, even, when the febrile symptoms have been but little marked. There seems, in these cases, to be required a certain tendency to disease in the kidney itself. Another cause, that may produce this affection, is exposure to the cold; more particularly, prolonged exposure in persons whose kidneys have been previously excited, or such as have drunk freely of intoxicating liquors, especially of the diuretic kind; also, in those, who, having drunk too much, lie about on the damp grass, or in other situations where they are exposed to the prolonged influence of cold, which is then peculiarly apt to affect the loins, from the position in which they are placed. Such persons are first affected with shivering, and, in a few days, fever arises, which terminates in what is called acute dropsy. You will observe, that exposure to cold acts more particularly on persons whose kidneys have been previously excited by the stimulating action of intoxicating drinks. There is produced in the kidney a change, which disposes it to congestion; and the influence of cold, acting on the whole surface, drives the blood inwards, and the congestion that ensues, in the predisposed organ, interfering with the secreting powers of the kidney, the serum of the blood thus passes through unchanged. This state sometimes begins with fever, and there is often some blood in the urine at the commencement, as evidenced by the reddish hue present. The urine is high-coloured, and of a transparent redness, mixed with the natural deep orange or yellow colour. There may be red or pink deposits, but this is not constant. The bloody hue sometimes changes to a slight greenish colour. The colouring matter is thrown down in flakes at the bottom of the vessel, and if the urine be tested at this time by heat and nitric acid, the precipitated albumen will be found of a dark red or dark brown colour, from the admixture of the colouring matter of the blood. In some instances, however, previously to the actual albuminous impregnation, the urine is very dark and scanty.

There is, with this state of the urine, often more or less pain and tenderness in the loins. This is not a constant symptom, but it may be present in the acute form. At times, also, there is some feverishness, and a dry state of the skin; thirst, and accelerated pulse, which, in many instances, is remarkably hard. In both states, there are symptoms approaching to those of nephritis: nausea, vomiting, and various nervous symptoms; delirium or stupor; also, some spasmodic or convulsive affection may occur. The urine is albuminous, and defective in its natural constituents, and, in many instances, coagulates almost into a solid clot by heat alone; sometimes, the urine is alkaline from the great quantity of serum of the blood that is contained in it.—It is necessary to neutralize this state by the exhibition of acids. Other symptoms, also, become apparent; such as: dropsy or anasarca, more particularly; and this form differs from the dropsy arising from other causes, inasmuch as it occurs in various parts of the body at once, instead of beginning in one part. There is another characteristic, often manifested in this form of dropsy; that is, swelling, accompanied by a great amount of tenderness. Not unfrequently, at the same time, rheumatic pains occur in the joints, and sometimes timefactions of the articulations, the knees, more particularly, exhibiting effusions under the capsules, accompanied by a good deal of pain. Now, the effused liquid, in these states, is not simple serum, but it is impregnated with some of the constituents of the urine, and this is the reason why the joints become painful, or even bordering on the inflammatory state. Sometimes, there is not so much swelling with the effusion into the cellular texture, but there are fluxes from the various mucous surfaces, or from the serous surfaces, constituting internal dropsy, as ascites, or hydro-thorax, accompanied, perhaps, by slight inflammation. There are frequently fluxes from the mucous membranes. There is a sort of humid bronchitis, with diarrhoea, and a low form of inflammation of the intestines; but in the more serious cases, where the interference with the function of the kidney is more direct and more sudden than usual, I have found, in connection with the conditions I have mentioned, and before they have become perfectly developed, symptoms arising from the retention of urea in the blood,—thus poisoning the system, and producing a noxious effect on the various functions. In these cases, delirium often occurs, with stupor, passing into a state of coma: or else the effect seems to take place more by disorder of the heart's action, and syncope is brought on. Sometimes, also, a state of asthma is induced, even where there is no effusion into the bronchial tubes. I have known all these things to occur in the acute form of albuminuria. Now, besides this, in the early stages of albuminuria, the specific gravity of the urine is very high, from the quantity of albumen it contains, as, also, from its retaining a considerable amount of its natural constituents. Urea may be detected in it, except in the worst forms, and lithic acid abounds much in the early stages. On examination of the kidneys, after death, in some cases we are able to point out many of the conditions connected with albuminuria. Where this disease is fatal, as sometimes takes place, in

connection with total suppression of the urine, the kidney is found very large in size, and of a dark colour,—almost of a chocolate hue; and the structure is very soft, such as we find with congestion in various other structures. There may not be inflammation, but a great amount of vascular injection. If the disease has lasted long,—two or three weeks for instance—the kidneys may be hard and tough, but the colour becomes paler, apparently from a deposition of lymph in the interstitial texture, with enlargement of the kidney. This condition is pretty uniform; but, in the vascular portion, there are striæ, or punctæ, here and there manifested. The state of softening, above referred to, may be compared to the process of hepatization in the lung. A patient, dying in this state, may exhibit a pale kidney, extremely large and soft, but without any distinct granular degeneration. That there is actual deposition in these cases, is quite obvious, from what is seen in the analogous state of the liver. There is a great increase in weight and size, the organ being three or four times the natural weight: not from congestion, for it is paler than usual, but, obviously, from an intervascular deposit. This deposit seems chiefly to affect the cortical substance. In many cases, however, this soft matter is deposited in the form of nodules, or small grains, not uniformly over the whole texture, but more in some parts than in others; and, in illustration of this, I may remind you, that there is a general disposition for lymph to be deposited in the granular form, more particularly, when the deposition takes place slowly, as in connection with congestive affections, or low inflammation. Compare this to the parallel case of granular pneumonia. The tendency to this, I believe to depend on the inflammatory action, sometimes, being confined to the vascular tissue alone, and sometimes extending beyond it. However, the effect is, that the deposition certainly becomes more or less granular. As it passes on, the organ exhibits a mottled appearance externally, as well as internally, when a section is made. This is found to a greater extent, as I have already said, in the cortical part, than in the tubular. Such is pretty well all that can be said of this disease, and we may now sum up with the causes that produce it.

The nature of this disease may be regarded as essentially congestive, or dependant on determination of blood, arising from inflammation: but the congestion is the essential part of it, and this congestion impairs the secreting vessels of the kidney, or those situated, especially, in the secreting vascular structure of the organ. Now, this condition may be produced by various causes, acting on the kidney, and which are capable of producing congestion: either over-stimulation, or various circumstances causing a determination of blood. The result of this congestion will be, to cause effusion and obstruction of the blood-vessels, and consequently a total destruction of their secreting power. If the acute disease goes on unrestrained, the secreting function of the kidney becomes more and more impaired, and at last it ceases altogether. This is not merely from the congested state of the organ, but by the circulation through it being obstructed, and the secreting apparatus destroyed. You may readily suppose that, if congestion continues, and more particularly if it be accompanied by a febrile state, structural changes will follow. A soft albuminous deposition exudes from the vessels, and, by compressing them, more or less interferes with the freedom of their passage, and causes their obstruction, thus, ultimately, leading to atrophy of the organ. Hence, the urine, for a while, may be somewhat increased in quantity, but its nature is more or less altered. The urea and other constituents are not properly eliminated. They remain in the blood, and produce various secondary effects, which differ according to the predisposition of the individual: producing, in some, nervous derangement, nausea, vomiting, diarrhœa, and flux from the mucous surfaces: in others, causing affections of the serous membranes, dropsy, and low inflammations, originating from the irritating effects of the urea. The effect of this impregnation of the blood with excrementitious matter is not only apparent in the textures, such as I have described, but likewise in

the blood itself. The red globules are deteriorated, and the albumen itself is diminished. The fibrine, also, is less in quantity. It produces, thus, a remarkable thinness of the blood, and a disposition to effusion into the various tissues. I mentioned the experiments of Andral and others, who found that, in diseases of the liver, more especially hydatids, which are so common in sheep, the blood was generally deficient in albumen; and the result of their researches would seem to imply, that the diminution in quantity of the albumen of the blood appears to have some connection with hydatids. At the same time that the urine itself may be more or less abundant in albumen, it is defective in its natural constituents, and it will be found to vary very considerably in its actual quantity of water. Generally speaking, in the acute form, it is scanty, and becomes of a lower specific gravity as the disease advances: being deficient not only in the proper urinary constituents which it ought to have, but, as the disease goes on, being deficient also in the albuminous products. And no wonder, when this deposition takes place, that the blood does not pass through with such freedom; it is, in fact, prevented from passing through by the albuminous deposit. Thus, the disease may become fatal from this interference with the function of the kidney; if actively treated, however, in its congestive state, before the structure becomes altered, it may be cured.

This will lead to the subject of the treatment, which will consist chiefly of four indications. The first indication is, to remove the congestion; the second, to restore the secreting function of the kidney; the third, to counteract the effects of the diseased state of the blood; and the fourth, and last, to treat the various symptoms of disease that may arise out of this disordered condition of the blood. Now, the first indication will be effected by the remedies already pointed out for congestion, and more especially blood-letting. Cupping at the loins may also be applied. Blood-letting should be employed freely, in proportion to the strength of the patient and the fulness of the blood-vessels. This is to be aided by derivatives. Hydragogue purgatives tend to diminish the amount of blood in the system, and to drive out its watery parts. One of the best is cream of tartar, in large doses, or combined with jalap, but in its general effect it is better alone. One ounce doses of cream of tartar, with half a grain of elaterium. The chief objection to this latter is, that it is very nauseating. The indication of derivation may be also assisted by sudorifics, by warm or vapour baths, or a hot-air bed. Tartar emetic may also be given, where the circulation is excited, and Dover's powder, so as to increase the cutaneous secretion. It is also useful, after the excessive congestion has been removed, to venture on some diuretics, on precisely the same principles that you apply stimulating lotions externally. The diuretics that answer best, are the tincture of cantharides, the tincture of digitalis, and cream of tartar, in small doses, combined with opium or tincture of henbane, to soothe any irritating effect these remedies may have. It has been supposed, by some, that diuretics are pernicious. I believe that they may do great harm in the early stage of congestion, as they are liable to convert it into inflammation; but after this has been removed, they come into useful operation. Cupping at the loins, and counter-irritation, may be combined, to allay any remains of inflammatory or congestive action. These may be continued until the urine loses its albuminous deposition, when they should be withdrawn. As to the third indication, that of counteracting the effects of the diseased blood, we do not know much about the means of doing this. There is a retention of urea in the blood, and we are very little acquainted with the means by which to counteract its injurious and poisonous effect; but I think it is a subject worthy of enquiry, whether matters which contain oxygen in excess will have any influence in this respect. The chief object is to evacuate it, and this is done by the measures already adverted to;—hydragogue purgatives tend to remove urea, and to purify the blood. The fourth indication is one of great importance, and that is, to obviate the troublesome symptoms. The vomit-

ing, and other very distressing symptoms, in the early stage, may often be counteracted by medicines; diarrhœa may be restrained by sulphate of copper; bronchitis by large blisters (as we treat the asthenic form of bronchial flux), together with the use of opium. The dropsical effusions are to be overcome by the different methods already adverted to:—hydragogue purgatives and diuretics. Chronic albuminuria is also connected with other structural diseases, and, in a few instances, with cancer of the kidney, and the form of yellow tubercle; but, in ninety-nine cases out of a hundred, it is combined with granular degeneration.

FURTHER OBSERVATIONS ON CONVULSIVE AND OTHER DISORDERS IN THE CEREBRAL HEMISPHERES.

CHOREA AND SYMPATHETIC PAINS.

By T. WILKINSON KING, Esq., F.R.C.S.E.

The various parts of the brain specifically affected.—Chorea (statistics) hemiplegic, with its auras.—Disorders of sense-tracts and their sympathies.—Convulsions, transitory.—False sympathies.

The hope of inducing clearer notions of brain symptomatology, in general, tempts me to set down a few particulars which at least serve to strengthen and extend my former exposition of cerebral convulsions.

Let us consider perceptive cords, diverging and thinly scattered, as they reach the vast area of the cerebral cortex. Suppose volition or mandate fibres, also, widely separated above and converging downward. Let us remember the great additional mass of intergyral loops, and of commissural radiating fibres, as it were, dilating and dilated by the sense and mandate influence in any one part towards the superficies of either hemisphere. Let us fairly picture to ourselves one hemispheric brain, as we know it anatomically. Two or three square inches of cortex should then seem but an insignificant loss; and it may more readily be conceived that superficial disturbance of an hemisphere must be well nigh universal, to excite general convulsion in the opposite side of the body, by irritating the mandatory ends of motor fibres. Lesions, also, of feeling and of motion will be great in proportion as disorganization is concentrated towards the great centre of irradiation. Not so of mind.

I deem it strictly a corollary of my former exposition of convulsions, that, whilst a defined lesion of the pons varolii may cause universal spasms, the same kind of lesion, if situated at the surface of the cerebrum, must be universal, to affect the body generally with convulsions. The like observation applies anew to the cerebrum, for disorder of common sensation,—and to the cerebellum for motion.

A man was two years insane, and had convulsions: the left side was most affected; the right hemisphere, above, was covered with an adventitious membrane, of the thickness of three sheets of writing paper; the left hemisphere is said to have been sound.—Abercrombie, p. 71.

A man, æt. 41, while drunk, fell down stairs: two ounces of blood were extravasated, with superficial laceration and softening over the left cerebrum. He had convulsions of the right side.—Bright, p. 635.

Mr. Mayo, in his Pathology, makes a remark on a case of which I am inclined to think he judged more accurately:—

“There was slight sanguineous effusion on the surface of the anterior lobe of the left hemisphere. It is possible, but very unlikely, that *this* may have caused the convulsions of the right side of the body.”—p. 209.

On another doubtful case, Dr. Bright observes:—“Possibly the convulsions that occurred were connected with” the extravasated blood in striæ in the pons varolii. p. 279.—The Doctor's general opinions, however, by no means accord with this expression, which I suppose to be a right one, and for reasons which may yet be capable of varied proof.

A connected view of the opinions I have ad-

vanced in the MEDICAL TIMES, and other journals, concerning cerebro-spinal functions and derangements, will, I hope, not only corroborate my several positions, and serve to render the whole more acceptable to the considerate practitioner, but it will even assist to define the value of humoral and physical principles in physiology and pathology, if any of the following points can be satisfactorily established:—

1. That lesions of motor fibres, or tracts, wherever situated, have no proper influence but on muscles (and the consciousness of willing).

2. That lesions of sense-fibres, in like manner, only pervert sensation, or give false impressions referred to their organ of sense.

3. That lesions of the cortex of the brain, with its peculiar intergyral and incalculable arcs, and commissural fibres, especially involve mental disturbance.

4. That changes in the meninges have no essential connexion with nervous functions, as to sensibility, mind, or motion.

5. That headache is confined to tissues, without the arachnoid cavity.

6. That the cerebellum and grey centres of the brain, and medulla oblongata, having proper functions, are liable to specific disorders.

7. That the excito-motor arcs of specific functions have their proper and limited derangements, parallel to those of sense and motion, without necessarily disturbing adjacent or commingled systems.

When there is no consciousness of vision, and the iris still remains very responsive to the impressions of light, it would seem that the excito-motory circle is entire, and yet that the communication with the organ of consciousness is cut off. Now, this, theoretically, may occur by partial division of the optic nerve, or by a lesion between the reflex centre and the percipient organ towards the convolutions. So, partial, and no other, divisions of the spinal marrow admit of unconscious excito-motory acts; and likewise of certain pathological sections of sense, or motor fibres, in the hemisphere. It is somewhat remarkable, that scratching often needs more will to discontinue, or shun it, than to begin or persist. Startings of the leg after fracture or amputation, or with simple inflammation of a muscle, do not appear to be necessarily more than muscular or local nerve affections. The painful nerve-hypertrophy, following amputation, does not always cause muscular spasm, nor is the motion certainly of reflex origin when it is produced. The *known* local affections of nerves, in general, do not cause spasm, unless of the muscles they direct.

Subsultus tendinum, in the aggravated stages of meningitis or phrenitis—the isolated mandate fibres of the convolutions being disturbed—is, I think, much to be compared with chorea.

Of fifty patients* in Guy's Hospital with chorea, 13 were males and 37 were females, or 25 and 75 per cent respectively, and I think that females generally, under similar circumstances, frequent our hospitals in the smaller proportion.

Dr. Bright remarks of chronic mild and curable chorea, that, in as far as his observation goes, it is more the disease of males than of females. This, perhaps, is an indirect admission that males have less of serious chorea than females have. He says that, the acute form affects children, more than adults, and females perhaps more than males. His "reports" contain 20 cases of which 4 only were males. Seven cases of chorea, terminating fatally, give but two males, the whole between the ages of 11 and 17 inclusively, the mean being 13 five-sevenths. All these were cases of pretty universal chorea.

The mean age of 48 patients with chorea was 13 years and 4 months. The oldest patients out of 48, were two females, æt. 21. I exclude a male (Dr. Babington) æt. 63. The youngest of 48 were a male and female, æt. 6; this is Hospital experience.—Vide the case of a female with chorea

* I have employed almost exclusively the great work of Dr. Bright, twenty-five cases in Dr. Babington's ample exposition in the Guy's Hospital Reports, and some other cases in the same periodical.

from before birth, until thirty, and after.—*London Med. Gaz.* V. 16, p. 287, and "Mayo's Pathology."

The occasional hemiplegic character of chorea is well known, yet, perhaps, too often overlooked. "In this case," says an able observer, "the disease attacked one side much more than the other, which is very frequently the case, and sometimes the loss of power has been such as to imitate hemiplegia. I have known two cases of this kind so marked, that in one of them the disease was actually mistaken for hemiplegia at the first visit."—(Bright, p. 408.)

The rough table which I have formed, gives me only nine cases in which it is plainly intimated, that the jactitation affected the body generally or universally; whilst in thirty cases, it is stated to have been decidedly hemiplegic, though not exclusively so*.

The right side, generally, is principally accused in fourteen cases; the left in nine, and, besides, the face and left arm twice, and the left arm twice. Thus far, neither side of the body is the more liable to suffer.

The two following notes refer to cases now in Guy's Hospital, and to which my attention was directed by an able observer in the field of rational medicine, Mr. H. Hales.

John B., æt. 8, much wasted. Two months since, he had acute rheumatism and palpitation. He has had distinct pricks, &c., in the left limbs, which are half palsied. Considerable general chorea—apparently convalescent.

A male, æt. 9, wasted after rheumatism and small pox—Chorea, with prickings of hands and feet about dinner time, and usually most after being up some time.

In seven or eight cases of my table, I find something like aura epileptica described: sense of coldness, numbness, pains, &c., usually in the limb most affected.

To this circumstance I attach much importance; it indicates the hemisphere opposite the aura as the seat of disorder, and helps even to indicate the part of the hemisphere involved. Some degree of paralysis in the limb, or limbs, of one side, or in the part most affected with contractions, also refers to the hemisphere. It is the same in chorea as in hemiplegia, the arm suffers more, and before the leg.

Dr. Babington says, that he has never known the leg to be alone affected in chorea, and no one of the histories I have examined, presents such an event. This fairly places chorea above the middle of the spinal marrow.

All the cases of chorea, to which I have referred, indicate decided decay of health; at the best, perhaps, had diet, bad habits, or lactation. The common cardiac bruit of chorea, first noticed by Dr. Addison, as well as the somewhat rarer palpitation, belongs (just as in hysteria) simply to an organ which is unequal to the efforts required of it. Augmented and irregular afflux of blood, from the excited limbs, which at the same time consume and exhaust the muscular nutrition of the body, leaves the heart disproportionately full, weak, and labouring. In many cases of chorea the mind is at least weak. This seems explanation enough of the import of fear, so commonly accused of exciting the disease. A slight, or scarcely real, alarm, or a more severe fright, weeks or months anteriorly, can hardly signify a great deal more. Head-ache is set down to the disease. I find it in more than one-fourth of the cases, and suppose it to occur oftener, and every now and then various other head symptoms likewise, including affections of the special senses.

We are not then without grounds for concluding that the seat of chorea is the brain, hemispherically—the outspreading motor fibres which

* Any hemiplegic affection seems to exclude the idea of any thing but the disorder of a hemisphere. We know extremely little of any cases of spinal affection, principally involving both the arm and leg of one side. Comparatively, we know but little of spinal disease involving one leg; less still of one arm. Superficial disease of the cervical spinal marrow would seem to affect the arms before the legs.

disease may fall upon more in detail, and corresponding sensitive tracts.

The fact that disorder in the cerebral hemisphere may cause pain, or give an erroneously located sense of pain in any and every sentient part of the body, is a grand truth, capable of abundant proof; and it is, perhaps, still more valuable as a severing, if not a fatal blow, to the doctrine of sympathies—that incongruous lumber-house of unexplained pathological phenomena. Either the skin may be morbidly sensitive, or the organ which receives the impression. Sense of pain is caused by disorder in any part of the sense—nerve—tract, and these observations apply to almost every modification of the natural sensations.*

A delicate mother with a sense of faintness and dizziness has occasionally a marked hemiplegic numbness of the cheek, leg, and arm. Surely this belongs to the opposite hemisphere. The auras of hysteria, chorea, epilepsy, and apoplexy, establish this point, and already begin to connect particular feeling parts with their appropriate portions of impressible brain. Heat or swelling, or redness, with local pain, serve to distinguish the true pain. So, with discrimination, the successful use of local applications.

Dr. Wollaston got through a feast, and an ice cream; in the drawing-room, he became lame, with a violent pain in one ankle, then he vomited, and his pain went away.

Sir B. Brodie† tells us also of a gentleman with obstinate severe pain in one instep, causing lameness. He had also stricture, and the pain seemed plainly and exclusively amenable to the bougie. Again, a lady had very severe pain in the left ankle extending towards the little-toe and the sole (some tenderness). This followed the course, and was fairly tractable to the treatment of, troublesome bleeding piles, that is, cold enema and conf. piper. Again, a bullet shut up in the leg, subsequently (perhaps with wasting health) approached the surface, and, now, twitches of the limb and even epilepsy followed. After this the ball appears to have wandered deeper and all spasm disappeared. To all this I have only now to say, let us beware of using a senseless term to foster our ignorance. Sir B. Brodie continues his narrative of facts with the account of a gentleman who, otherwise, in health, lost the sense of touch in one whole arm, yet he had a sense of heat and burning at irregular intervals. Was not this certainly cerebral. At least anaesthesia betokens sense-cords divided, or sense obstructed; while the pain indicates disturbance above the division or obstruction. No cause is advanced by Sir Benjamin. A gentleman (l. c. p. 29) with old stricture suffered regularly from retention for the last half of the night and quinine cured him. Just as I suppose tonics may set an asthmatic bronchitis above the difficulties of daily exposures and evening repletions. The blood and capillaries are sometimes independent parts in pathology. The two affections would be equally amenable for a

* Hysterical sensations, palsies, or spasms, will appear the more real as the affections assume a physiological order and connection. I would rather distrust contraction of an arm and the opposite leg, &c.

† In a work which may be justly styled an ornament to the College of Surgeons and for the instruction of Physicians.—"Lectures on Local Nervous Affections." A gentleman felt great and peculiar pains in one side of the abdomen, and after some time in the other side. His speech was indistinct and drawling. Epilepsy followed for a few years and he died. See the comments on this case (Brodie p. 6) which are very remarkable. A gentleman (p. 8) had a most severe kind of tic in the left cheek, then in the left calf, the first abating. After a few days the pain in the leg gave place to that in the face. An invalid under my own observation, with fever, had a momentary prick in the right cheek, and a few seconds later in the right middle finger. Now, is it not apparent that two or three more of such sensations, on one side only of the body, must contribute with additional force to allocate the actual derangement in the hemisphere, and one or two muscular contractions on the same side would corroborate the conclusion.

time to bleeding, a hot climate, starving, purgatives, a hot bath or a diaphoretic.

We have seen that convulsions have been imputed to the surface of the convulsions, and it might seem staggering to adduce simple cases of tubercle or other lesion confined to the upper parts of the cerebrum attended with convulsions. This question, however, is not to be settled off-hand, or it would have been determined long ago. A simple disorganization in the anterior extremity of a hemisphere may be thus held to produce any cerebral symptom, but we gather, perhaps, that in the same case there was pain at the occiput, or effusion into the ventricles; in other words, proof of more general vascular disturbance, or, that the convulsion was only or chiefly in the limbs of the same side as the brain lesion (*which cannot be*).

Perhaps the convulsion of a limb only interrupts its permanent palsy, which is evidence that the motor excitement is nearer to the spinal marrow than the obstructive lesion of motor brain cords. As pain referred to a senseless limb indicates morbid action between the percipient cortex, and the more settled obstruction of the sense-cords, common head-ache, or febrile disturbance alone, is a positive objection to the idea of a *confined* cerebral disorder.

The symmetric tendencies of disease are very often marked enough in the brain, and I venture to draw a simple inference from the fact, not doubting that, in the end, it will generally be conceded. In a given case, there shall be spasm, or even palsy, of the *right* arm, with signs of general brain lesions, and the only disorganization discovered is towards the hind part of the *right* cerebrum. Now, I assume at once, (not without well explained exceptions) that there must be a certain incipient disorganization in the corresponding *left* cerebrum to account for the affection of the *right* arm. It is no wonder to me that, the discovered lesion (confined within limits) has not seemed to involve the opposite arm, even though it be true that a smaller lesion seems at times to paralyze the limb. It is enough for me that, in the main, this lesion causes that palsy—exceptions apply more strongly to our perceptions than to the course of nature. No one expects to meet with such exceptional cases, as an obstruction of the pulmonary artery causing difficulties in the left heart instead of in the right.

The partial palsies which precede convulsions, or which follow or alternate with them, may serve to indicate the centre or "point de depart" of the nervous disturbance, and such do not look like mere superficial brain-lesions.

The cause of the subsidence of convulsions, and of their usual transitory character, may be in the varying state of the circulation. When all is easy, specific causes determine altered circulatory acts in the motor tracts of the brain: perhaps the surface of the brain is oppressed (coma), or some excitement (delirium) may follow. The head and face often betray turgescence, &c., from the beginning. Perhaps there is headache, or it follows. It ought not to be very wonderful if universal spasmodic efforts, even to the obstruction of respiration, and arrest of the pulse, should speedily cause so much retardation in the cerebral circulation as to stop disease, and not only disease, but, in a manner, life itself.

These considerations may have weight in therapeutics; and when we consider cranial hypertrophies and thickenings of meninges, with ulceration, &c., as part of the morbid effects in epilepsy, we see still more cause to value the like considerations.

The exhaustion of muscle, whatever it consists in, tends to rest. The more equal or diffused distribution of blood relieves the brain, as ligature of a limb; time and secretion have consumed the spare support of life and action, and the epileptic sleeps. I deem it premature to attempt to define the specific passing changes of sense or motor cords which produce symptoms.

Dr. J. Gregory observes: "It is impossible to overlook the fact that in a very large proportion of cases of cerebral, or idiopathic epilepsy, there is preternatural fullness in some part of the vascular system of the brain. This is an important feature in the pathology of epilepsy. . . .

Epilepsy occurs in persons of full habit of body and indolent mode of life; the fit is generally preceded by headache, flushings of the face, and throbbings of the carotid and temporal arteries; it is brought on, in many cases, by great muscular exertion, as in parturition, by stooping, intoxication, heated rooms, and above all by violent fits of coughing, such as occur in severe whooping cough. The hysteric form of the disease is only one of those many consequences of obstructed menstruation, of which the prevailing character is irregular determination of blood. Paroxysms of *convulsion* are occasionally connected with a state of cerebral circulation, directly the reverse (of turgescence of vessels); as when we see them following large bleedings at the arm, double amputations, or excessive purging." (p. 378.)

The more we understand of the nature and seat of the convulsive excitement, the more we shall see cause to distinguish different kinds of cases. The course and aspect of epilepsy certainly appear congestive. The various hypernutritious of cranium and meninges, and even the ultimate alterations of brain substance, are all consequences and indices of protracted, though varying, or rather repeated, disturbances of capillary, or nutrient, acts.

It cannot be out of place to shew once more the due relation of these views to practical matters, as well as to a pathology more rational than sympathy.

I know of no kind of difference between the development of a tooth, and that of any one part of the body. Can the arm double its length, and redouble its struggles, without stretching the axillary plexus. I am persuaded that all physiology is against the vulgar heap of teething mischiefs, and I know of nothing yet settled of the real pathology of the matter.

With regard to the visceral inflammations which so constantly follow paraplegia, it cannot be right to omit all reference to the unusual circumstances under which the abdominal organs are placed when deprived of the support of the parietal muscles. The arterial circulation is devoid of a wonted resistance, and the venous and lymphatic currents are deprived of support, and of impulsion, in a material degree; and if to these effects we add those circumstances of local disturbance which operate more partially, as irritation of ammoniacal urine, of secretions too long retained, or of gaseous elimination, we may not, certainly, safely attribute all the disease to a single specific defect of innervation.

The great organ, the skin, has its functions suppressed or perverted: and physicians hardly teach that this is more than a sign. Some talk of the waste of perspiration, as if the loss of water were the grand evil. Medical men themselves, their wives, and children, at every age, suffer and die from unconscious neglect and exposures—rare and sudden, or repeated and insidious mischiefs to the surface of the body, and yet how few regard it. How little attention is paid to the simple consideration of the natural balance of its functions, whether to restore health, to obviate disease, or to support and comfort the feeble and the delicate, the infant and the aged.

I admit that it is easy and very common to overrate one set of pathological or of therapeutic causes. To rebut such a charge against myself, I shall only appeal to what I have elsewhere repeatedly written. But I am once more urgent to ask, which is the organ of the body, so vast, so exposed to mischief, to remedies, or to palliatives, and, at the same time, so neglected, as the skin?

It is comparatively well for the vigorous and healthy to despise these reflexions and objects, but the time comes when none may do so with impunity, and this is when the patient seeks the aid of medical judgment.

How many disregard through life the points of practice I refer to. A medical friend* had a little son, with variable bronchial affection, under different kinds of treatment for ten months. Nothing availed until an Arnott's stove was introduced into the nursery. In ten days the child was well, and has not since been affected, unless transitorily. Are the air tubes the only parts influenced by cold? Another contends that an obstinate vary-

ing incrustation of the face, which, for anything I know, is also in part catarrhal, must remain until teething is ended.

I would continue to hope that only a rude analysis of physical, humoral, and nervous matters in health and disease, will yet render remedies, more and more rational.

36, Bedford-square.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 295.)

Although there are still some varieties and modifications of dysmenorrhœa, as also of the other derangements of the catamenia, (menorrhagia, &c.) of which I propose to give some illustrations, yet, as these are chiefly owing to their being complicated with affections of neighbouring organs, I must delay the consideration of them until I have described some of the affections which we usually observe to exert a modifying influence upon this function. Of these I think I may say that *oophoritis*, or inflammation of the ovary, will foremost claim our attention; not only on account of the ovary being deemed essential to the catamenial discharge, but because we seldom see derangements of the menstrual function exist to any considerable extent without more or less irritation of the ovaries, and, I think I may say, we never see ovarian irritation existing without more or less derangement of the uterus.

It is a curious circumstance, that the left ovary is affected with inflammatory action much more frequently than the right;—thus, in twenty-one cases, the right was affected in only three instances. Why, or wherefore, this is so, I do not pretend to explain, but merely state what is, I presume, a well known fact to all who are in the habit of observing this class of diseases.

Acute oophoritis is not a very common affection, except in certain forms of puerperal fever, where the disease appears to spend its virulence upon the peritoneum, especially where it covers the uterus and ovarium. In the unimpregnated state, it chiefly occurs in connection with suppression of the menses, in consequence of cold, or any other suddenly acting cause. The patient is seized with severe pain in one groin, darting towards the bladder and rectum, increased by pressure on the part, and with a feeling, to the patient, of being swollen, which is sometimes also perceptible to the eye and hand of the practitioner. The pain usually spreads over the abdomen with considerable rapidity, from the peritoneum becoming involved in the inflammatory attack, so that not unfrequently the symptoms of the original disease appear lost or merged in the much more marked phenomena of acute peritonitis.

In the subacute and chronic form, which is by no means uncommon, the local symptoms are better marked, from not being attended with any severe inflammatory attack of the peritoneum or neighbouring viscera, although it is usually complicated with more or less derangement of the rectum, bladder, and especially the uterus, causing in the latter case severe dysmenorrhœa, which, as far as my own experience goes, is mostly attended with exudation of fibrinous matter at these periods. The pain, as in the acute form, is situated in one or other groin, or rather the hypogastrium, mostly to the left, darting towards the bladder or rectum, or extending down the thigh. It is almost always aggravated just before the appearance of the catamenia, at which time it frequently assumes more or less of an acute character, until relieved by the discharge. The pain is also increased by the act of straightening the thigh upon the pelvis, as in the erect posture, by which the integuments are put upon the stretch, and pressure thus exerted over the part. Thus, some patients are unable to maintain the erect posture without resting the foot of that side on a stool, so as to keep the thigh more or less bent upon the pelvis, and thereby the integuments, &c., are relaxed. There is frequently much irritability of the bladder, the

* Mr. T. Leadham, of Southwark.

patient being unable to retain more than a small quantity of water at a time, and the evacuation of it is occasionally attended with much pain and strangury. In such cases, the pain above the symphysis pubis is sometimes as prominent a symptom as that in the groin, and might thereby lead a careless observer to suppose that the bladder is really the seat of disease. The passage of the fæces is also attended with pain and tenesmus; the distension of the rectum, at that moment, especially if there be a degree of constipation, causing pressure on the inflamed and swollen ovary.

The difference in, what I may call, the accessory symptoms, depends on whether the anterior or posterior half of the ovary be the seat of the affection; the symptoms of derangement of the bladder being chiefly observed in the former, and those of the rectum in the latter case, thus enabling us to form a more correct diagnosis as to the precise nature and situation of the disease, and to arrive at greater certainty as regards the plan of treatment.

On examination *per vaginam*, we shall find pain on pressure at the upper part of the vagina, on the side of the affected ovary, and if considerably swollen and indurated, we may be able to feel it, although indistinctly, in this direction. The os and cervix uteri also frequently appear to be painful, but the pain of which the patient complains is, on careful investigation, not referrible so much to the uterus itself, as to the side of it when pressed against the ovary. It is, however, the examination *per rectum* to which we must look for our most important means of gaining information; for being able by this means to reach high up along the posterior surface of the uterus, we can now detect the ovary with great distinctness, if only slightly enlarged, as a knuckle-like projection, seated a little in front of the sacro-iliac synchondrosis of that side. In a state of health, the ovary does not appear to be painful on gentle pressure; but now it is intensely tender, and the patient herself will frequently exclaim, that the medical man has touched for the first time the seat and centre of her sufferings. Even when the ovary is not sufficiently enlarged to be distinguished with certainty, the great tenderness in the direction of this organ will pretty surely indicate the character of the complaint.

During the examination, *per rectum*, the other hand should be placed upon the groin of the same side, and we shall find that, on holding the finger still, which is in the rectum, and slightly, but suddenly, pressing upon the groin with the other hand, we shall produce the same intense pain in the posterior part of the pelvis, as we did when pressing directly upon the ovary with the examining finger. We shall also find that pressure on the ovary, *per rectum*, produces pain in the groin as distinctly as when the groin is pressed upon externally. If the ovary be sufficiently swollen and indurated, and the patient not too fat, pressure on the groin will, also, distinctly move it against the finger in the rectum, and the patient will frequently say that we are now holding the painful part between the fingers of both hands. If the swelling of the ovary be still more considerable, the passage of solid fæces will be attended with much difficulty as well as pain, and they will assume a more or less flattened shape.

The treatment of the acute form does not differ essentially from that of peritonitis and other abdominal inflammations, except that, when the symptoms have been subdued by the appropriate measures, pretty free inunction, with mercurial ointment, of the affected groin, has been deemed necessary to complete the cure. It is, however, to the treatment of the subacute or chronic form, to which I wish more particularly to direct your attention, as being of far more frequent occurrence than the other. This will, in some degree, vary, according to the character of the symptoms, and the part of the ovary which appears to suffer most. If the pain in the groin, and the bladder symptoms, be the most prominent features of the complaint, I know of no application so efficacious as the antimonial ointment well rubbed into the part, and, when the eruption comes out, applied by a piece of lint, until a slight degree of sloughing is produced. The only objection is, that the patient is

occasionally attacked with nausea, faintness, and other symptoms, from the system having been brought under the effects of the antimony. The bowels should be cleared out by a brisk mercurial purge, and afterwards kept open by some gentle unirritating laxative. When, on the other hand, the symptoms indicate that the posterior portion of the ovary is chiefly the seat of the disease, four or more leeches should be applied directly to the ovary by means of a tube, to be introduced up the rectum. The relief thus experienced is frequently very striking; the pain, for a time, entirely disappears, and the patient feels as if she had lost every trace of the complaint from which she had been suffering so severely. On examination, the ovary will have, in great measure, lost its extreme tenderness to the touch; if previously hard and swollen, it will now be softer and smaller, and the throbbing which probably existed before the application of the leeches will be much diminished.

S. P., æt. 28, mother of two children; delicate looking.

Feb. 16th, 1836.—Much pain of back and loins; severe pain in the left hypogastrium, much increased by pressure, and extending along the crest of the pubic bone; sense of fulness in the part, and of heat in the vagina; numbness of the thigh; irritability of the bladder, and frequent desire to pass water; urine has a red sediment, and scalds her when passed.

Hirud. x hypogast. sinistro; confect. sennæ p. r. n.

Feb. 23rd.—Pain partially relieved, but only for a time, and is now as severe as before.

Examination *per Vaginam*.—Os uteri large, soft, and nearly closed; lips transverse; cervix very short and thick, very painful on firm pressure, especially on the left side; uterus hard and solid.

Cucurbitulæ cruentæ hypogast. sinistr. ad. 3x. Rep. Confect. sennæ.

March 15th.—Symptoms were again relieved for a few days, but have returned; bowels regular, but apparently not healthy; tongue coated.

R. Pil. hydrarg., extracti hyoseyami aa. gr. v. o. n.

R. Potassæ bicarb. 3ss., succi limonum q. s. ad saturand. Aquæ 3iss. M. Ft. haust. ter die sumend.

R. Unguent. antimonii potass.-tart. hypogast. sinistro mane et nocte infricand.

22nd.—Although she has not rubbed in the antimonial ointment sufficiently, it has produced decided relief. Pergat.

29th.—Feels much relieved by the ointment, which has brought out a copious eruption; she has still pain of back, and frequent desire to pass water, which scalds her. Rep. Pilulæ et unguentum.

R. Sp. ammon. arom. m. xx., sp. ætheris nitr. tinct. hyoseyami aa 3ss., aquæ menthæ viridis 3iss. M. Ft. haustus ter die sumend.

April 5th. Feels better; the sensation of numbness of thigh and heat in the vagina are diminished; the pain of hypogastrium is most severe where it extends along the crest of the pubic bone; frequent desire to pass water; slight leucorrhœal discharge.

R. Pil. hydrarg. chloridi comp. gr. v. m. et n. Hirud. x. hypogastrio sinistro. Rept. mistura.

12th. The pain in the left hypogastrium has returned.

On examination, *per rectum*, the uterus felt hard and painful; was not certain that I could feel the ovary.

Rep. pil. mistura et unguent. antimonii.

19th. Pain of left side much relieved by the ointment, which has brought out a copious eruption; there is still much irritation of the bladder, although the water is not so high coloured as before. Rept. mistura et pilulæ.

26th. Pain has again returned. Rep. med. et unguentum.

May 10th. I advised her to continue the friction with the ointment, after the eruption had appeared, until a complete confluent crust had been produced, even to a degree of sloughing. The side is, therefore, extremely sore, but the pain entirely relieved.

R. Pil. hydrargyri, extracti gentianæ aa. gr. v. o. n. Rept. mist.

17th.—Has been much easier since the excoriation produced by the antimonial ointment. Her mouth has been slightly affected by the mercury.

R. Extracti gentianæ, extract. coloc. co. aa. gr. v. o. n.

R. Haust. sennæ co. pro re natâ, mane sumend. Rep. mist.

31st.—Feels very easy, although she has occasionally slight pain in the left groin; pulse rather sharp. Pergat haust. sennæ.

June 7th.—Is free from pain, but has a slight sensation of fulness in the left hypogastrium. Rep. pil. et haust. sennæ.

14th.—Feels nearly well.—Pergat.

21st.—Has had a little pain in the left hypogastrium.

The situation of the pain being entirely in front, with irritability of the bladder, and the absence of any distinct ovarian enlargement to be felt, *per rectum*, showed pretty clearly that the anterior half of the left ovary was affected; and from this circumstance I hoped to relieve the symptoms by local depletion; but, although it was actively used, only temporary relief was produced. On the other hand, although the ointment was imperfectly applied in the first instance, it was attended with decided improvement, but it was not until I had persuaded her to bring the part nearly to a state of sloughing, that I succeeded in entirely removing the disease. I regret much that the state of the menstruation was not noted, but I was not at the time aware of the close connexion which existed between oophoritis and dysmenorrhœa, particularly when accompanied with fibrinous exsudations, and as she did not complain of any peculiar derangement in this respect, I may presume that this function was in a tolerably healthy condition. In six months after the last report, I again saw my patient; she then considered herself to be already three months pregnant; she went her full time, and was delivered without any deviation from the natural course of things. I met her again, by accident, after another considerable interval, and she informed me that she was enjoying good health.

ON THE PROXIMATE CAUSE OF TUBERCLE AND THE TREATMENT OF PULMONARY PHTHISIS.

By J. H. TOSSWILL, Esq., Surgeon, Leicester.

(Continued from page 266.)

In the healthy condition, as much carbon, taken in the shape of food, is applied to meet the demands of the animal economy, as there is parted with in the urinary secretion, and under the form of carbonic acid.

Should it happen that carbon and hydrogen, received into the system, are in excess, and oxygen is in deficiency to combine with them, the formation of fat results, which formation, at some subsequent period, when the admission of food is impracticable, may serve as a reservoir of those elements necessary for combination with oxygen, without the prejudicial effects of this latter element combining with the carbon and hydrogen of the organic tissues themselves. If, on the contrary, it should occur that carbon is deficient in the system, that, either it cannot be received in the shape of food, or if the elements of the aliment taken are not properly prepared by the digestive process for entering the circulation; then, oxygen being in excess, wasting of the body will occur: the organic tissues furnishing, by their own decomposition, that carbon and hydrogen which *must* combine with oxygen. When the metamorphosis of the tissues, taken up by the circulation, is not in adequate quantity to supply the demands of oxygen (if animal heat be not kept up by clothing, or a non-azotised diet), the temperature of the body falls, and, with it, that of the lungs; their vitality is diminished, and the oxygen attacks their tissue, the result of which is, irritation and inflammatory action in them.

The food of man presents two great and opposite characters—namely, that which is azotised, and that which is non-azotised. The azotised constituents are entirely engaged in the nutrition

of the body; they contain, in themselves, the precise elements of the blood, and are converted in the animal body into that fluid, and, finally, from it into organic tissues; all these changes being nothing more than varieties in appearance, not changes in chemical character. The elements, furnished by that source, supply the waste which is perpetually occurring in the body, and which waste is the result of motion.

The non-azotised class contains those principles which are intended to support the respiratory process, and serve for the production of animal heat; they are entirely unconnected with the process of nutrition, otherwise than in furnishing those materials, carbon and hydrogen, which, by combining with oxygen, sustain the temperature of the body, and prevent this latter gas from entering into combination with the organic tissues.

We have seen, when the changes effected during the circulation were considered, how the two constituent components of alimentary matter (that is the azotised and non-azotised principles) are applied in the nutrition of the body, and in the supply of material for the support of respiration. We have also learnt, that the changes which the food effects, in modifying the functions of those parts engaged in the production of animal heat, must be dependant upon the proportionate amount of daily consumption of the nitrogenised and of the non-nitrogenised constituents, and must likewise be influenced by the number and action of the red globules contained in the blood. The nitrogenised portion of the food, we know, is entirely applied to the nutrition of the body, and formation of the blood; consequently, the more the system has been wasted by exercise, by disease, or by any other cause, which may produce a transformation of the tissues, the more essential and urgent is the demand for azotised material, to make up, by a speedy addition, the continual waste which has taken place in the body. A superabundance of food, containing this principle (nitrogen), that is, a quantity supplied to the system more than is sufficient to compensate for the metamorphosis of the organic tissues, causes a general plethora, the blood-vessels being distended from excess of food.

No more nitrogen, in the shape of food, should be taken into the system than there is excreted. The elements of the azotised products contain about 17 per cent. of this principle; organic tissues, and blood, contain the same amount. If, therefore, we discover in the excretions of an animal, in the course of twenty-four hours, 17 grains of nitrogen, it is clear that 100 grains of its organic tissues have been metamorphosed, and that nutritive material, containing 17 grains of nitrogen, must be taken to renew the amount of disintegrated organism. Individuals, therefore, who are subject to great privation of food, and are engaged in laborious occupations, are continually favouring a rapid transformation of their tissues, without having it in their power to take that nourishment, which may, in equal ratio, restore them, the consequence of which is a speedy emaciation of the whole body.

The non-azotized portions of the food, as we have seen, have a part equally important to perform; namely, to support respiration, and to prevent, by the amount of carbon and hydrogen which they supply (and which cannot be employed for the purposes of nutrition), a decomposition of the solids by the action upon them of the oxygen obtained from the atmosphere: the substances which compose this class: are fat, oils, starch, gum, and sugar; and it is by a plentiful supply of these articles, which are abundantly formed in the various grains and vegetables employed as food, that the system is enabled to furnish sufficient material to combine with the high amount of oxygen taken into it in cold countries,—an amount supplied by a condensed atmosphere for the purpose of supporting animal heat. If these elements are not received in sufficient quantity to meet the exigencies of the climate, the tissues of the body, as it has been previously observed, are decomposed to furnish carbon and hydrogen to combine with oxygen. This may be accomplished in two ways. First: where exercise is taken, and sufficient disintegration of matter, the result of

motion, is afforded for the demands of the inspired oxygen, attended with general emaciation of the body; secondly: when little or no exercise is indulged in, and consequently when little or no material from organic metamorphosis is afforded to sustain the temperature. In such case, provided the animal be deprived of food whose character is essential to respiration, and of that exercise which may give it the opportunity of preparing from the organism those principles which are urgently required, the blood globules, as they arrive at the lungs and are submitted to the action of oxygen, will first become decomposed, and yield up their elements to combine with that gas, and, finally, the causes continuing, whilst the supply from this source (the globules) fails, the substance of the pulmonary tissue itself will ultimately become involved; this condition is, however, never carried to a point so desperate: but is, I apprehend, often partially manifested; and this is doubtless the case in those diseases (phthisis for example) accompanied with a gradual diminution in the number of red globules contained in the blood,—a result occasioned by an inadequate supply of that food intended for the purposes of respiration, combined with an insufficient amount of exercise to furnish the necessary disintegration of the animal tissues.

From either of these causes, the sufferer will speedily undergo emaciation; and if, in addition to the want of a proper supply of food, there be added laborious exercise as a cause of increased consumption of carbon, the emaciation and disintegration of tissue will increase in equal ratio. Again, the food taken, although in abundant quantity, may possess an unsuitable character for the occupation of the consumer; thus, if circumstances compel the daily expenditure of force in the shape of mechanical exertions, and, consequently, a waste of the tissues is occasioned proportionate to the amount of motion,—an equivalent to this loss should be supplied in the form of a nutritive or azotised diet, since food of a non-azotised character, although fulfilling all the purposes of respiration, is unable to furnish those elements on which the renewal of disintegrated parts depends. Combination of the oxygen, carried by the globules, with the carbon of the decomposed parts, would still continue in the capillaries, whilst the abundance of a non-azotised diet, affording more carbon than is necessary for the production of animal heat, would furnish the elements for the formation and deposition of fat in the cellular tissue, emaciation slowly progressing; at the same time, in the muscular system, &c. Equally imperative is it for the individual of sedentary occupation to adapt himself to his position. Withdrawn from the necessity of muscular exertion, there is but little waste, and consequently a highly nitrogenised aliment is not required. Experience teaches him to diet himself with those light substances which, whilst they fulfil all the demands of respiration, avoid the production of an unhealthy condition of plethora.

That the globules of the blood act a very important part in the production of animal heat, cannot be doubted; they serve the purpose of carriers of oxygen, which they part with in the capillaries to the carbon and hydrogen of the decomposed tissues, with evolution of heat; the remainder of those elements, which have not combined in this situation with the oxygen, furnished by the globules, being sent to the liver, there to be secreted as bile previous to its consumption in the lungs. Now, it must happen that, if the number of the globules contained in the blood be great, a considerable quantity of oxygen will be conveyed by them to the capillaries, and a high amount of combination will there occur between the oxygen and the carbon and hydrogen it meets, and a less amount of combustion and function will happen in the lungs; for it should be remembered, that the lungs only *disengage* the carbonic acid formed in the *capillaries*; whereas they have to furnish the field for *combination*, as well as *disengagement*, for that carbon brought to them as bile.

On the other hand, if the globules be deficient in number, whilst the decomposition of the tissues is being rapidly produced by mechanical efforts, and carbon is taken into the

system as usual, then these vehicles of oxygen being few, the amount of oxygen conveyed to the capillaries is diminished, whilst the surplus and superabundant supply of disintegrated material, which is conveyed to the liver, and then to the lungs, to be there oxydised, supports the animal temperature, and at the same time probably increases local heat, producing in the lungs an increase of function, shewn by an increased number of respirations, congestion, irritation, and inflammatory action:—inflammatory action being the manifestation of chemical combination in living tissues.

A balance between the pulmonary, cutaneous, capillary, and hepatic functions, is, therefore, essential to health; and a balance between the number of globules contained in the blood, and the amount of tissue disintegrated, should be also established for the same purpose.

When the respiration is frequent, the atmosphere dense, the food plentiful, the occupation laborious, the number of the globules of the blood should be increased, in order that they may carry an adequate amount of oxygen, thus to promote capillary combination, and thereby save the lungs a considerable amount of function.

This is the reason, obtained from practical observation, why the inhabitants of northern climes take more animal food than those of the south. By the active state of the respiration, much oxygen is admitted, and by the decomposition of the organic tissues, the result of laborious exertion, much carbon is furnished. The native of the south, on the contrary, living in a climate highly rarified, whose temperature nearly equals that of his body, cannot perform the same amount of mechanical labour, and needs not the same amount of carbonaceous food. The nitrogenised constituents of the body being but little affected by motion, metamorphosis of the organic tissues is, therefore, carried on to a less amount, and a food less azotised is required; caloric not being so readily abstracted from the body, less carbon is demanded, in order to keep up animal heat. The air, by reason of heat and moisture, being highly rarified and deficient in oxygen, less of this gas is taken into the body by the lungs, and, the amount of function being less, the amount of disease, as a result, is also less; the digestive organs having likewise a smaller amount of function to perform, they fulfil that diminished amount better, and assimilation and digestion are equally improved by the diminished activity of organic function. Instead of subsisting upon a food highly azotised, as do the inhabitants of a colder and more variable climate, they partake of that aliment which contains in it the least amount of nitrogenised principles, selecting such fruits and vegetables whose amount of carbon and nitrogen, in the same weight, is far inferior to that contained in the food of the inhabitant of the north.

EXPERIMENTS CONCERNING THE GAS EVOLVED BY PLANTS,

By Dr. HERMANN HOFFMANN,

Professor of Physiological Chemistry and Botany, in Giessen.
Translated, at the Author's request, for the MEDICAL TIMES, by Dr. SHERIDAN MUSPRATT, Fellow of the London Chemical Society.

(Continued from page 321.)

21. *Agaricus Spectabilis*.—Plucked 12 hours previously; grows in an intercepted light in forests. The experiment in the morning, by feeble sun-shine, lasted 105 minutes; weight = grm. 182.8, (8.5 p. c. residue = grm. 15.5); carbonic acid = grm. 0.043.

100 grm. in 100 minutes, moist mushroom = carbonic acid, grm. 0.022. Dry = grm. 0.142.

22. The above mushrooms, on the same day; they laid exposed during the interval. The experiment, in the dark, lasted 125 minutes; weight, as above; carbonic acid = grm. 0.040.

100 grm. in 100 minutes, of moist mushroom = carbonic acid, grm. 0.017.

On contrasting the two, it will be found that there is an excess of carbonic acid for the sun-light.

23. *Agaricus Muscarius*. L.—Plucked about 16 hours before, and appeared very sound; grows in a forest. The experiment, in the morning, by a dull light, lasted 115 minutes. Temperature 56° F.; weight, grm. 116.5, (5.0 p. e. residue = grm. 5.82); carbonic acid = grm. 0.039.

100 grm. in 100 minutes, moist mushroom = carbonic acid, grm. 0.029. Dry = grm. 0.498.

24. The same mushrooms were left uncovered until the evening. The experiment, in the dark, lasted 107 minutes; weight, as above; carbonic acid = grm. 0.035.

100 grm. in 100 minutes, moist, &c. = carbonic acid, grm. 0.027.

25. The foregoing mushrooms were experimented upon the following morning, during feeble sun-shine. The research lasted 120 minutes; weight, as in the preceding; carbonic acid = grm. 0.049.

100 grm. in 100 minutes, moist, &c. = carbonic acid, grm. 0.035.

26. The above mushrooms. The experiment was performed in the evening of the same day, as 25; it lasted 120 minutes; weight 116.5; carbonic acid = grm. 0.030.

100 grm. in 100 minutes, moist mushroom = carbonic acid, grm. 0.020.

It is evident, from what has been stated, that the quantity of carbonic acid, evolved by the fungi, is in itself very considerable, (a frog expires, upon 100 grm. in 100 minutes, 0.02; a cat, 0.26; and a pigeon, 0.48 grm. carbonic acid) and that it increases in sun-light, in a ratio proportionate to the maturity of the mushroom, while with the vesicular plants, the contrary is the case.

Experiments with Green Plants.

27. *Hypnum Trignetrum*. L.—Plucked 16 hours previously. The upper green portion, serving for the experiment, was lopped off from the under, which was somewhat withered. The experiment in the morning, during partial sun-shine, lasted 100 minutes; temperature, 52° F. in the shade; weight = grm. 20.0, (40.9 p. e. residue = grm. 8.2); carbonic acid = grm. 0.042.

100 grm. in 100 minutes, moist plant = carbonic acid, grm. 0.210. Dry = grm. 2.561.

28. The same moss had remained uncovered during the day. The experiment in the evening lasted 130 minutes; temperature and weight, as above; carbonic acid = grm. 0.084. Dry = grm. 1.024.

There appears an excess for the experiment performed in the sun-light.

29. *Hypnum Tamariscinum*.—Had remained for some days in a tin box, without suffering any change. The experiment in the morning, by clear sun-shine, lasted 115 minutes; weight = grm. 12.0; carbonic acid = grm. 0.012.

100 grm. in 100 minutes, moist = carbonic acid grm. 0.087.

30. The same moss had remained exposed during the day. The experiment, in the evening of the same day, lasted 139 minutes; weight, as above; carbonic acid = grm. 0.011.

100 grm. in 100 minutes, moist = carbonic acid, grm. 0.066.

There is an excess of carbonic acid owing to the action of the sun-light. This moss contained much less water than No. 27. The mosses appear to comport themselves like the mushrooms.

Vesicular Plants.

31. *Euphorbia Peplus*. L.—Being perfectly fresh, it was cut off at the *nodus vitalis*, and then inserted in a beaker-glass. The experiment was performed in a very dull light, and lasted 130 minutes; weight = 19.5 grm.; carbonic acid = grm. 0.014.

100 grm. in 100 minutes, moist = carbonic acid, grm. 0.059.

32. *Urtica Urens*. L.—Prepared like the preceding. The experiment in the morning, by very weak sun-light, lasted 130 minutes; temperature 54° F.; weight = grm. 22.2, (17.5 p. e. residue = grm. 3.885) carbonic acid = grm. 0.014.

100 grm. in 100 minutes, moist = carbonic acid, grm. 0.048. Dry = grm. 1.236.

33. The same plant remained uncovered until the evening. The experiment, in the dark, lasted 175 minutes; carbonic acid = grm. 0.042.

100 grm. in 100 minutes, moist = carbonic acid,

grm. 0.108. There results a deficiency for the action of the sun.

34. *Cichorium Endivia*. L.—Salad. An upper bunch of leaves, cut off quite fresh, soon closed at the incision from the exuding *latex*. The experiment performed in the morning, in clear sun-shine, which fell particularly on the under part of the leaves, lasted 90 minutes; weight = grm. 62.0, (9.2 p. e. residue = grm. 5.704); carbonic acid, grm. 0.013. 100 grm. in 100 minutes, moist = carbonic acid grm. 0.023. Dry = grm. 0.403.

35. The same plant had remained exposed for some time prior to the examination. The experiment, in the evening of the same day, lasted 125 minutes; weight, as above; carbonic acid = grm. 0.080.

100 grm. in 100 minutes, moist = carbonic acid, grm. 0.103. There is a minus of carbonic acid owing to the solar influence.

From the foregoing observations, it appears that the conditions of vegetation of the cellular plants, the green as well as the others, differ materially from those of the vesicular ones.

If we consider, in general, the position of the parasites in the vegetable kingdom, and divide them into two classes, we find those nourished by the unchanged sound juices of other plants (and animals) and which we regard as injurious: *e. g.* the mistletoe, the *coranthæ*, and the *hypocistæ*; and those obtaining their nutriment upon or from the residues of an extinct vegetation—or, humus, &c.; to this class belong most mushrooms, mosses, and lichens. We assume them as signs, but not causes, of a bad condition of the saps.

It is obvious, that this behaviour corresponds to that represented in the animal kingdom by the two principal classes of the rapacious animals, viz., such as live on carrion, and such as subsist upon fresh* meat. The relation which they bear to other animals, is the same as that of the parasites to the other plants, which transform the more simple ingredients of the air and soil into more and more complicated forms, in order to afford sustenance and life to those species that are organized in a different manner—be it during their own maturity, or after their decay. Here, we recognize again the wonderful means, by which the innumerable forms of life are able to balance one another. It is almost needless to add, that the carbonic acid is, in the above respect, particularly decisive, and that this must be further the case, so long as the more direct means of nourishment of plants are not better understood—of the mother-plants as well as of the parasites.

Plants, deriving their texture from simple sources; *e. g.* from carbonic acid and water, expire oxygen under the solar influence, while the carbon and hydrogen remain; whereas, those to which prepared aliments, and in some cases substances resembling humus, are administered, behave in a contrary manner; *i. e.*, they evolve carbonic acid. They lack even the organs for generating oxygen, and are mostly void of *chlorophyl*;† or else, if they possess a green tinge, it is readily distinguishable from that imparted by the *chlorophyl*.

If we arrange the analogous cases, in the foregoing series of experiments, and select from each species an experiment made by daylight, we shall find that the content of water has had no influence whatsoever upon the quantity of carbonic acid which has been developed.

There appears, from the experiments, no constant difference between the mushrooms arriving at maturity in the solar rays, and those growing in the intercepted light of a forest.

The beginning decomposition might seem, to some, to be the most essential reason for the exha-

* Liebig has remarked, that some vegetable soils, such as those of America, contain vegetable matter in large proportion; and as these have been found eminently adapted for the cultivation of most plants, the organic matter contained in them has naturally been recognized as the cause of their fertility. To this matter the term, "vegetable mould," or *humus*, has been applied.—

Trans.

† The green colouring matter of leaves, &c.—

Trans.

lation of carbonic acid; but this is ascertained not to be the fact, partly by the appearance and quality of the mushrooms employed, and partly because the carbonic acid does not increase or diminish, in a proportionate ratio, from the time of the lopping of the fungi, if we do not overlook the quantity of water in the mushrooms, which necessarily assists decay.—(Vide 6 and 7, 14 and 16, 4 and 21, &c.)

The temperature, also, does not present any constant influence, because the same species gave different quantities of gas at the same temperature, but in a different light.—(Vide 6 and 7, &c.)

ENCEPHALOID TUMOURS IN THE ABDOMEN MISTAKEN FOR EXTRA-UTERINE PREGNATION; QUESTION OF CÆSAREAN SECTION.

(From our Dublin Correspondent.)

THE report of the proceedings of the Surgical Society of Ireland includes an account of one of the most instructive cases on record, and of the facts of which we were previously aware. It is an instance of encephaloid disease of the abdomen, simulating so closely the form of a foetus, that it was about to be made the subject of the Cæsarean operation. We shudder when we imagine a human abdomen laid open for the purpose of extracting a foetus, and exposing to the panic-stricken assembly a mass of malignant disease.

The subject, a woman thirty years old, and the mother of four children, was admitted into St. Vincent's Hospital on the 28th September, 1844. She was delivered of her last child three months before, and a tumour was then discovered in the abdomen. She was seen before admission by two practitioners, who decided on the existence of an extra-uterine foetus, and their opinion was agreed to in the hospital by Sir P. Crampton, Drs. Beatty, Montgomery, Evory Kennedy, J. Labatt, Churchill, Bellingham, and others. The question of operation was now discussed, but some gastric irritation occurred, and caused its postponement. On the subsidence of these symptoms, the question was renewed, and the professional world was full of the approaching operation, when Mr. O'Ferrall, the chief surgeon of the hospital, arrived in Dublin from a visit to the country.

Another consultation was now held; the majority were for immediate operation, on the ground that the patient's constitution would suffer from delay. Dr. Evory Kennedy advised delay, as, from Dr. Davis's report, the general result of operation was unfortunate before adhesion had taken place. Mr. O'Ferrall wished for delay, in order that he might have an opportunity of examining the patient, and a further postponement was agreed to.

Having examined the case, Mr. O'Ferrall did not hesitate to record his opinion. We have seen a copy of his letter to his colleague; it is as follows:

"I had an opportunity of examining the patient by the touch, for the first time, yesterday.

"I cannot recommend you to operate,—and this, not on the grounds of present inexpediency, but of diagnosis.

"In differing with so many professors, eminent in their own department, I do so, of course, with reserve; but as it involves a question so grave as that of Cæsarean section, I think it my duty to hazard the opinion, in order that it shall obtain consideration.

"The impression made on my mind is, that it is one of malignant disease.

"Yours, truly,

"J. M. O'FERRALL.

"Nov. 2nd, 1844."

This opinion altered the proceedings, though not the conviction, of the consultants, who persisted to the last in their belief in the existence of a foetus. Their reasons, as stated by Dr. Bellingham, were as follows:—1st. The patient's abdomen had been larger during the last pregnancy than on former occasions.—2ndly. The child, of which she was delivered at the full period, was smaller than any of her other children had been at birth.—3rdly. The patient experienced a sen-

sation like that of the motions of a child, for one day subsequent to her delivery.—4thly. The tumour was apparently suddenly developed, immediately after the birth of a child, having been first noticed by the patient three days after delivery, when the binder, which had been fixed tightly round the abdomen, was relaxed.—5thly. The patient was of opinion that the tumour, instead of having increased in size during the last three months, had rather diminished.—6thly. There had been no tumour or enlargement of the abdomen previous to the last pregnancy.—7thly. The tumour was moveable, not painful upon pressure, and in shape and feel resembled as nearly as possible a foetus contained in its membranes, lying within the cavity of the abdomen; and as the abdominal walls were very thin, it appeared almost impossible to be deceived.—Lastly. The patient herself was under the impression, that the tumour contained a foetus.

The patient gradually sank and died on the 30th November. The *post mortem* examination was an anxious one. On opening the abdomen no foetus was to be found, and, in lieu, there was enccephaloid disease involving the liver, mesentery, omentum, and ovaries. This morbid deposit between the layers of the omentum was found to have given the deceptive impression during life.

We have already given grounds on which the large majority made the erroneous diagnosis. It is instructive to compare them with those which led Mr. O'Ferrall to form his accurate judgment of the case. We quote from the proceedings of the Surgical Society:—

"Mr. O'Ferrall said the grounds, on which he had made the diagnosis under consideration, were as follows:—In the first place, the aspect of the patient struck him as one with which he was perfectly familiar—one which he had seen associated with extensive abdominal disease. On examining the part that was said to contain the liquor amnii, he found it to be a circular space about two inches in diameter, bounded by a hard border; it was elastic and undulating, as had been represented to him, but he found on percussion, that it yielded a clear sound. This at once led him to suspect that it was a portion of intestine adherent to the harder mass; he next examined the condition of the peritoneum; the loins were prominent, elastic, and dull on percussion; hence, he inferred that their prominence was not owing either to any portion of the hard tumour, or to intestine; and that it was due to the presence of fluid in the peritoneum, he ascertained by the undulations transmitted from one side of the abdomen to the other, by the usual percussion. He was now led to suspect the existence of organic disease, and he proceeded to interrogate the organs. The liver, not palpable in the horizontal position, could be detected by causing the patient to lie upon the left side, and thus making the moveable contents of the abdomen gravitate in that direction; this organ could now be felt at some depth, and presenting the irregular protuberances, which characterise Farre's tubercles of the liver; turning the patient on the right side, a large fixed tumour could be detected in the left iliac fossa—it was soft, elastic, and quite different in consistence from the more moveable mass. Examination per vaginam detected a tumour in the pelvis of irregular figure and carcinomatous hardness. On examining the groins several glandular enlargements could be felt; they were uneven in shape, and of seirrhous consistence. The assemblage of these phenomena rendered it manifest that there was a very large amount of malignant disease. He next proceeded to examine the central and moveable mass, supposed to be the foetus, and which was the source of his greatest difficulty. There was, no doubt, visible to the eye, and palpable to the touch, the figure of an elbow, forearm, carpus, and fingers, prominent through the attenuated parietes; he with a little care, however, placed the fingers of both hands under the supposed forearm, and holding it between the fingers and thumb, found it to bend like softened cartilage. Now this was not the physiological state of the forearm of a foetus full grown, or of the size commensurate with the tumour; ossification would, at this period, have existed, and given a very different result; here, then, was a physiological contradiction. He next

proceeded to measure the forearm, which he found to be two inches from the elbow to the supposed wrist, while it measured two and a-half from that point to the extremities of the fingers; here, then, was an anatomical inconsistency. He remembered that arrest of development might account for the shortening of the forearm, but it could not account for the lengthening of the hand; this law must have obtained more completely in the latter. He next measured the length of the several ridges, supposed to be fingers, and compared them with each other, and found that that which represented the little finger was the largest of the range; here there was another anatomical contradiction. Thus, then, both the dimensions and organisation were inconsistent with the opinion entertained, and he at once rejected the supposition that it formed any part of a human foetus. Thus, then, there was positive evidence of the existence of a large amount of malignant disease, and negative evidence as regarded the presence of a foetus, and from these data he felt himself justified in making the diagnosis in question."

Of the skill, tact, and knowledge of disease, displayed by Mr. O'Ferrall in this memorable case, we shall only say, that it recalls to our recollection the words of the celebrated Dr. Baillie:—"but while we compliment him on qualities for which he is already distinguished, we feel that his own satisfaction must have been even greater in having prevented a frightful and unavailing operation, than even in the triumph of an opinion so bold and acute."

THE VALERIANATE OF ZINC.

(To the Editor of the "Medical Times.")

SIR,—During my recent visit to Paris, my attention was drawn by Mr. O'Grady, the surgeon to the English Embassy, upon one of the principal members of which I was then in attendance, to the valerianate of zinc, a salt recently discovered and introduced by Prince Louis Lucien Bonaparte, and which he described to me as being a very valuable antispasmodic in the treatment of certain nervous affections. I was induced by his representations to procure some of the salt from Messrs. Pelletier and Berthelot when returning to England, and soon after my arrival gave it an extensive trial, in cases of nervous deafness and tinnitus aurium, and also of incipient amaurosis and muscæ volitantes. I have found it answer my expectations in nearly every case in which I have employed it, it being fully understood that its use is to be recommended only in those cases where the disease is caused by or attended with symptoms of debility. In cases where the deafness or amaurotic symptoms are induced by congestion or determination of blood, or are accompanied by inflammatory action, its exhibition is of course contra-indicated. When my stock was exhausted, I was obliged to send to France for a fresh supply, as it was not then to be obtained in London, and Mr. O'Grady was kind enough to forward me a sufficient quantity for further trial.

Dr. Devay, physician to the *Hôtel-Dieu* at Lyons, has published a very important paper on the use of the valerianate of zinc in the treatment of hemicrania and neuralgia, which appeared both in the *Gazette Médicale*, and also in the *Abeille Médicale*. He speaks in the very highest terms of its action on the nervous system, and describes it as a pure antispasmodic, modifying and neutralizing the vicious and increased action of the nerves, without diminishing their influence on the system. In a state of health, the action of the valerianate is not comparable to the influence it exerts in morbid conditions of the system. A dose of three grains, which is sufficient to arrest an attack of neuralgia, and to moderate the paroxysms of a violent hemicrania, in the healthy state only causes a slight headache, and fugacious vertigo with some hesitation and excitability of the function of hearing. This latter symptom may explain its action in the relief of nervous deafness.

Dr. Devay is inclined to restrict the use of this valuable medicine to cases of purely nervous disease, unattended by either rheumatic, gouty, or syphilitic complications, and he says that it is not

possessed of any efficacy, except in those cases which are totally uncomplicated.

He has published several remarkable cases, illustrating the value of the remedy. The principal of these are instances of neuralgic affections of more or less duration. In one case the disease, which had existed thirteen years, was seated in the course of the facial nerve: the darting pain being chiefly experienced on a level with the ear, and in the sub- and supra-orbital regions. The diseased side of the face was contracted, principally near the eye and forehead, and the general expression of the countenance that of anguish; he was ordered to take a pill containing one grain of the valerianate of zinc, night and morning, which he continued to do for a week with marked relief. He then left off the medicine for a few days, when he experienced a relapse, but not so severely as before. Three grains of the valerianate of zinc were then administered daily for about a fortnight, and the man was ultimately perfectly cured. Another case of supra-orbital neuralgia, supposed to have been induced by residing near a large gas manufactory, was also cured in a very short time by the valerianate of zinc.

As I have already said, the cases in which I have tried this remedy, were instances of tinnitus aurium, nervous deafness, amaurosis, and muscæ volitantes. In the case of Mr. G., a clerk in a public office, who had been labouring under tinnitus aurium more or less for six years, who had been taking the arnica and bark ineffectually, and who had been for a long time under the care of different medical men, I found the valerianate of zinc, in one grain doses, afford relief in less than a week, and effect a cure in about three weeks. I have seen him several times since, and he continues perfectly well. I gave the salt in the form of a mixture, dissolved in the compound infusion of orange peel. I also attended a delicate young lady, about twenty-two years of age, who presented symptoms of chlorosis, and was affected with intense tinnitus, and lowness of spirits. After her general health had been improved by appropriate treatment I administered the valerianate of zinc with the happiest effects; she speedily improved, and after a short attendance, I had the pleasure of finding her perfectly recovered. A widow lady, 54 years of age, consulted me for a similar complaint, attended with extreme lowness of spirits, and violent hemicrania. The slightest excitement brought on an attack of nervous deafness, lasting for several days. In this case also, the valerianate of zinc speedily effected a cure. In the last edition of my work on the Present State of Ophthalmology, I have briefly mentioned a case of commencing amaurosis with muscæ volitantes, in which I gave the valerianate of zinc with decided advantage; and I have since met with several others, in treating which I derived equal benefit, after other medicines had failed to be of use. I am prepared to state that, in my opinion, this salt will prove a very valuable remedial agent, and is fully deserving of a trial in the cases for which it has been recommended. Should it be as successful in the hands of other practitioners as it has proved with me, it ought to take its place in the new pharmacopæia.

M. Guillemond says, the best mode of preparing the salt is to saturate an aqueous solution of pure valerianic acid by recently precipitated carbonate of zinc. It is met with in the form of brilliant scales of exceeding brightness; it is neutral, much more soluble in hot than cold water, and very soluble in alcohol. Ether and other oils also dissolve it. It is not deliquescent like the other valerianates.

I have the honour to be, Sir,

Your obedt. servant,

JOHN HARRISON CURTIS

2, Soho Square, Jan. 13th, 1845.

NITRATE OF POTASS IN SPASMODIC ASTHMA.—Dr. Frisi, in a paper published in *Il Friuli Sebizio*, says he has tried this remedy, in a case of spasmodic asthma, which had obstinately resisted all other treatment. The relief was instantaneous and the remedy never failed to cut short the attack as often as it was repeated.

PROGRESS OF FRENCH SCIENCE

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 9th, 1845.

On Cerebral Rheumatism.—The analogy which exists between the different serous membranes composing the human body, led naturally to the discovery of the frequent complication of arthritis and affections of the heart. This analogy ought, says Dr. Hervey de Chegoin, to direct the attention of the practitioner to the membranes of the brain; and he supports this opinion by three cases in which this metastasis took place; and although the fact was not verified by autopsy, yet the mode of development, the symptoms of the complication, and the circumstances under which it appeared, are sufficient proof that such was the case. This affection is very dangerous, since, of the three persons attacked, and whose cases are related, two died, one very rapidly, and the other on the seventh day. As to the treatment, it ought to be very energetic, especially when coma is present; venesection, revulsives, internal and external, and perhaps the sulphate of quinine in strong doses, as recommended of late in rheumatism. Case.—*First Case; Rapid effusion, sudden death:* A woman, *ætat* 45, of a strong constitution, while suffering from acute rheumatism, which kept her in bed, was seized with cephalalgia and considerable agitation, and died in the night. This fatal termination occurring during the existence of arthrodynia was evidently attributable to that cause. *Second form:* M. de R. *ætat* 30, tall and stout; lymphatico-sanguineous temperament; had experienced four or five years ago an attack of acute rheumatism of the joints, which yielded to an appropriate treatment; from time to time, he felt, in his hands and feet, pains, accompanied by slight swelling, which disappeared spontaneously. In September last, he started, though indisposed, for a trip into the South of France; on the first night of his journey, the right hand became excessively painful, and so hot, that to cool it, he exposed it to the night air. The symptoms increased to such an extent, that he was obliged to stop on the road at an inn, where he remained forty days, suffering from erratic pains in the abdomen, hands, &c.; extreme excitability; disposition to weep; but little or no fever. Venesection being impossible, numerous leeches were applied, and as anorexia existed, a mild purgative was administered, which gave rise to copious evacuations. The abdominal pains subsiding somewhat, he was enabled to return home. The patient, for ten days, remained in this state, during which time, as the pulse increased every evening with paroxysmal fever, 3j. of sulphas quinini, in three enemas, was administered, after which the fever, instead of an intermittent, assumed the continued form; the intellectual faculties remained perfect, being merely slightly excited. On the 1st December, this excitation increased; he wept, prayed, became agitated and delirious, which was followed by a comatose state, during which the delirium persisted. Fifteen leeches were applied behind the ears, and sinapisms to the extremities, which produced a slight amelioration, but of very short duration. These symptoms persisted in the intermittent form, and on the seventh day, in spite of the most active remedies, cupping, mercurial frictions, blisters on the head and extremities, calomel, &c., the coma became continued, and death ensued. *Third form:* M. Flatter, a sculptor, by birth a German; easily excitable imagination; had been affected frequently with arthrodynia, always complicated with delirium, and on the present occasion this last symptom was so violent that he appeared to be attacked with mental alienation; it persisted for about twenty days, though venesection, purgatives, cupping, &c., were had recourse to. Coma did not exist; on the contrary, there was a considerable degree of agitation, and loquacity; pulse frequent, full; skin hot; nothing abnormal in the functions of the thoracic or abdominal organs. In this case, rheumatism affected the hands, feet, and wrists, and was not followed by effusion into the cavity of the synovial membranes, but by infiltration into the surrounding tissues, forming the fibrous, or cellular rheumatism. May it not, therefore,

be concluded, that the fibrous membrane of the brain was the seat of the disease, and that there is a fibrous as well as a serous cerebral rheumatism? In the former, there are irritation and delirium, which may last several weeks, without proving fatal; in the latter, on the contrary, there is a momentary excitation, followed by effusion, so rapid as to cause sudden death, or collecting progressively, so as to produce coma, which alternates with the delirium, and, after a certain length of time, proves fatal, as illustrated in the second case.—*Gazette des Hôpitaux.*

On the Three Images of the Eye, or the Catoptrical Test. By Dr. Magrèe, pupil of Sanson, and oculist to the poor of the first *arrondissement*.—It was in the year 1836, that Professor Sanson first observed this circumstance, and, in 1837, he announced in his clinical lectures, that if a light was placed before the eye of a person afflicted with amaurosis, the pupil having been previously dilated, three images would be perceived; the first, anterior, the brightest, is erect: the second, central, somewhat paler, is inverted: and the third, posterior, the palest of the three, is, like the first, erect. The first is formed by the cornea, the second by the anterior segment of the lens, and the third by its posterior segment. Opacity of the cornea destroys all three images; opacity of the anterior portion of the capsule, the centre and posterior ones; and opacity of the posterior portion of the capsule, the posterior alone. But certain precautions are necessary to be observed: 1° The pupil must be dilated; this is to be attained by means of belladonna, so that the pupil may be double or treble its original size. If it be necessary to obtain dilatation immediately, atropine may be employed, in the proportion of gr. j. to a tablespoonful of water, dropped into the eye. This application is followed by pain, an injected state of the conjunctiva, and an increased flow of tears; but the first is not very intense, and the two last soon disappear. The patient must be requested to keep his eyes well shut; otherwise the solution will escape with the tears, and no effect be produced. 2° The eye must be examined in a dark room. These precautions taken, the three images will be seen, should cataract not exist; there are, however, two states in which they are perceived, notwithstanding this disease. (a) When the cataract is very slight, forming a species of haziness, through which the rays of light penetrate, though with difficulty.—(b) When the opacity has commenced by the periphery, affecting only a very limited portion of the lens. In the former case, the two posterior images are so pale, that this circumstance, united to the other symptoms, is sufficient to establish a diagnosis; and in the second, the patient, when requested to look at an object in various directions, ceases to perceive it, as soon as the opaque point of the lens intercepts the rays of light, and only one, or at most two, images are perceived, when the eye is examined in that direction. The two following cases are proofs of the exactitude of this opinion. In June, 1841, the Duchess of M— came to consult Sanson, who was at that time suffering from the disease which ultimately carried him off. Being unable to examine the patient, Dr. M. was requested to do so; and the result was as follows: eyes healthy in appearance; iris movable; pupils dilated; two posterior images almost imperceptible. Unwilling to say, positively, that he thought a cataract had commenced, the extract of belladonna was prescribed, to be used by frictions; and the next day, Sanson confirmed the diagnosis, which time has shewn to be correct. In the same year, and about the same period, Mrs. B—, the wife of a member of the Institute, called upon Sanson, on account of a diminution in the sight of the left eye, and, after examination, she was requested to call again, but ere this period had elapsed, Sanson had breathed his last. After his death, Mrs. B. consulted another eminent practitioner, who diagnosticated amaurosis, and prescribed accordingly. Having followed the various remedies ordered, and reaping no benefit, Dr. M. was consulted, and having examined the eye, he thought he perceived an opaque spot, and, on the next day, dilatation of the pupil having been obtained by means of bella-

donna, such was proved to be the case, as the two posterior lights were not visible. The diagnosis of commencing capsular cataract was confirmed by other practitioners, and still more conclusively by the progress of the disease.—(*Gaz. Medicale.*)

On the Treatment of Purulent Ophthalmia. By Felix d'Arcet, M.D.—In adults, the most appropriate therapeutical means may be comprised under the following heads: 1° General or dynamic; 2° Local or topical; 3° Prophylactic.

1° *General or Dynamic Remedies.*—Venesection, until syncope takes place; arteriotomy; leeches on the mastoid processes, on the temples, on the internal surface of the lid, or applied as recommended by M. Gama in wounds of the scalp; also cupping. The pulse must be examined from time to time, for, by weakening the patient too much, the eye may be lost; blood must, however, be drawn freely in ophthalmia blenorragica.—Scarification must be employed, conjointly with venesection; in children the former is enough by itself.—Excision of the swollen parts: this ought not, however, to be done to the extent recommended by McKenzie, as an entropium, or trichiasis, may be the result, when the conjunctiva has assumed its normal dimensions:—rest, in a properly ventilated and dark room; spare diet;—emollient tisanes, and other similar means, employed in inflammatory diseases;—purgatives, which seem to have not only a revulsive, but likewise a hypos-thenising, action; the most efficacious are: seidlitz water, and castor oil;—emetics are lauded by Dr. Jourdain, but, in all probability, they are injurious, inasmuch as they must increase the cerebral congestion, and subsequently that of the eye;—copaiva and cubeba have been highly recommended by Professors Roux and Velpeau in ophthalmia blenorragica;—calomel, combined with opium;—mustard foot-baths, taking care to prevent the action of the essential oil on the eyes.—2° *Local or Topical Remedies.* One of the most efficacious is the azotate of silver, in solution, from grs. iv. to 3j. in distilled water 3j.; in an ointment or in substance (several cases observed in the clinical wards of Professor Velpeau are here given as proofs);—scarification combined with the preceding (Gouzé);—emollients, generally rejected, but still considered as useful by Dr. Villeneuve;—continual irrigations with cold water (employed several times with success by Dr. Rognetta);—the following solution is recommended by Sanders and McKenzie to be employed frequently in a tepid state: R. Hydrargyr. oxymur. gr. j. ammon. muriat. gr. vj. vin. opii 3ij. aquæ puræ lb. j. M. ft. lotio;—frictions, with mercurial ointment and belladonna, or with one containing the deutoxide of mercury;—evacuation of the aqueous humour (McGregor and Reybard);—collyria, containing tinctura opii (Dupuytren and Professor Breschet);—calomel, insufflated into the eye (Dr. Lauer, of Berlin);—compression (Professor Piory states that, in an epidemic in 1832, he found this a most heroic remedy). The accidents concomitant with, or consecutive to, this affection, setting aside those which need surgical operations, are: *granulations*: when small, slight caustics in ointment, solution, &c., and revulsives on the intestinal canal; but when large, and apparently carcinomatous, they must be cut off by a stroke with the scissors, and the part touched afterwards with lunar caustic, tincture of opium, or sulphate of copper, and purgatives may be given at the same time.—*Pannus*, formed by a vascular swelling of the kerato-conjunctival mucous membrane, whence the name of *telangiectasia*, given by some authors to this affection. It is sometimes slight, limited to mere vascularization; sometimes serious, formed by innumerable small vessels, crossing each other, and giving to the eye the appearance of a vegetation. Professor Velpeau considers it as being caused by the constant friction of the palpebral conjunctiva on the cornea. The treatment consists in cauterization, excision, scarification, and purgatives.—*Pterygium*. To this com-

* *Onguent Mercuriel Belladonné* (Sichel).—R. Unguent. hydrar. Extract. belladon. aa. p.æ. M. ft. unguentum.—*Onguent de Deutoxide de Mercure*. R. Oxyd. hydrarg. rubr. ʒj.—3j. Cerat. simpl. 3ʒ. M. ft. unguentum.

plication, a peculiar lesion, observed and described by Larrey, during the Egyptian campaign, may be added. It consists in a species of excrescence, susceptible of thickening, and becoming membranous and horny. The treatment consists in excising and cauterising the part. Scarpa dissected it; Demours removed it at once; Ribieri, Boyer, and Middlemore, united the two methods.—*Partial Opacities of the Cornea*: Collyria, powders, (calomel, sugar-candy, oxide of zinc), oleum jecoris gad. morrh., ol. nue. juglan. regie, and perhaps abrasion of the cornea, are the means of cure. The preceding lesions, though not the only consecutive accidents, but by far the most frequent, are principally deserving of the notice of the practitioner.—*3° Prophylactic Treatment*.—Larrey recommends avoiding the direct action of light and dust on the eyes, which are to be well covered during the night, placing a bandage over the lids; to keep at a distance from moist and marshy situations; to keep up the action of the skin; to shun excesses in wine, and strong drinks; to take, from time to time, slight tonics; and, finally, to wash the parts frequently with vinegar and water. M. Lusardi recommends isolation of the patients, in a hospital situated at some distance from the town, and, when cured, that they should perform a quarantine of six months. MM. Fallot and Varley, in military practice, advised the removal of the infected regiment, and, during their absence, the barracks must be ventilated and properly cleansed. Finally, persons affected with gonorrhœa must be careful not to touch their eyes with the matter proceeding from the urethra; and children, at their birth, should be carefully washed, especially their eyes, with tepid water.—*Annales de Chirurgie*.

Efficacy of Liquor Ammoniac in Pertussis.—Dr. Levrat Perrotton recommends the following prescription, in this disease:

R. Aq. distill. lact. vir. ʒiv.
 ——— flor aurant. ʒij.
 Syrup. pæoniæ off. ʒj.
 ——— belladonnæ ʒij.
 Ammoniac liquor. gtt. vj.
 M. Ft. haustus. cochl. mag.

q. q. horâ sumend. Four cases are quoted as proofs of its efficacy; the cure in all was rapid and complete; as adjuvants, leeches were applied to the arms.—*Revue Médicale*.

Fibrous Tumours of the Uterus; Dystocia: by Dr. Barnetdat, Chief Surgeon of the Lying-in Hospital, Bordeaux.—The following case shows that misarrriage is not a necessary consequence of retroversion, complicated with the presence of three tumours situated in the uterus. Mrs. —, ætat 42, married only two years ago, but affected for the last ten years with a hard, bosselated, tumour, mobile, easily separated from the uterus, and which could be felt through the abdominal parietes. Shortly after her marriage, she became *enccinte*, but miscarried at about two months and a half of the uterine gestation. A year after, a second pregnancy took place, accompanied by retention of urine, and other accidents, at its commencement, but which disappeared as the uterus rose in the abdominal cavity. At four months, *ballotement* was instituted; quickening took place at the fifth, and, after the seventh, the movements of the child were so violent as to be a source of pain to the mother. On the 21st July, 1843, labour pains came on, and the amniotic fluid escaped on the night of the 22nd, followed by a considerable quantity of meconium; it was then impossible to reach the os uteri, but, on the 25th, it was felt at about two inches above the os pubis, and, on the 27th, at an inch and a half; the child presented itself in the anterior right saero-cotyloidian position. Finally, on the 28th, the pains recommenced, though they were intermittent; the funis and foot protruded through the os uteri; the other extremity was soon liberated, and the accouchement promptly terminated. The death of the child had taken place two days previously. The after-birth came away five minutes after; no hæmorrhage; but nervous symptoms declared themselves, which carried off the patient the day after the delivery.—*Post-mortem examination performed eighteen hours after death*. Neck of the uterus in its normal position; a large quantity of

purulent serosity in the pelvis; about a quart of reddish serosity in the peritoneal cavity. Portion of the peritonæum, lining the abdominal parietes, healthy; that covering the intestines slightly arborescent; and that forming the omentum, and contained in the pelvis, evidently inflamed; no recent nor old adhesions, nor membraniform exudations; uterus voluminous; its internal surface smooth and covered with a layer of sanious pus; tissue easily torn, and containing yellowish-white nuclei, as hard as cartilage, and enveloped in a species of cellular sac; uterine sinuses surrounded by pus; none, however, in the veins and lymphatics; the external surface of the uterus presented here and there cartilaginous tumours, similar to those already described: three of them, much larger than the rest, were seated on the fundus and the right and left sides, just above the tubæ Fallopianæ, and ligamenta rotunda, the first being about the size of the head of a fœtus at six months. The uterus and tumour were not weighed, but their dimensions were:

	INCHES.	LINES.
Height from the os uteri to the superior part of the uterine cavity (tumour not included).....	5	10
Height of the tumour on the fundus.....	5	6
“ “ on the right Fallopian tube.....	2	6
“ “ on the left Fallopian tube.....	3	3
“ from the os uteri to the upper part of the tumour on the fundus.....	1	0
Circumference of the pedicle of the tumour on the left Fallopian tube.....	0	4
“ of the pedicle of the tumour on the right Fallopian tube.....	0	8
“ of the central portion of the tumour on the fundus.....	1	4
“ of the uterus in its centre ..	1	3

Fallopian tubes and ovaria healthy; other viscera also in their normal state. Examination of the tumours:—when divided, the scalpel penetrated into a cavity, of which the parietes were not very thick, except inferiorly, on account of the presence of the tissue of the uterus, containing a great quantity of serosity, mixed with pus, which was partly emptied by a moderate degree of pressure; from side to side, whitish strong fibres extended, forming species of cells, full of a pul-taceous matter, fluid in some spots, whilst in others it was tenacious and adherent. The smaller tumours were composed of a sort of cellular network, formed of fibres crossing each other in every direction, and full of a liquid. Moreover, here and there, were small nuclei, varying in consistence from the firmness of cartilage to the liquidity of mucus, and which seemed to be added to the parenchyma of the uterus, but in no wise formed at its expense. According to the author, they were degenerated fibrous tumours, and this was the opinion of all the members of the *Société de Médecine* of Bordeaux.—(*Journal de Médecine de Bordeaux*.)

Academy of Sciences; Sitting of the 6th Jan. 1845.—M. Elie de Beaumont replaced Baron Chas. Dupin in the chair, after which, the Academy proceeded to elect:—1° a vice-president, votes 54; M. Mathieu obtained 31; M. Pouillet, 19; MM. Poncelet, Gay Lussac, Poinot, and Piobert, each 1. M. Mathieu was, therefore, declared duly elected. 2° Two members of the *Conseil d'Administration*: MM. Poinot and Beudant, re-elected.

M. de Jussieu presented:—1° in the name of M. A. de Candolle, the 9th part of his *Prodromus Systematis Naturalis Regni Vegetabilis*; and 2°, in the name of M. Laseque, the *Musée Botanique* of M. Benjamin Delessert.

Researches on the Composition of the different kinds of Wax: by M. Lowry, presented by Professor Dumas.—The various kinds of wax, examined by the author, were:—1° *Bees'-wax*;—when impure, it contains more carbon and less oxygen than when white; is composed of *cerine*, *myricine*, and a third compound, as yet not described, and which the author calls *ceroline* (cera et oleum), which is soft; melts at 83½° F.; soluble in cold alcohol and ether; has an acid re-action on litmus paper.—

Cerinic acid: produced by treating cerine by a solution of potass; white; crystallizable; melts at 149° F.; slightly soluble in hot alcohol, and ether; somewhat more so in absolute alcohol.—*Myricinic acid*: obtained by treating myricine by a solution of potass; same characters as the preceding, but melts at 141° F. With nitric acid, bees' wax forms margaric, pimolic, adipic, lepic, œnantylic, and sulcinic acids.—2° *China wax*, obtained from the *rhus succedaneum*, melts at 180½° F.: very slightly soluble in boiling alcohol and ether; easily soluble in oil of naphtha; with potass and baryta, forms a soap; formula C⁷² H⁷² O⁴.—*Sinesic acid*: obtained by treating China wax by a mixture of lime and potass; white; crystallizable; melts at 176° F.; formula, C⁷² H⁷² O⁸.—3° *Palm wax*: obtained from the *ceroxylon audicola*; very abundant in New Granada, under the form of a greyish white powder on the palm tree; when pure, is of a yellowish white colour; very slightly soluble in boiling alcohol, and is precipitated on cooling; melts at 161½° F.; composition: carbon 80.72, hydrogen 13.30, oxygen 5.98.—4° *Myrica wax*: obtained by boiling the wood of several species of *Myrica*, especially the *myrica cerifera*, a tree very common in Louisiana; when impure, is brittle, and of a greenish colour; pure, of a greenish yellow colour; melts at 117½° F.; composition: carbon 74.24, hydrogen 12.08, oxygen 13.68; easily saponifiable, and, according to M. Chevreul, furnishes stearic, margaric, and oleic acids.—5° *Carnauba wax*: obtained from a species of palm tree which grows abundantly in the north of Brazil, chiefly in the province of Ceara, forming on the surface of the leaves a thin layer of a yellowish white colour; very brittle; easily powdered; soluble in boiling alcohol and ether; crystallizing on cooling; melts at 182½° F.; composed of, 1st experiment: carbon 80.36, hydrogen 13.07, oxygen 6.57; 2nd experiment: carbon 80.29, hydrogen 13.07, oxygen 6.64.—6° *Aucuba wax*: produced by a shrub, which grows abundantly in the province of Para, and in French Guiana; according to M. A. Brogniart, from one of the following plants: *myristica aucuba*, *myristica officinalis*, *myristica sebifera*; is of a yellowish white colour; soluble in boiling alcohol; melts at 98° F.; composition, 1st experiment: carbon 73.90, hydrogen 11.40, oxygen 14.70. 2nd experiment: carbon 74.09, hydrogen 11.30, oxygen 14.61.—7° *Bicuiba wax*: according to M. A. Brogniart, is produced by the *myristica bicuhyba*; yellowish white colour; soluble in boiling alcohol; composition: 1st experiment: carbon 74.37; hydrogen 11.10; oxygen 14.53. 2nd experiment—carbon 74.39; hydrogen 11.13; oxygen 14.48. 8° *Sugar cane wax*: called by M. Arequin, *cerosie*; is obtained by scraping the bark of the sugar cane, especially the violet species; when pure, is white, crystallized, melts at 179½° F.; insoluble in cold alcohol and ether; very soluble in boiling alcohol; hard; easily pulverized; formula: C¹⁸ H⁴⁸ O². 9° *Andaguies wax*: principally collected by the Taucas Indians, who reside on the banks of the *Rio Coqueta*; called, in the country, *cera de los Andaguies*; is collected by a small insect, called *cavija*, very common in that country, which makes several hives on the same tree; when pure is white, with a light yellow hue; melts at 170½° F.; composition—1st. Experiment: carbon 81.65; hydrogen 13.61; oxygen 4.74. 2nd experiment: carbon 81.67; hydrogen 13.50; oxygen 4.83. Like bees' wax, contains three principles, which may be separated by boiling alcohol; formed of palm wax, and sugar cane wax, with a little oily matter, in the following proportions: palm wax, 50 per cent; sugar cane wax, 45 per cent; and oily matter, 5 per cent. *Cerosic acid*: obtained by treating *cerosie* by a mixture of lime and potass; of a white colour, and crystallized; slightly soluble in boiling alcohol and ether; easily soluble in oil of naphtha; melts at 200½° F.; formula C⁴⁸ H⁴⁸ O⁵. From these facts, the author concludes:—1° That there are a great many species of wax of vegetable origin, which in appearance and in composition are more or less like bees' wax. 2° That Andaguies wax is a mixture of palm wax and *cerosie*, and ought not to be considered as being a real animal secretion. Professor Dumas, in his course of lectures, delivered last year at the school of Medicine, stated that the examination of this

wax left some doubts in his mind as to the exactitude of his experiments on bees' wax. It may, however, be said, that the bees of the Andaguies do not possess the power of secreting the wax with which they make their hives, it being difficult to admit that these insects produce exactly a mixture of palm wax and *cerosie*; whereas experience leads to the conclusion, and this opinion is the most natural, that the bees collect, on the palm trees and sugar cane, the wax which they need.

Researches on the Density of Vapours Produced by Compound Bodies. By M. A. Cahours: presented by Professor Dumas.—From the facts observed by the author, he concludes:—that the density of the vapour of acetic, butyric, and valerianic acids, varies very much; that the molecules of compound bodies may be divided by 2 and 4; that the division by 6, and by 3, does not exist, as the experiments of M. Malaguti on *formethylal*, and those of the author on the acids of the acetic group, seem to indicate; that one compound is an exception, the chloride of silicium, which gives but one volume of vapour, if 92.6 be the atomic weight of silicium, and Si O the formula for *silica*.

On a New Treatment of Diseases of the Internal and Middle Ear: by P. H. Wolff, M.D., Berlin.—Water being the vehicle usually employed for the administration of liquid medicines, its vapour should be equally so, for gaseous substances; but the elevated temperature of the latter is such as to burn the parts, should it be introduced. To obviate this accident, the author proposes the following apparatus: water, containing the medicinal agent, is introduced into an iron retort, and heated to ebullition; the vapour, thus obtained, passes into a large recipient over a third vase, containing cold water, after which it escapes through a small tube, by which it is introduced into the ear; if the substance is volatilized at a lower temperature than the water (ether, alcohol, &c.), it must be put in the third vase, for the steam, in passing over it, is sufficient to produce evaporation; the vapour of benzoin, and similar aromatic substances, is obtained by putting them in a small box, drilled with holes, in the large recipient. When the Eustachian tube is not obstructed, catheterism may be performed by means of a gum-elastic sound, introduced about 2½ or 3 inches into the inferior nasal canal, and the outer extremity of which is made to communicate with the tube through which the vapour escapes. But when an obstacle exists, the author recommends combining the two species of sounds, proposed by Itard, Kramer, and Deleau; the exterior one being an amalgam of silver and copper, the inner one of Caoutchouc, or what is better of pure silver, which is sufficiently elastic to bend, and, at the same time, capable of overcoming an obstacle, which the gum-elastic one cannot do.

On a New Mode of Embalment.—Dr. H. Monteuci addressed a letter to M. Arago, describing the process employed by M. Baldaiconi, *Conservateur du Musée d'Histoire Naturelle*, Sienna, Tuscany, and which he denominates *petrification*. This process consists in a long immersion of the part in water, saturated by a mixture of twelve parts of the bichloride of mercury, and two of the hydrochlorate of ammonia—a mixture very like the *sel d'Alembroth* of ancient chemistry. In order to ascertain whether the ammoniacal compound had any peculiar action, Dr. Monteuci performed the following experiments: A piece of a fowl's liver was placed in a solution of the bichloride of mercury alone, and another in one to which the hydrochlorate of ammonia had been added. Some weeks after, being taken out and dried in the open air, they were found to differ very much; the former was white, porous, larger than in the normal state; when broken, it presented a chalky appearance; struck with a metallic substance, it gave a sound similar to that of a bit of leather; it had lost about one-fifth of its weight. The latter, on the contrary, was of its natural colour; compact; smaller than the preceding; by its broken surface, its hardness, and the sound produced, when struck by a metallic substance, it was very like *stearite*; it had lost one-seventh of its weight. Other viscera were submitted to the

same experiment, and the result was constantly the same. The alcoholic solution might, perhaps, be substituted, with advantage, for the aqueous solution.

On the Substitution of one Nerve for another; by Dr. Tavignot.—Numerous experiments having proved, that, when the two extremities of a divided nerve are placed in contact, they unite, and their functions are not destroyed, the author performed other experiments, in order to ascertain whether the extremities of two nerves will not unite likewise, and he was led to conclude:—1° that, if two neighbouring nerves are included in the same ligature, a species of *nerviform ganglion* is produced, in which the fibres and functions of both nerves seem to be united; 2° that the extremities of two nerves, placed in contact with each other, give rise to a new nerve, retaining their usual functions; 3° that the possibility of engrafting one nerve on another, will become a source of new experiments, by which the physiology of the nervous system may be elucidated.—M. Flourens remarked, that, twenty years ago, he published the result of similar experiments, performed by him at that period.

On the Action of Arsenious Acid on Plants.—Memoir read by M. Chatin, Chief Pharmacien to Beaujon Hospital. The author studies the utility of this substance:—1° in husbandry; employed with the intent of destroying the carbon in cereals, it is useless, inasmuch as arsenious acid exercises no influence on the cryptogamia in general, and on the *uredo carbo* particularly; therefore, its sale ought to be prohibited for this purpose. 2° In legal medicine: the elimination of arsenious acid by plants, in a given time, proves the impossibility of discovering its presence in cereals when added to the seed in autumn. 3° In therapeutics: by comparing the results obtained in these researches, with those already obtained by the author on animals, it is evident, that, in both, heat acts in the same way; and does not this analogy come to the support of the experiments, performed to ascertain whether a calm and humid atmosphere, combined with darkness and electricity, is not useful to prevent absorption?—and when this has taken place, whether a dry atmosphere, frequently renewed, a bright light, &c., does not facilitate its elimination?—that the perfect neutralization, by means of the chloride of calcium, of the arsenious acid absorbed, and combined with the alkalis contained in the juices, and the alkaline nature of the blood in animals, renders very probable the formation of a similar compound, and indicates that the chloride of calcium may be considered as an antidote for arsenious acid after it has been absorbed by the latter.

Academy of Medicine. Sitting of the 7th January, 1845: M. Caventou in the chair.—Dr. Baillarger requested to be placed on the list of candidates for the vacant place in the section of anatomy and physiology.

M. Caventou read the speech, which he had the honour of addressing to the King, and His Majesty's reply; he next expressed how much he felt honoured by being chosen president, and finally proposed a vote of thanks to Dr. Ferrus, the former chairman.—Adopted.

Incident relative to Dr. Malgaigne's Memoir.—Professor Velpeau remarked that, on a previous sitting, a vote by ballot had taken place, deciding that the Memoir should be inserted in the Bulletin; but only a portion had been published; all the facts, the cases on which the author founds the dogmatic portion of the memoir, were suppressed. He, therefore, requested to be made acquainted with the reasons of such an omission.—Dr. Bousquet, in reply, stated, that the portion inserted was that which was read before the Academy. The other was not given to him, but to the members forming the committee; the *Conseil d'Administration*, therefore, decided that the latter should not be inserted, the Bulletin being the expression of what passed in the Academy.—Professor Velpeau: Dr. Malgaigne, in this case, followed the mode usually adopted at the Academy of Sciences, and all other learned societies. The author of a memoir, after reading a part of his paper, or the conclusions to which his researches have led him, gives at the same time the proofs of their exactitude. These documents are delivered to a com-

mittee, who, on their responsibility, present a report; and, as the members of a committee represent the society of which they form a part, it cannot be said, that any portion of a memoir given to them ought not to be published because it was not read.—This incident gave rise to a most tumultuous discussion, in which Messrs. Dubois (d'Amiens), Gaultier de Claubry, P. Dubois, Londe, Gerdy, Gerardin, Ferrus, Baudelocque, Roux, Renaudin, and Begin, were heard; some defending the decision taken by the *Conseil*, and others combatting it. Finally, the Academy, by its vote, confirmed the latter view, and, consequently, the entire memoir must be published.

The Academy then formed itself into *Comité Secret*.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M.D.

On the Characters of the Urine in Disease.—English observers have frequently expatiated on the different combinations of ammonia, which abound in the urine, where the nervous vitality is deeply affected: as for instance, in typhus, or after lesions of the brain, or spinal marrow. It is still doubtful, whether the condition of the brain directly occasions the presence of the salts of ammonia in the urine; the author thinks it improbable, since the urinary organs are supplied only by the spinal marrow; he believes, therefore, that a secondary affection of the spinal marrow must exist, where the combinations of ammonia are found in the urine of persons suffering under cerebral lesions. On the other hand, the *alealesence* of urine is so far dependant on spinal affections, as the latter interfere with its proper expulsion from the bladder. In the urine of insane people (which was frequently analysed by the author, and but rarely found acid) an unusual quantity of ammonia was a very frequent and characteristic phenomenon. In hæmaturia, occurring in a girl, four years of age, the author found a clear yellow urine having an acid reaction, while, at the bottom of the vessel, was a sediment in regular red stripes, and, at the same time, a red coagulum was floating in the urine. Microscopic investigation shewed the red sediment to be composed of: 1, normal blood-corpuscles; 2, a quantity of small, round, and yellowish grains, probably coagulated fibrin; 3, regular crystals of triple phosphate of magnesia, in considerable quantity; 4, several globules of fat; 5, epithelium-cells from the lining membrane of the bladder. The triple phosphates seemed to have been formed by the decomposition of the blood-globules. In pregnancy, the urine is of diagnostic importance, for during the latter part of this period, as well as during suckling, the urine contains a great abundance of fat, with a peculiar combination of proteine, very analogous to the lacteal secretion. This is one of the surest signs of pregnancy, but its absence does not prove the contrary.

Diagnostic Importance of the Faecal Matter in some States of Disease.—In a man suffering from insanity, complicated with diabetes, the excrements consisted of two distinct and separable parts. The usual faecal matter was surrounded by a gelatinous, grey substance, like wax in appearance, but interspersed with clots of blood. The liquid parts of these masses displayed acid re-action, and contained numerous oval-shaped corpuscles. The grey mass consisted of albumen and fatty matter; sugar also seemed to be present. On analyzing the excrements of diabetic patients, the same results were obtained by Simon. It may then be regarded as a demonstrated fact, that, in this particular form of disease, the fat, received with the nutriment, is evacuated in the form of a waxy matter with the faeces, not being properly saponified in the duodenum, through deficiency of bile. Purulent matter is not so frequently found in the excrements as in the urine; the author thinks it unlikely that the faeces should serve, like the urine, as a medium for critical discharge in the suppurative

dysergasy; thus, though matter, when found in the urine, by no means shows a suppurative process to exist in the urinary organs,—pus in the excrements may always be regarded as a distinct sign of local suppuration. Great abundance of fat in the excrements is a sign of consumption; it is particularly found in pulmonary phthisis, Bright's disease and diabetes.—*Dr. Bruch in Hünter's and Pfenfer's Zeitschrift.*

The Spleen and its Functions. The observations on the functions of the spleen have elicited the following facts. 1, The greater part of the water, received into the body, is admixed with the venous blood of the spleen in a few minutes, by which means a great distension of this organ is effected. 2, The splenic veins, leading to the vena portæ, are filled during the digestive process with a darker blood than the other veins of the body. 3, The spleen has been extirpated in some animals (chiefly herbivorous), without any peculiar injury to the system, with the exception of a slight derangement of the process of chylification. 4, The spleen, possessing no eductory canal, can have no influence on the formation of chyle. 5, The periodical accumulation of blood in the spleen, particularly during digestion, makes it appear to be a mere reservoir of blood for the organism, favouring perhaps chylification by its pressure on the stomach. 6, The lymph, passing from the spleen, is redder and more coagulable than that of other organs. After the extirpation of the spleen, the lymph, as it passed into the thoracic duct, was white, thin, slightly coagulable, and, only after it had been exposed for some time to the air, did it assume those properties of redness and greater coagulability, usually communicated through the influence of the spleen. 7, After the extirpation of the spleen, a more abundant urinary secretion takes place, the urine being thin and watery. 8, The bile has, in this case, a much darker colour and an altered taste. 9, The volume of the spleen is enlarged, and the texture relaxed, by intermittent fever, as well as by typhus abdominalis. In explanation of the above facts, it is shewn that the larger viscera of the body, and particularly of the abdominal cavity, have a specific attraction or relation to the elements of which the organism is chiefly composed, and by which it is reproduced: i. e. oxygen, hydrogen, carbon and azote; the lungs to oxygen, the kidneys to azote, the liver to carbon. Now, hydrogen alone remains, which is not always found combined with oxygen, in the form of water, in the organism, but also (pathologically) with other gases in the blood. The spleen seems to form the point of attraction for this hydrogen, a view confirmed by the fact, that, in all countries in which an excess of hydrogen is found in the air, and thus received into the blood, affections of the spleen are chiefly produced. Thus, we may say, that the spleen has a specific relation to hydrogen, separating it from its combinations, in order to elaborate it for its peculiar organic purposes. Thus, water undergoes a decomposition in the spleen; the hydrogen is carried with the blood of the splenic veins to the liver, and used for the secretion of bile. This accounts for the dark colour of the venous blood of the spleen, during digestion; therefore, the bile becomes changed in character, and the urine watery, after extirpation of the spleen. The oxygen of the water is absorbed by the lymph, and produces the colour, and coagulability, proper to this fluid. In intermittent fever, the spleen becomes enlarged and softened, in consequence of the hydrogen collected in it. In perverted, or obstructed, function of the spleen, the water is left in the blood circulating through the body, and produces abnormal and morbid phenomena in consequence. The, so called, *splenic vertigo*, appearing under the form of a derangement of the functions of the brain, seems to be produced by this abnormal reception of hydrogen into the blood.—*Dr. Frank of Berlin in Casper's Wochenschrift.*

Tar or Pitch, as a Remedy in Hæmorrhoids.—The boasted powers of pitch in hæmorrhoids, induced the author to try it on himself, after having suffered from this complaint for years. He took three grains of the remedy, in the form of a pill, in the middle of the day, and repeated it before going to bed. Next morning, free evacuation by

stool ensued, without any pain; the pills were continued for some days, and the author states, that he has been free from the complaint ever since. Numerous trials, on other patients, have furnished equally decisive proofs of its efficacy. *Dr. Bonfiglioli in Schmidt's Jahrbücher.*

Lemon juice in Chronic Hæmorrhoidal Hæmorrhage. The author administered lemon juice, with the best results, in two cases of hæmorrhoidal hæmorrhage, complicated with hydrothorax and ascites, after all other remedies had failed. Two tablespoonfuls were given, every two hours. In the first case, the hæmorrhage was very soon checked; the urine flowed with greater abundance, and general improvement commenced. Constipation subsequently appearing, the author ordered the lemons to be strongly squeezed, in order to administer, with the juice, the bitter and oleaginous substances of the peel, by which means the bowels were gently relaxed. The dose of the juice was gradually increased, so that the patient took two thirds of a common tumblerful, and continued with the remedy to the 27th day. The cure eventually became complete. In the second case, the prognosis was still more unfavourable; but, even here, complete recovery took place.—*Dr. Giadorow in Schmidt's Jahrbücher.*

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

PSORIASIS.—Mr. Waddington has found an ointment prepared with equal parts of palm oil and spermaceti ointment, the best application in psoriasis. The affected parts should be washed every night and morning with tepid rain water, then made quite dry, and the ointment applied lightly with a camel's hair brush. Oiled silk should be worn over this. The best internal remedies are, ten grains of Plummer's pill every night, and twenty minims of liquor potassæ three times a day. The diet should not consist of saline meats, shell-fish, fermented liquors, nor acids. The less fruit and vegetables the better.

AMPUTATION.—The opinions of Baron Larrey, on the immediate and secondary re-union of the wound after amputation, are given in the *Medico-Chirurgical Review*, as follows:—when the operation is performed for any chronic disease of the extremity, as for caries of the bones, white swelling of the joints, or cancerous or other malignant degenerations of the soft parts, Baron Larrey considers it indispensable, if it be desired to prevent local engorgement and purulent infection, that the divided surfaces be not immediately united and kept together, so that the effused fluids may not be retained, or forced back upon the system, but may ooze out from the wound as they are formed. Nearly the same remarks hold good in cases of primary amputation, according to Larrey's experience, and this was found to be the case in the operations that were performed at the siege of Antwerp. When immediate re-union was attempted, the reaction was generally such as to require the removal of the bandages and plaisters, and those cases were always much longer healing, than those in which secondary re-union was sought for from the beginning. When immediate re-union has been obtained, the internal adhesion is effected only by a kind of agglutination of the tissues; the vessels cannot be retained in such a mutual apposition as to anastomose with each other, the divided extremities of the nerves cannot unite together, and to end, the stumps generally remain more or less painful, are apt to ulcerate on the slightest causes, and sometimes even to mortify. In fine, Baron Larrey says, nature must work slowly and without disturbance to effect the process of healing wounds after surgical operations, whether they have been performed for chronic diseases, or for recent injuries.

LARREY'S APPAREIL IMMOBILE.—The following, from the *Medical Chirurgical Review*, are the instructions given by Larrey how to arrange and apply his apparatus:—in treating a compound fracture of the leg, it is first to be simplified by freely dividing all *brides*, removing all extraneous bodies and pieces of splintered bone, and by arresting the hæmorrhage, after which the edges are to be

brought together, and kept in apposition with a piece of linen with holes in it, spread with some balsamic substance. Pledgets of lint, carded linen or tow, are then to be placed over the dressings, and the hollows corresponding to the wound; and some square compresses also previously dipped in a glutinous strengthening liquid, prepared with the white of egg, beat up with camphorated wine, vinegar, or salt water. These compresses should be carefully applied over the whole of the injured part, while an assistant is engaged in maintaining the fractured bone or bones in exact apposition, by appropriate extension and counter-extension. These compresses act as immediate splints, and are free from their inconveniences. They are kept in their place, and are moreover strengthened by an eighteen-tailed bandage, which, when properly applied, maintains everything firm together. The foot and ankle-joint should previously be enveloped in long compresses, wetted with the same fluid. A pad of tow of a pyramidal shape is placed under the tendo Achillis, to make all level and even, so that the pressure of the apparatus may be uniform throughout. The surgeon is then to take two cylindrical rolls of new rye straw, and wrapping them up in the opposite edges of a towel or small sheet, stretched out under the leg, apply them on each side, two or three flat cushions, filled with oat chaff, being interposed to prevent the pressure of the straw-rolls on the skin. These are secured in their place by a good many broad tapes or ribbons, which should be tied over the outer roll of straw, and so as not to press directly upon the crest of the tibia. The advantage of the straw-rolls is that they are so elastic, that although they give way at first to the swelling of the limb, they continue to remain in close contact with it as the swelling subsides, and no void ever exists between them and the apparatus, an advantage not possessed by the paste-board splints, and other substitutes which have been recommended of late. As a substitute for the foot-board, he uses a piece of folded sheet placed like a stirrup under the sole, some tow being previously interposed to fill up the cavity; the two ends are brought up, crossed over the instep, and then secured to the straw-rolls with strong pins. The loose end of the sheet stretched under the leg, which extends below the lower ends of the straw-rolls, is to be folded under the foot, and over the ends of the roller, and then firmly secured by a few stitches or pins. This apparatus is equally suited for fractures of the body or neck of the femur; the outer straw-roll must be, in such cases, continued up as high as the pelvis, and firmly secured by a belt round this part. The limb must be kept in the horizontal position, until the callus is consolidated.

FATAL CASE OF CONSTIPATION.—Dr. Barlow has narrated, in Guy's Hospital Reports, a case of constipation terminating fatally from peritonitis, in which, on examining the body after death, the cavity of the abdomen was found to be almost filled by an enormously distended, thickened, and hypertrophied sigmoid flexure, which had been twice turned on its axis. The descending colon, where it became continuous with the distended flexure, passed in front of the rectum. Just above this portion of the colon, there was ulceration of the mucous membrane, and in one place perforation of the intestine. The sigmoid portion of the colon had a twisted root, with a contracted mesentery; it crossed to the right, and suddenly back again; the upper part seemed the largest, but the whole resembled the stomach of a great turtle, with a thickened and inflamed mesentery. The rectum was wide and pale; but immediately above the part where the intestine passed behind the descending colon, dilatation with thickening rapidly commenced. There was great muscular hypertrophy of the sigmoid flexure, and a firm thick lining, in part diphtheritic. There were not any ulcers in this part. The transverse and descending portions of the colon were much dilated, tumid and inflamed, diphtheritic, and sloughing with numerous ulcers, one of which had perforated the intestine just above the commencement of the sigmoid flexure. The small intestines were full and inflamed, and feebly glued together, in parts, with whitish soft fibrine; there was besides ex-

tensive recent peritonitis. The subject of this case, a young man 26 years of age, had on two previous occasions suffered from constipation. In another case, described by Dr. Barlow, occurring in a boy of twelve years of age, who had suffered from repeated attacks of colic and constipation, and who came under Dr. Barlow's care only when in a dying state, there were found at the post-mortem examination evidences of peritonitis; four turns of the upper part of the jejunum were much distended, dark, and rather thickened; the three lowest were the most sound. At the end of this portion was a distinct, thick, soft, circular cord of rather recent cellular membrane, obstructing the gut, but adhering to it loosely at most parts; a large probe passed easily under it: the commencement of the chief dilatation in the duodenum was bound to it; as also an intermediate portion. When laid open, the bowel seemed remarkably free. The colon contained liquid fæces.

OSTEO-SARCOMA OF THE LOWER JAW.—Dr. Jervy, of Charleston, was consulted in a case of osteo-sarcoma of the lower jaw on the right side; the tumour, at that time, not being larger than a common hen's egg. He advised an immediate operation for the removal of the diseased portion of the jaw, which was not performed for a year, in consequence of the patient's repugnance. Dr. Jervy operated last January, in the following manner:—He commenced by making a free incision from the angle of the mouth, on the right side, directly down to the inferior border of the lower jaw, thence along the edge of the bone to a little above, and in front of the meatus auditorius externus. Having carefully dissected up the whole of the right cheek, which, by the way, was the most tedious portion of the operation, the exceeding vascularity of the tumour rendering it necessary to tie some vessel at almost every stroke of the knife; he then divided the bone at the chin, and again above the angle of the jaw, removing the portion between these points with which the tumour was connected.—The patient was on the table rather less than three quarters of an hour, by far the greater portion of which time, however, being employed in applying ligatures to the bleeding vessels peculiar to the tumour. In dressing the patient, Dr. Jervy made use of a silver plate, which had been carefully moulded so as to form an exact receptacle for the teeth of the upper and lower jaw of the left side, leaving a small space between the jaws through which food, &c., might be introduced. This plate was of very great service, as the lower jaw is now in its natural position, instead of being sunken and drawn to one side, which must have occurred without this support.—The only unpleasant symptom following the operation, was the formation of an abscess in the throat. The man perfectly recovered. The case is recorded in the *American Journal of the Medical Sciences*.

IMPACTION OF A BARLEY BEARD UNDER THE TONGUE.—Dr. Ranking has published, in the *Provincial Medical Journal*, the case of a lad, 17 years of age, the son of a farmer, who was affected with sore throat, and swelling of the soft parts forming the floor of the mouth. The fauces were not implicated. Deglutition was painful, from the difficulty experienced in moving the tongue; articulation was impeded, and there was considerable fever. These symptoms were attributed to the irritation produced by a beard of barley, which was supposed to be in the mouth, but could not be discovered. The usual treatment failing to afford relief, and the swelling increasing, several deep punctures were made with a bistoury, in the neighbourhood of the sublingual ducts. No appearance of the barley "haw" could be discovered. Next day he had a severe rigor, and the pulse became rapid and lost power; the features likewise became collapsed. Under the impression that an abscess had formed, the part was again punctured deeply, but without giving issue to pus. The patient died two days after, and the body was examined thirty hours after death. The neck was livid and puffed up with emphysema; the brain healthy, but slightly congested. Upon cutting into the neck, the cellular tissue was found to be dark, and filled with air. Dissecting inwards, through the

genio-hyoid muscles, a gangrenous abscess, the size of a turkey's egg, was discovered. The genio-hyoglossus, and lingualis muscles, and the substance of the tongue, as far back as the epiglottis, were converted into a complete putrilage; and in the centre of this mass of gangrene was found a portion of barley "haw," or beard, an inch in length.

UTERINE HÆMORRHAGE.—Mr. Elkington exhibited at a meeting of the Birmingham Pathological Society the uterus of a woman who had died of hæmorrhage; there was a portion of the placenta adhering to the fundus and side, nearly as large as the top of a wine-glass. The patient, who was 22 years of age, had been delivered nearly four weeks previously, and had laboured under hæmorrhage and serous uterine discharge ever since.—Mr. Elkington further stated that he had had cases of abortion at the third or fourth month, where the placenta remained, in one or two instances, for nearly a month, without causing flooding or any bad symptom, and in these cases, as far as he could ascertain, it never was expelled. The patients all recovered without a bad symptom. In cases of retention of the placenta after abortion, it is probable hæmorrhage is prevented by the entire adhesion of the placenta; when a partial separation takes place, more or less flooding necessarily occurs, and this is likely to be more copious towards the end of gestation, from the greater calibre of the vessels of the uterus and placenta at that period. In this case the discharge was serous—nearly colourless. Mr. Elkington has noticed a similar discharge occurring to a considerable extent very soon after delivery at the full period. The patient has complained, perhaps in an hour after delivery, of feeling faint, and of having a copious discharge. After carefully examining the napkins and making an ocular examination, this has been ascertained to be a copious draining of a nearly colourless discharge, consisting of the watery or serous part of the blood. This discharge prostrates the patient nearly as rapidly as the direct loss of blood.

LOOSE CARTILAGE IN THE KNEE.—Mr. Terry relates in the *Provincial Medical Journal*, a case of loose cartilage in the knee joint, occurring in a lad, 17 years of age, who was admitted into the Northampton Infirmary, under his care, on account of chronic pain and swelling of his right knee, consequent on a fall on the ice three years previously. On carefully examining the knee after an attack of acute synovitis, a loose cartilage was discovered in the cavity of the joint. The patient said he had felt this for several months, and considered it as the cause of the occasional attacks of pain which he had experienced. With considerable chronic disease of the joint, and after a recent attack of synovial inflammation, it seemed doubtful whether or not it would be justifiable to operate for the removal of the cartilage; but, it was decided in consultation to do so, and the patient himself was very anxious to have it done. It seemed clear, that although there might be danger from the operation, there was at least an equal degree of danger in allowing a source of irritation to remain in the joint. The operation was accordingly performed, and the substance was easily removed. The wound was drawn together by one stitch and a strap of plaster; it was very tightly bandaged, and thoroughly wetted with cold water. The limb was put in a straight fracture box, a little elevated above the thigh; and the most perfect state of rest was enjoined. He was seen four hours after the operation, and was then quite comfortable, and without pain; but the pulse had increased both in strength and frequency, and he therefore lost thirty ounces of blood from his arm, and was directed to take a saline medicine containing tartaric acid, and sulphate of magnesia. Some folds of the bandage were cut, and the wet application was made effectual by the agency of capillary attraction; a bit of worsted hanging out of a bottle of water kept up a continual dropping on the part. The plaster was not removed till the tenth day after the operation, when it was found that the wound had united by the first intention. In two days more the plaster and bandage were left off, but the limb was still kept quiet in the box for another two days,

when all treatment was discontinued, and he moved about freely in his bed. The patient thus recovered, as far as the loose cartilage and the operation for its removal were concerned, but the relief which he hoped to receive from the operation was not obtained; the original disease continued, and after a time, went through the ordinary stages of scrofulous disease of the knee joint, and amputation was ultimately required.

REVIEWS.

On the Structure and Colour of the Corpora Lutea in the Early State. By R. PATERSON, M.D., &c. Leith.

THIS pamphlet contains the examination of the state of the ovaria immediately after conception in three cases, under peculiarly favorable circumstances. The first, a case of suicide, the second, one of murder, and the last, a death from hæmorrhage, each case differing some little as to time, and thereby shewing a progressive state of appearances during the earliest periods after conception. The author endeavours to prove, that a true corpus luteum was established in each case, on which, however, some little doubt exists. For instance, in the first case, no ovum could be found, though carefully and minutely searched for, and the author's conclusions as to conception were chiefly formed from the appearances presented on the dissection of the left ovary. Now, even this is stated to be twice the size of the right ovary, and, it is possible, therefore, that the ovary might be organically diseased, so as to exhibit the appearances spoken of by the author. When we add the fact that no ovum was found, the case will not appear sufficiently conclusive, particularly as the author proves, that if conception took place at all, it was full three weeks before death—a length of time quite sufficient to enable the ovum to have been found, if it existed.

This view is strengthened by the fact that the researches of Raciborski on the corpora lutea, have led him to the very probable conclusions that neither the presence of corpora lutea nor of Graafian vesicles in the ovaries, are any proofs of the loss of virginity, or of a female having had access to the male. *Nothing but the presence of a fecundated ovum in the uterus can prove this.*

The second was one on which an unfortunate controversy took place between the author and Dr. Robert Lee, of London, the latter stating, in terms not the most polite, that it was a "mere clot of blood," and "no true corpus luteum." The preparation, however, was itself forwarded to Dr. R. Lee by other hands, and the Doctor, not knowing it to be the same body, pronounced it a "true corpus luteum." Of course, the only thing remaining to be done was for Dr. Lee honorably and fairly to acknowledge his error, and apologise for the discredit he had thrown on the author. This act of justice has been, however, denied, and a lengthy correspondence is the consequence, Dr. Lee trying to evade the apology, whilst Dr. Paterson as stoutly demands a withdrawal of the offensive sentences. Dr. Paterson certainly appears to have acted with becoming forbearance for some time, but there is a point beyond which none can endure quietly. We regret to see such exhibitions, and earnestly hope, for the honour of the profession, and the hitherto creditable standing of Dr. Lee, that a suitable acknowledgment will be made to Dr. Paterson. There can be no two opinions on the necessity of this course.

It is not high names and high places that can bear down the opinions of others without consideration, and if Dr. Lee feels the smart, he

must recollect the punishment was of his own creating. The third case is a decided and interesting one. The remarks accompanying them are deserving attention, and the illustrative plate well executed.

NOTICES TO CORRESPONDENTS.

A pressure of communications precludes our insertion before next week, of a Pencilling of Dr. Elliotson, a Lecture by Pinel, on Insanity, an important portion (furnished by the author, M. Michean,) of a new work, shortly to be published, on Hypochondriasis, a paper, by Dr. Costello, on Lithotomy, with illustrative engravings, &c., &c. We are in possession, also, of another lecture, recently delivered by Liebig, from our esteemed correspondent Dr. Muspratt.

A multitude of communications are before us, of which we shall publish, or shortly announce for publication, those accepted. It is not our custom to announce the names of authors, as correspondents, unless we are certain of using their contributions. As any other plan would occasionally subject our friends to the annoyance of a public rejection of their papers, it is hoped that our silence, with regard to their favours, will not be misconstrued.

Dr. Grant, of Brora, Scotland, will receive no more numbers of the Medical Times from our office. He has extracted from us, much against our will, what we must now consider an eleemosynary supply of our journal, a thing to which we have great objection. The understanding, on our side, was that he was to have paid for value received. It appears that Dr. Grant thinks otherwise.

M. R. C. S. insists that a College of General Practitioners is unrequired, and would be mischievous. There are enough already to choose from: men already have diplomas in abundance,—why one more? He considers the New College will, after all, if granted, be but an Apothecaries' Hall—and, if no better, why not be content with the one they have? Besides, the Surgeons and Physicians will have the glory of high names, and are not likely to allow their present distinctions tranquilly to be transferred to a new establishment. They would soon contrive to have all Surgeons, or Physicians: for men would not become "General Practitioners" by name, when they could become more in the eyes of society quite as easily. What, then, would become of the new body? Our correspondent then makes some remarks on the New Bill with some laudations on ourselves, for both of which this notice will suffice.

A Subscriber.—The index to vol. 10 was published, and may be had by any bookseller. The price is 5d., or stamped 6d. It forms an extra number.

G. S. has been sent the missing number. Will he state the amount?

Dr. Hocken appeals to us to sit on judgment between him and a writer in Dr. Forbes' Quarterly Review. When in receipt of Dr. Hocken's pamphlet, we shall be in a position to consider the matter; but fear much that the prior claims upon our space for numerous papers pledged to our readers and contributors, may prevent our entertaining the question in our pages. The awkwardness of answering, in our Journal, imputations made in another, is not trifling, and can, in few cases, be satisfactory, either to the injured author, or his medium of defence. Dr. Forbes will not object, we apprehend, to a detailed reply in the work that contained the attack.

Our Glasgow Correspondent is thanked for his obliging enclosure of the proof.

Scotus.—"The Faculty" will be the Royal College of Surgeons and Physicians, Glasgow. The diploma will entitle to register as physician.

Erinensis.—Our opinion is, that a person—not an M. D.—vending the drugs which he himself has prescribed, is clearly amenable to the penalties of the Irish Apothecaries' Act.

The pamphlet on the Hanwell Lunatic Asylum shall have early consideration.

M. N.—We do not know. There was, it is true, such a journal as the Dublin Medical Press, but what with its occasional use of the pulvis Jacobi, and large abuse of an Irish poison known as "Maunselline," neither of which suited the patient's malady—consumption—we should think it gone before this.

A General Practitioner.—Gregory's "Practice of Physic" would be likely to suit our Correspondent,

Medicus, 1815.—Dose 15 drops three times a day. We can give no decided opinion on its efficacy; the remedy seems useful in the earlier stages.

The September number of the "New York Journal of Medicine" has not come to hand.

A Constant Reader.—Of course, it is true that medical men use prussic acid as a medicine, and a very useful one it is, when used with discrimination.

I. W. Macclesfield.—Five Numbers.

Mr. Carfrae has received a P. O. Order for 8s., no name accompanying the order.

Aliquis.—All shall be done that is possible to meet the judicious suggestions of our Correspondent, but arrangements, apparently small, are often more difficult than a stranger can understand. Thus, a wrapper different from the form we now use, would preclude our having a stamped edition.

Omega, under the New Bill, will be entitled to register as a Physician. The Bill contains a clause providing for his case. The complete draft of the Bill is given verbatim in the Medical Times' part for August.

H. Battle is very flattering to us in his encomiums, and has our best acknowledgments. With so much, fortunately, to secure his good opinion—which we may say we much value—on the rest we must beg him to look with the eye of faith, or at least charity. "In dubiis eharitas," said old St. Augustine. If he will not confide in our editorial judgment farther than he sees a clear way himself, we may yet ask a kindly suspension of opinion. For once, may we not see the farther of the two? We say all this with a due consciousness of the mischief of all premature generalizations, especially when grounded on facts not unequivocally established themselves.

All business letters should be addressed to Mr. Carfrae, editorial letters to the editor. Attention to this matter would save us much inconvenience, and our correspondents occasional delay.

THE MEDICAL TIMES.

SATURDAY, JAN. 18, 1845.

IMPORTANT.

GREAT CHANGES IN THE COLLEGE OF SURGEONS.

It is our pleasing duty to announce, on authority beyond suspicion, that there is every probability of an immediate adjustment of the serious differences which have so justly alienated from the English College of Surgeons the good-will of its numerous members. Sir James Graham has announced, we understand, his full acquiescence in the propriety of great modifications of the Charter recently granted; and the majority of the Council were last night considering the details of a supplementary Charter, which is to receive the sign-manual of Her Majesty on the earliest possible day. The improvements to be adopted are of a very varied but decided character.

1st. All members, now and for the future, of ten or fifteen years standing, whether practising pharmacy or not, are to be fellows, *ipso facto*, and to have the plenary power of electing the governing body of the College.

2ndly. Gentlemen practising midwifery will be eligible to be on the Council, which in future is always to be composed of a certain number of gentlemen practising in that department of the profession.

3rdly. The Court of Examiners will be partially composed of surgeon-accoucheurs; and examinations in midwifery will form for the future an integral part of the surgical candidate's examinations.

4thly. Some new arrangements will be proposed, by which will be removed the barrier which now prevents surgeons practising pharmacy from ever sitting on the Council.

5thly. The Fellows will take seniority in the order of their standing, as members of the College; and may propose, without reference to any list of precedence, any eligible member as candidate, to fill any vacancies in the Council.

In the present embryonic stage of the Supplementary Charter, it is, of course, impossible to say with certitude, if the features we have named will, in the measure's full development, be a little more or less prominent than we have described them; but, from undoubted information that has reached us, we are fully justified in believing that the majority of the Council will go as far as we have named in meeting the wishes of their members; and that Sir James Graham will support them in every one of the improvements they shall represent to him as necessary for the contentment and well-being of the body of English surgeons.

To us, who have never ceased to denounce the New Charter from the very moment it was designed, as a piece of impolicy exasperating to the members and fatal to the prosperity of the College, it is no small pleasure to find ourselves in a position to announce that so sage a course of policy is at length to be adopted; a course which, if too late to save the Council from unpleasant reminiscences—that we fear may long rankle—is yet sufficiently early, we trust, to avert the worse consequences that very surely impended. We need not repeat our stereotyped opinion, that an enlightened and generous liberality, removing cheerfully, and ungrudgingly, every annoyance the large body of General Practitioners have so long and justly been complaining of, will do infinite honour—nay, infinite personal service—to the Council, and promote, in no small degree, and for no short period, the very best interests of the Profession.

One circumstance it is here just to add. The Charter, which has produced so much confusion, though granted, it is true, *formally* at "the prayer" of the Council, was in fact pressed on the majority of the Council much against their own consent. Sir Benjamin Brodie—by an almost unpardonable mistake—thought it would have been practically an acceptable improvement in the position of the members, and having Ministerial confidence in his favour, acceptance became necessary to save almost the existence of the College as a great examining body. We believe that the great majority of the Council had as strong an objection to the Charter, as any of the Members now express, and it is pleasing to find that, supported by Sir James Graham, they are now ready to retrace their steps, and to place their College in intimate and cordially good union, with the great body of their members.

Before concluding, we must take leave to express our regret to find, that the three gentlemen elected by the meeting of fifty or sixty Fellows—Messrs. Wellbank, Scott, and Cutler—have been proving by their votes how infinitely worse is an election by fifty or sixty *unknown* fellows, than that, by even twenty councillors, *known* and therefore in some small shape amenable to censure for a bad choice. The older members of the Council have at least the apprehension of Collegiate danger, and some personal interest to force them to circumspection: the triumvirate owning a Council-respectability far more equivocal, seem to know of no means of keeping the genteel footing they desiderate above all other things, save by an unbending and all-resisting conservatism. The supplementary charter furnishing perhaps 2,000 electors, it may be as well to admonish our three friends, that their re-election, which is to be an-

nual, for some few years, will be a very improbable affair unless they make a better use of their trust than we have recently had to notice. If they improve, our readers—the future electors—shall be honestly informed of the circumstance.

"There is a tide in the affairs of Men, &c."

SHAKESPEARE.

The Society of Apothecaries are at this moment as worthy of every man's study, as they are pretty sure of being of every doctor's notice. We watch them with the interest, bewitching and absorbing, with which one views a Tartuffe, vindicating in expansive modesty an universal excellence, and *charitably* overlooking, with an unfelt mildness, a well-founded charge. Goodness never personified itself in a snug English corporation till they told their own story in 1844 and 1845, and blushless, made us know their virtues. The Apothecaries "*peintes par elles-mêmes*" are modern angels, the bald-head, and poueh-belly, notwithstanding, The lascivious pencil of Mr. Wakley, when anticipating the elegancies of the *Town* and *Satirist*, never drew their nude ugliness more frightful than the well-adorned beauty in which they have painted themselves. They are the "cynosure of modern eyes" political. "They conscientiously believe that *they* shall best promote the true interests of the public." (1) "They feel a peculiar interest in the welfare of the branch with which they are themselves connected;" (2) "*they* refer with feelings of the *highest* satisfaction to the beneficial working of *their* Act of 1815." (3) "They confidently argue, from the success which has attended the labours of their Court of Examiners." "They will endeavour to procure such a measure of Medical Reform, founded upon broad and liberal principles, as will satisfy the reasonable wishes and expectations of the General Practitioners." (4) "They, in discharging their duties, have succeeded in materially raising the character and attainments of the class of General Practitioners." "They are now ready and willing, irrespectively of personal or corporate considerations, to assist in obtaining for those who have been educated under their auspices, a more perfect organisation than they could enjoy in connection with either of the existing Medical Institutions." "If the position of the Society of Apothecaries, as one of the medical institutions of the country, or the manner in which they may have succeeded in discharging the important duties with which they have been entrusted for the last thirty years, give them any claims upon the consideration of the Legislature, and the country at large, they are prepared to throw the weight of that position, and of those claims, into the scale in favour of the object now sought by their medical brethren" (incorporation under the Apothecaries). "They desire, however, that any influence they may possess, should be exercised in a manner the most conducive to the real interests of the general practitioners, and they are, therefore, deeply anxious that such influence should be exercised *legitimately*, and as becomes a body continuing to discharge an important public trust." "They have no personal, corporate, or local interests to advocate!"

And then, in the same letter, in which with a grave pen they tell us they have no manner of interest in a new incorporation, they are responding in bland and thankful acquiescence to a Man-

chester Committee, (which has in so many words named them as "the head of the movement for Incorporation") that "*they* will not shrink from the responsibility of taking their *natural* position, at the head of the movement for incorporation:" nay, they actually propose to merge their own corporate existence in that of the new and more respectable incorporation, at whose head—in perfect consistency with the whole course of their self-sacrifice—they wish, if they can, to put themselves; and moreover, know very well that the whole movement for a new corporation—as proved indeed by the Marylebone manifesto—centres in the question of placing them as the chiefs of the New College. "The present examiners," says that document, "are to continue their appointment; their number to be increased from twelve, to eighteen or twenty-four, and the whole, or a part, of these newly elected, to be members of the College of Surgeons, and of undoubted ability as surgeons." In other words, the Apothecaries who are self-described as without "personal, corporate, or local interest," in this affair of the Incorporation, are to form, by compact, its rulers—kindly allowing, however, the admission of a half-dozen O'Connors and Ancells—"surgeons of undoubted ability" and equally "without personal, corporate, or local interest"—as a reward for working-up the Incorporation movement on the other side!*

One instance more of the Tartuffe philosophy which seems to guide our worshipful Society in their dealings with the public. They live, of course, only for the Profession; they exist but for its good, for which they will gladly suffer even annihilation: they, in short, give us an edifying death-bed repentance, and are as meek, when Corporate life is menaced, as Satan was saintly,—when sick. In this modest and inoffensive spirit they carefully assure us that, "*they* felt it to be no part of their duty to originate any proposal as to the specific changes which it might be expedient to advocate,"—"it was more becoming in them, as one of the existing medical institutions of the country, to wait for some distinct expression of the wishes of the General Practitioners," &c. Well, we turn to their "Statement," published six months before, and we are told—as matter of eulogium, too—"that the Society had, in fact" (before Sir James Graham introduced his Bill), "made considerable progress in the preparation of a measure comprehensive in its nature, &c.;" had "originated a Bill;" had done the

* Our readers will be good enough to understand that we infer no censure against the mass of worthy gentlemen who constitute the English Association of General Practitioners. We believe them to be animated by the very best intentions, and that though partially committed to certain speculative preferences, by manœuvres not well known to them, that they will ultimately much help in achieving great practical good for the Profession. The more our friends join them the better: the Profession should be in their Association: it will guarantee the body against any of those extravagant steps and impracticable aims which, while very promising to an adventurous practitioner or two, can, under present circumstances, produce no useful result, and may intercept important advantages now within our reach. One circumstance, we confess, in the constitution of the Society, excites our surprise, while explaining perhaps a few things in its past policy which would be otherwise mysterious. The committee have, for one secretary, the hired, and not very elevated, literary instrument and secret agent—of whom? Why, of a man with whom it is well known they treat all personal communion as a disgrace not to be talked about! Shall the servant be so much better than his lord?

"unbecoming" thing, were not waiting for others' opinion, but initiating a "comprehensive measure" themselves!

Now all this Pecksniffism, this intensely ardent pursuit of the good things of this life, under guise the most coolly self-denying and philosophical, would do very well if there were no such Journal as THE MEDICAL TIMES, and no such persons as an acute Medical Profession; but under present circumstances, is only so much worldly wisdom profusely expended at a great disadvantage. Far sounder, far wiser, would it have been, bluntly and honestly to have placed their true position, frankly before the profession. "Sir James Graham's hand is on our throat; our corporate funds and influence, shall all be used in boldly resisting his assault; if we fail, if we must die, why, we will at least die game." But to tell us a long bead-roll of corporate perfections they are to have, appealing to the tender mercies of the Profession, and of Sir James Graham by a litany of future excellencies, which are so many phillipics against their past deficiencies, to do this—we say—is only to make themselves ridiculous, and to disincline the Licentiates, (who for thirty years have vainly and uselessly furnished them with an enormous capital, that might in better hands have founded the most flourishing Medical University in Europe), to disincline these Gentlemen to pay a fair attention to the claims the Apothecaries really can advance on them. Under certain circumstances, (one of them being watchful supervision)—there is no true policy, but honesty. If that will not serve the Apothecaries' Company they are doomed.

Just now, we shall abstain from considering what the Apothecaries have, and what they have not done, for the Profession: but we will not attempt to conceal that, apart from these hypocritical pretences of superhuman disinterestedness, which deceive nobody, we admire vastly the breadth and daring of the policy which engage them to stake their all on the possible chance of heading the British body of General Practitioners. Drug-venders they may be—unknown, also, to society, to literature, and to science—but there is something in the mere aspiration that involuntarily wins our respect for them. The more that unfortunate circumstances seem to have unfitted them for being the scientific chieftains of a scientific community, the more must we laud the ambition which would give their energies so high an aim. It might be that an undistinguished headship would cripple the new Institution's grandeur, and in the ardent competition with other corporations, under rulers of European celebrity, ultimately produce its ruin; but there is greatness in the attempt; if success cannot be commanded, it is something to have deserved it, and next to turning a great opportunity to account, must ever be the merit of a well-contested, hard-battled, though failing, attempt.

But the deep, the high, the noble policy, excogitated for once by brains in the neighbourhood of Blackfriars—does it convey no hint, make plain no "sign of the times," to the Surgeons in Lincoln's Inn Fields, or the Physicians in Trafalgar Square? Are they blind enough not to see that the opportunity is before them of putting themselves at the head of, perhaps, the largest and by far the most gentlemanly body of Doctors known to any nation of the civilized world? That the College of Physicians—now a decaying, perishing, chancery-smitten, club-room of some two or three hundred members—may be revolutionized to greatness with a startling increase

(1.) A statement, &c. p. 39—2. *Idem*, page 38.

(3) Address, &c., p. 5. (4) Address, &c. page 55. Letter in *Times*, Jan. 31.

of consequence and celebrity to its rulers? That the Council of Surgeons may not only consolidate their present prosperity, and avert a very threatening insignificance, but make their Institution the greatest of European Medical Universities? "Now's the day and now's the hour!" The moment is big with fortune, if they know how to seize it. There is an altitude in events that invokes their minds to enlarge. To be generously daring, is to be safe; to be recklessly liberal, prudent. Old usages and petty distinctions that were of importance six months since, are made inexpressibly and ridiculously insignificant by the new questions that have since "upheaved their vastness" on the scene. The prejudice that was then a personal interest, is now a mad impolicy: prepossessions, harmless for years, can now only be indulged with the peril of a character's ruin. The little *must* give way to the great: and rulers are *forced*, with their Institutions, into the social eminence of European fame, or to fall under a universal finger pointing them out, wherever science goes, as "Idiotic Corporators!" What, then, in especial, say the Surgical Councillors? Will they accept the offer of greatness on the easy terms of meting out to their brethren a handsome measure of justice? Will they rise to a level of the high occasion before them, and make their Supplementary Charter *entirely* and for ever conclusive of every difference between them and the Profession? For our parts, we ardently hope they will, and that we may have to do them the justice in eulogium we have hitherto been compelled to do them in censure. Glad, indeed, shall we be to see that every ground of political agitation is removed for ever from our pale; that no longer a struggle exists in any portion of our Profession, save who shall prove himself most *scientific*; and that the rulers of the College of Surgeons of England, existing truly for "the Surgeons of England," rise in fame and respect, by using vastly increased affluence and influence, in not only maintaining, but *raising* the "honour and dignity" of the Profession!

THE INQUEST AT SALT HILL.

That medical men are the worst witnesses that can be brought forward in a court of justice, has become almost an incontroverted axiom, and it is indeed a rare thing to meet with a member of the profession sufficiently aware of his position and duties, to restrain himself to a discharge of the latter, without wandering into the discussion of matters, either altogether extraneous, or at least foreign to his own pursuits. Although the science of medicine is so exceedingly comprehensive, as to require the full exercise of the intellectual faculties, examples are continually placed before us in the records of medical jurisprudence, where the surgeon, thus, not content with his own branch of the enquiry, defeats the ends of justice through the distrust of his evidence, which is naturally engendered by his failure on those points in which he ought not to have attempted to give an opinion.

A pregnant illustration of these remarks may be found in the report of the enquiry of the death of Sarah Hart at Salt Hill. It appears that her decease occurred suddenly, and under circumstances presenting sufficient grounds for the suspicion, that her death had been caused unfairly. Two gentlemen, Messrs. Champney and Norblad, surgeons practising in the neighbourhood, were appointed to examine the body; and the result of their investigation was to the effect, that the viscera were generally healthy, the only morbid lesion being an ancient adhesion between the costal and pulmonary pleurae, which of course had no influence in producing death.

Thus far these gentlemen acted correctly, but failing to detect the cause of death in any morbid lesion, their attention was necessarily directed to the examination of the viscera and their contents by chemical analysis, to ascertain the existence of a lethal dose of poison, and in doing so, they appear to us to have overstepped their duties. In lieu of having recourse, as they were bound to do, to the assistance of an analytical chemist, whose whole life is passed in the performance of chemical operations, these gentlemen relied upon their own judgment and skill in manipulation, and experimented themselves. Their evidence, as might have been expected, so far as it relates to the chemical part of their enquiry, is a tissue of contradictions.*

Mr. Champney states, that he found the contents of the stomach *strongly acid*, inasmuch that he first tested it for the strong mineral acids, such as the sulphuric and nitric, and failing to discover these, he afterwards pursued his analysis by applying tests to ascertain the presence of prussic acid. In this he stated himself to have succeeded, but afterwards again contradicted himself, by averring that the poison was not present in the free state, but was combined with salt; it existed in the form of the cyanuret of potassium, notoriously a most fatal poison. Mr. Norblad's evidence was to the same effect, but is not reported so minutely as his colleague's.

The contradictions contained in this statement are of sufficient importance to enable a clever lawyer to puzzle and confound an incompetent or nervous witness, as to render his evidence altogether inadmissible, or at all events to deprive it of its due weight, and thus unfortunately to defeat the ends of justice. It must be self-evident that the contents of the stomach could not have been rendered so strongly acid as to give rise to the suspicion that sulphuric or nitric acid was present by the mere existence of prussic acid in the liquid, as it is one of the feeblest of all acids in its chemical reactions, and its taste, instead of being acid, is intensely bitter. It is, therefore, clear, that the very acid condition of the contents of the stomach remains as yet unaccounted for. Another point of equal importance is the utter impossibility of hydrocyanic acid imparting any indications at all, seeing that it was not present in the free state, but combined with the metallized potassium in the state of cyanogen. It is true that this salt, the cyanuret of potassium, on the addition of water, gives out the hydrocyanic acid odour, but even then the chemical indications of an acid would not be perceptible, as long as the hydrocyanic acid was in combination with the potash, the hydrocyanate of potash being, of course, formed by the decomposition of a portion of the water in which the cyanuret of potassium is dissolved.

These points of error cannot be regarded as mere quibbles, for they have a direct bearing on a most important question. Human life is at stake, and our law holds that while justice should be inflexibly meted out to the criminal, the prisoner should always have the benefit of a doubt. There can be little hesitation in averring that the errors and contradictions which we have pointed out, may be so twisted and explained as to render the medical evidence altogether valueless. This might have been avoided, if the surgeons whose medico-legal skill was relied upon, in this case, instead of performing the analysis themselves, had had recourse to the assistance of a well educated and practised chemist. Medical men are supposed to be, and generally are, sufficiently acquainted with the processes of chemistry to conduct an analysis to their own satisfaction, but very few of them can be said to be sufficiently acquainted practically with the subject, to authorise their dealing with it in matters of medical jurisprudence when the liberty of the subject is endangered, and human life is at stake. The processes of analytical chemistry require constant practice and unwearied attention to enable the operator to decide between the minute changes of colour in

* Our remarks, it is not necessary to state, are based on the newspaper reports of the proceedings at the inquest.

the liquids tested, or in the precipitates, by which his opinions must be formed, and the portions operated on are occasionally so small, that only the most practised eye can detect the changes. It is clear, therefore, that medical men in active practice, especially in the country, cannot have time, however great their inclination, to keep themselves *au courant* with the advance of chemical knowledge, either practically, or theoretically, in such a way as to make a Judge and Jury stake a human life on the chance of their unerring accuracy.

Concluding as we began, that medical men generally constitute the worst witnesses in a court of justice, we beg to express a hope that the time is not far distant, when a great and beneficial change will be effected in this respect.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. III.

(Evidence of Dr. Southwood Smith continued.)

In our first notice of Dr. Southwood Smith's evidence, we restricted ourselves to the facts adduced and the opinions expressed in reference to fever, and we showed how closely this fatal disease is connected with the filthy state of the streets and houses of the poor. Fever was brought prominently forward as being "the most obvious and the most rapidly fatal of the diseases arising from the neglect of sewerage, ventilation, and cleanliness;" but we now propose to show, on the authority of Dr. Smith, that "neglect of sewerage, ventilation, and cleanliness, gives rise to other diseases besides fever, and to other consequences still more to be deplored than the pressure on the parish funds."

The poison generated in places cursed by this neglect "acts as a powerful predisposing cause of some of the most common and fatal maladies to which the human body is subject;" among which are specified diseases of the digestive organs, inflammation of the air-passages and lungs, consumption, exanthematous fevers—scarlet-fever, small-pox, measles, &c.—which latter occur chiefly in childhood, and cause an excessive mortality in unhealthy towns and districts.

The constant exposure to the malaria generated in these neglected districts, "produces," we are told, "diseases of the nutritive system," which "diminish its power of resisting the numerous causes of disease to which the body is commonly exposed, and so enfeeble it, that the individual is very much incapacitated from labour." "The mothers are often so enfeebled as to be unable to attend properly to their domestic duties, so that the children are not taken due care of, while the sickness of the children becomes an enormous tax on the time and wages of the parents." "The ability of the labouring classes to support themselves is very much diminished." The poor are thrown in large numbers for relief or support upon the parish, the charitable are put to an increased expense for hospitals and dispensaries, and the spirit of independence is so broken down that large masses of the people are reduced "to the degradation and wretchedness of depending for their support on charity, and not on their own industry."

The mental faculties suffer impairment as well as the bodily health. With the bodily vigour and industrious habits of a healthy and independent peasantry, they lose "the intelligence and spirit proper to such a race. One of the most melancholy proofs of this is the quiet and unresisting manner in which they succumb to the wretchedness of their lot. They make no effort to get into happier circumstances; their dullness and apathy indicate an equal degree of mental as of physical paralysis; and this has struck other observers who have had opportunities of becoming acquainted with the real state of these people." In the Poor Law Commissioners' Report on the Sanitary Condition of the Labouring Population there is the following statement, which, says Dr. Southwood

Smith, "impressed my mind the more because it revealed to my recollection vividly similar cases witnessed by myself:"—"In the year 1836," says one of the medical officers of the West Derby Union, "I attended a family of thirteen—twelve of whom had typhus fever—without a bed in the cellar, without straw or timber shavings—frequent substitutes. They lay on the floor, and so crowded that I could scarcely pass between them. In another house I attended fourteen patients: there were only two beds in the house. All the patients lay on the boards, and during their illness never had their clothes off. I met with many cases in similar conditions; yet amidst the greatest destitution and want of domestic comfort, *I have never heard, during the course of twelve years' practice, a complaint of inconvenient accommodation.*"

We must not withhold Dr. Smith's commentary on this fearful statement. "This want of accommodation" he says, "under such circumstances, appears to me to constitute a very melancholy part of this condition. It shows that physical wretchedness has done its worst on the human sufferer, for it has destroyed his mind. The wretchedness being greater than humanity can bear, annihilates the mental faculties—the faculties distinctive of the human being. *There is a kind of satisfaction in the thought, for it sets a limit to the capacity of suffering which would otherwise be without bound.*"

Another necessary consequence of the action of malaria on the system, is the use of unwholesome stimulants to counteract the debility it occasions. "The poison generated in these neglected districts," "is a sedative poison, among the most distinctive characters of which, are the depressing effects produced by it both on mind and body. This is one of the main causes, not only of the mental apathy, of which I have already spoken, but also of that physical listlessness which makes them incapable of any great exertion. I am satisfied that this feeling of depression is one of the chief inducements to the use of stimulants, which the same feeling naturally leads them to take in excess whenever a sufficient quantity can be procured. I quite believe, from what I have observed of them, that the inducement to take the most pernicious amount of stimulants often arises from a sensation of lassitude and languor, the direct result of the debilitating causes that are incessantly acting upon them, and that render them so incapable of physical and mental exertion." The stimulants here alluded to are ardent spirits, and opium, of which the latter is comparatively rarely taken by the adult, but given to children in almost incredible quantities.

This is one of the most remarkable facts brought to light by the Children's Employment Commission. "Dr. Mitchell, one of the Sub-Commissioners, reports that the medical witnesses examined by him state, that the infants and children are seldom brought to them before they are benumbed and stupefied with opiates; the usual preparation given, being Godfrey's Cordial, a mixture of treacle and opium, known by the name of 'comfort,' and an article in constant demand. A little girl will come to the chemist's and ask for a dose of it to give to the baby next day, telling him that her mother is going out to work. A respectable chemist stated that he had made twenty gallons of 'comfort' in the year; and that there were chemists who lived near the market-place, and more in the way of these country people, who made a good deal more." This evidence refers to the colliery districts, but it appears on the authority of other medical men, that the same practice prevails at Croydon, in Surrey, and by inference, in other non-manufacturing towns. Speaking of the districts of Nottingham, Derby, and Leicester, another Sub-Commissioner, Mr. Grainger, states, that the practice of administering opium to infants, which is very general in these districts, "is usually begun when the child is three or four weeks old." But Mr. Brown, the Coroner of Nottingham, states, "that he knows Godfrey's Cordial is given on the day of birth, and that even it is prepared in readiness for that event." The extent to which the system is carried, may be judged from the fact, expressly ascertained by this gentleman, that one druggist made up in one

year, 13 cwt. of treacle into Godfrey's Cordial. The result of this terrible practice is, that great numbers of infants perish, either suddenly, from an over-dose, or, as more commonly happens, slowly, painfully, and insidiously. Those who escape with life, become pale and sickly children, often half idiotic, and always with a ruined constitution. "Compared with this," adds the Sub-Commissioner, "the Chinese practice of infanticide may be called merciful."

Though this practice of administering opium to young children is not in all, or even the majority, of cases, perhaps, a consequence of the unhealthy and debilitated state into which the mothers are brought by constant exposure to unwholesome influences, there can be no reasonable doubt that it is adopted in a great number of instances as a direct consequence of the sickness or weakness of the mother. We shall have other opportunities of alluding to this destructive practice, but it formed too important a part of Dr. Smith's evidence to be passed over in silence.

We must touch but lightly upon many parts of the evidence before us, though there is no part of it which may not be read with advantage. The utter impossibility of maintaining habits of cleanliness and decency; the repulsion of the poor man from his wretched and filthy home to the cleaner and more attractive public-house or gin-shop; the domestic discord to which these anti-social habits give rise; the reckless indifference ending in utter disregard of all moral obligations, and of the peace and property of others; the demoralising effect on the minds of children brought up in the midst of all these unfavourable influences (an effect which the best school-education must be nearly powerless to counteract); the great number of cases of fever, and other severe illnesses, which must of necessity be treated in these miserable abodes, under the combined disadvantage of inadequate accommodation, unskilful nursing, and foul air;—these are some of the points touched upon, and well deserving consideration, but which we must content ourselves with thus briefly noticing that we may pass on to the remedial measures which Dr. Southwood Smith's experience has led him to point out.

Among these, a good system of sewerage stands first and foremost, a system which should be carried out universally in every town in the kingdom, by the abandonment of the "present prevalent system of separate local acts," and the substitution of a comprehensive plan co-extensive with the evils which it is intended to remedy. "The great principle in regulating the construction of drains," appears to Dr. Smith, "to be to make such provisions as will secure their being really conduits, not reservoirs—pipes, through which the refuse matter is carried away, not receptacles in which it is deposited and detained." "Experience has shown that this object, namely, the complete and rapid transmission of noxious matters, may be materially facilitated by giving to the bottom of the drains a particular form, that is, a semi-circular form, instead of making them with flat bottoms." "No drain can be efficient through which there do not flow currents of water. If in any particular case, it be not practicable to cause a current of water to be constantly flowing through a drain, then contrivances must be adopted to cause currents to flow through it, at regular and no distant intervals. Without a provision for this regular and abundant supply of water, drains not only fail in accomplishing their object, but they become positively injurious. They generate and diffuse the very poison, the formation of which it is their object to prevent." Dr. Southwood Smith directs attention in a very pointed manner to the system of flushing the sewers, adopted in the Holborn and Finsbury divisions, and which we shall have occasion to notice when we arrive at the second volume of the report. We shall merely state in this place, that the object of that system is to obtain a supply of water which may be used at short intervals to sweep out the deposits which are continually forming.

The application of the refuse of towns to the land in the neighbourhood, the value of that refuse, the probability that it would pay the expense of the structures necessary for its transport, the

possibility of applying water more extensively, and efficiently to the cleansing of streets, the mode in which the money is to be raised for defraying the expense of conveying away the refuse of our towns, with several other questions of a similar nature, will also be better considered when we come to the second volume of the reports.

The next subject to which our attention is directed, by the evidence of Dr. Smith, is the condition of the houses of the poor. Here is a description, written on the spot, of Punderson's Gardens and Lamb's Fields:—"The place called Punderson's Gardens is a long narrow street, in the centre of which is an open sunk-gutter, in which filth of every kind is allowed to accumulate and putrefy. A mud-bank on each side commonly keeps the contents of this gutter in their situation; but sometimes, and especially in hot weather, the gutter overflows; its contents are poured into the neighbouring houses, and the street is rendered nearly impassable. The privies are close upon the foot-path of the street, being separated from it only by a paling of wood. The street is wholly without drainage of any kind. Fever constantly breaks out in it, and extends from house to house; it has lately been very prevalent here, and we have had several fatal cases from it, in the London Fever Hospital. The open area called Lamb's Fields, is about 700 feet in length, and 300 feet in breadth; of this space, about 300 feet are constantly covered with stagnant water, winter and summer. In the part thus submerged there is always a quantity of putrefying animal and vegetable matter the odour of which at the present moment is most offensive. An open, filthy ditch encircles this place, which, at the western extremity, is from eight to ten feet wide. Into this part of the ditch the privies of all the houses of a street, called North-street, open: these privies are completely uncovered, and the soil from them is allowed to accumulate in the open ditch. Nothing can be conceived more disgusting than the appearance of this ditch for an extent of from 300 to 400 feet; the odour of the effluvia from it is, at this moment, most offensive. Lamb's Fields is the fruitful source of fever to the houses which immediately surround it, and to the small streets which branch from it. Particular houses were pointed out to me, from which entire families have been swept away; and from several of the streets fever is never absent."—Dr. Smith adds: "I know that no verbal description of these places can convey any conception of their disgusting and poisonous condition; they must be seen to be at all understood; and when seen every one involuntarily exclaims, 'Can such a state of things exist in a country that has made any progress in civilization?' These places had remained in this state many years, and no one had made any attempt to improve them; and now, after an account of their condition has been published to the world upwards of five years, they are allowed to remain just the same!"—"A part of this place has been improved since this description was written, by the cuttings of the Eastern Counties' Railway, which passes through it; but the offensive ditch, with the exposed privies emptying into it, remain just the same."

Of course they do. The matter is not at all pressing. There are many things much more important to be done. Trafalgar Square is not yet completed; the Royal Exchange; Piccadilly must be widened. It is at present inconveniently narrow, and it is within the bounds of possibility that if four or five vehicles were driving abreast, the paint might be rubbed off their wheels. The house of Lords is impatient for its new building, the nation for its Palace of Westminster. What is health and life, cleanliness and decency, morality and virtue, and the whole tribe of physical and moral blessings which link themselves to the state of the poor man's dwelling, when compared to the accommodation and amusement of the privileged inhabitants of the West End! What are Punderson's Gardens and Lamb's Fields to the elegant dilettanti of May Fair? They don't inconvenience them. Physicians and philanthropists may amuse themselves with such matters, and fret and fume as much as they please, but commend them to Tom Thumb and his carriage,

Madame Tussaud, and her waxen heroes and heroines, Chinese Exhibitions, Italian Operas, Greek Plays, and English Pantomimes. These are the fitting employments for an aristocracy; but as for your Punderson's Gardens and Lambs' Fields,—pshaw! The very thought of them is enough to make one sick.

For our own part, if it had not been for that racy description of those attractive localities, we should have finished Dr. Southwood Smith's evidence in the present number, but we are reluctantly compelled to postpone the conclusion till our next, when we shall also notice the short evidence of Mr. Ward, which fills up the interval between that of Dr. Southwood Smith and Dr. Arnott.

STATE OF PROFESSIONAL FEELING.

A meeting of the medical men of the County of Hertford, was held at the Red Lion Inn, Hatfield, on Wednesday, January 8th, 1845, for the purpose of taking into consideration the proposed Medical Reform Bill of Sir James Graham.

Present :—Drs. Davies and Thomas, Messrs. Ward, Betts, Pidecock, Lipscombe, sen. and jun., Dickens, Shillitoe, Woodhouse, Philips, Clifton, Asbury, Butcher, Whatley, and Ringrose.

Thomas Abel Ward, Esq., of Watford, in the chair.

A number of letters having been read from gentlemen residing at a distance, expressing their approval of the Bill, the following resolutions were adopted:—

"1.—That this Meeting is fully sensible of the defects in the Laws which now regulate the Practice of Medicine and Surgery in the United Kingdom, and of the unsuccessful attempts which have been made to improve them; it therefore views with much satisfaction an endeavour on the part of Her Majesty's Government to bring about their reform.

"2.—That this Meeting is of opinion that the unconditional repeal of the Apothecaries Act of 1815, contemplated in Sir James Graham's Bill, would be productive of great mischief to the Medical profession, by throwing open the practice of medicine to unqualified persons.

"3.—The meeting approves of the uniformity of qualification and of fees to be required by the several examining Colleges; of the registration of duly licensed practitioners; of the exclusion of unregistered persons from all public medical appointments; of the disqualification of unregistered persons to give medical evidence in courts of law, and to grant medical certificates; and of the declaration and confirmation of the rights and privileges of present lawful practitioners.

"4.—That this meeting highly approves of the establishment of a 'Council of Health and Medical Education' for the superintendence of the affairs and protection of the interests of the Medical Profession, but is of opinion that the General Practitioners, who constitute a very large majority of English Practitioners, are entitled to a fuller representation in the Council than is provided for in the said bill; it therefore suggests that, inasmuch as English General Practitioners are for the most part Licentiates of the Society of Apothecaries, as well as Members of the College of Surgeons, it would be desirable that they should be represented by a Member of the Council, elected from amongst the body of that Society, in addition to their being represented through the College of Surgeons as members of the same.

"5.—That this meeting considers it very inexpedient, and highly calculated to destroy the harmony that ought to prevail amongst the members of a profession, that there should exist any distinction of privileges, amongst those of their respective Colleges, and that a measure of Medical Reform should provide that all members of the College of Surgeons, previous to the grant of their late charter, should be placed on an equality of rank and privileges.

"6.—That a copy of these resolutions be sent to every Member of Parliament connected with the County of Hertford, with a request that he will

support a measure of Medical Reform founded upon the principles expressed therein. That Dr. Davies, of Hertford, Dr. Thomas, of Hatfield, and Mr. Lipscombe, of St. Albans, be requested to form a Committee to embody the foregoing resolutions in a petition to be presented to the legislature."

A vote of thanks to the Chairman was then unanimously agreed to.

On Friday, the 3d. of January, the Medical Gentlemen of the town and neighbourhood of Plymouth, met in the Board Room, at the Royal Eye Infirmary, for the purpose of taking into consideration Sir James Graham's Medical Bill, and that a series of resolutions on the subject be adopted.

The meeting was convened by circular, and there was a full attendance. Drs. Butter, Yonge, Soltau, Bulteel, Moore, and Coeks,—Messrs. Square, Hicks, Hull, Andrews, Freeman, Harper, Whipple, Fuge, Wells, Smith, Derry, Kelsall, of Plymouth; Messrs. D. Little, H. Little, Kerswill, May, Laity, Swain, and Crossing, of Devonport; Messrs. Perry, Burrows, and Bennet, of Stonehouse; Mr. Langworthy, of Plympton; Mr. Winchester, of Tamerton, were present.

Dr. Butter, being unanimously called to the Chair, stated the object of the meeting, observing that he had found a great degree of indifference amongst his Plymouth brethren about this bill of Sir James Graham's. Some did not trouble themselves about it: others were satisfied by the *ex parte* statements published in the *Times* newspaper against, and in the *Standard* for this Bill, and with the innumerable accounts published in all the Medical Journals. The Legislature had not attempted this great measure silently or rashly. The grievances and anomalies of the medical profession had been urged upon him, and Sir James Graham had proposed such remedies as appeared to him the best. These were now placed before the great body of Medical men, exceeding, perhaps, 20,000.

Mr. Square then rose, and after some suitable observations, moved that this meeting views with interest the bill now pending in Parliament, entitled "A Bill for the better Regulation of Medical practice throughout the United Kingdom," and expresses its satisfaction at the ample time afforded the Profession for the consideration and discussion of its several clauses.

This was seconded by Dr. Bulteel, and carried unanimously.

Mr. Wells proposed, and Mr. Hicks seconded, the next resolution, which was to the following effect:—

Whilst this meeting approves of the creation of a "Council of Health and Medical Education," it cannot but regret that the interests of the General Practitioners are inadequately represented in the said Council.

Mr. S. Derry, in introducing the next resolution to the notice of the meeting, said, in reference to unqualified persons being permitted to practice, that it was notorious that druggists did a vast deal in medical practice, and did, he believed, a vast deal of evil (hear). He spoke advisedly on this point, he had in his recollection cases, where, he did not hesitate to say, life had been sacrificed. He had met with a case of pleuritis which the druggist had treated for spasm; he had been then sent for, and in forty-eight hours the patient died. He had also another case under his care at that moment, where severe inflammation of the knee had been induced by a blow; the individual went to a druggist of that town, and by his direction put on a large blister, thus adding fuel to fire; effusion of the joint was the result, and the man had lost much time by it. Another reason why druggists should be restricted from prescribing, was the invariable practice of medical men to prescribe for the poor gratuitously, thus obviating the necessity for their having recourse to druggists. There was another which would bring the subject of this resolution home to their feelings. A number of persons who could afford to employ medical men, send to their druggist and get him to prescribe, hoping thereby to save a little money; and if it should happen not to do them good, they send for

a medical man, and tell him that they had sent to the druggist for a little powder, because they did not like to trouble him. But it was not out of a disposition not to give the medical man trouble that they sent to the druggist, but to take money out of the pocket of the former (hear). He then proposed "That this Meeting is of opinion that a general Registration of Qualified Practitioners is most desirable, but regrets that no provision is made in the aforesaid Bill to render such registration compulsory; and that the method proposed in the present measure will be unsatisfactory to the General Practitioners, inasmuch as it degrades him from the position of a Member of the College of Surgeons, to a Licentiate in Surgery; and it considers that some stringent and summary process should be adopted to prevent unqualified persons from tampering with the public health."

Dr. Soltau seconded the resolution, and after some observations from Dr. Yonge and Mr. Swain, the resolution was then put and carried.

On the motion of Mr. Fuge, seconded by Dr. Moore, it was decided, "that a copy of the resolutions be forwarded to Sir James Graham, accompanied with the thanks of this meeting for the interest he has evinced in the welfare of the Medical Profession, by bringing its present anomalous and conflicting state under the consideration of Parliament," and it was further resolved on the motion of

Dr. Coeks, seconded by Mr. Perry, "that Petitions, embodying the sense of the foregoing resolutions, be presented to the House of Commons by the Borough Members, and that the Members of the County be requested to support the prayer thereof; and that the Chairman do sign the same in behalf of this meeting."

On Wednesday, January 8, a meeting was held at Aylesbury, Robert Ceely, Esq., in the chair. The other speakers were: Messrs. Warren, A. P. Owen, Knight, G. Cowley, H. Hayward, E. Pope, Howell, C. Spencer, T. Savory, Vores, H. B. Picken. With an expression of satisfaction at the Government's taking up the subject, the resolutions conveyed more or less censure of the Bill itself. The Incorporation of General Practitioners was recommended.

On the 9th December, "The Faculty of Physicians and Surgeons of Glasgow," met and passed sundry resolutions approving of the Bill's equalizing the standard of Education, and cost of Collegiate licenses, and making common to every medical man the privilege of practice throughout the empire. They insist, however, that they should not be excluded from the power of examining and licensing the General Practitioner in medicine and surgery. They plead, also, for further restraining quackery, and less Registration fees.

THE LATE EXAMINATION FOR FELLOWSHIP.

To the Editor of the Medical Times.

SIR,—A letter in your Journal of last week signed "A Practitioner of Many Years Standing," induces me to offer the following remarks for insertion.

The best refutation of some of the statements relating particularly to the Fellowship Examination, would be the publication by the examiner of the questions requiring written answers, given to the candidates on the 3rd and 5th of December last. I am sure no exception will then be urged against them on the score of difficulty or severity.

To have excluded descriptive and relative anatomy from the examination of the "Practising Surgeon" would indeed have rendered that examination a farce, and been an insult to those gentlemen who, however arduous and toilsome their occupation, endeavour to keep up and acquire professional information. Some of the gentlemen, I know, were not unprepared for a fair question

* They were published in the Medical Times of last week.

upon elementary anatomy and modern physiology. But we were, nevertheless, thankful at escaping the bother of such *sub judice* matters.

On the first morning of the examination I was completely astounded by a gentleman telling me, that he had made no preparation, and by his and other gentlemen stating, with the semblance of authority,—there would be no rejections. Other observations equally startling, which were made *intra* and *extra muros*, together with the circumstance of some of the examiners having signed the recommendatory certificate of a part of the candidates, contrary to an expressed understanding, so contaminated me with the same notion, that I did not hesitate to express my annoyance and regret at having put myself to so much trouble and expense; and after carelessly and hastily replying to the *forty-eight* questions of the 1st day, and the *thirty* of the 2nd, and being surly informed that the sending in of my papers was no passport to being set at liberty, and that I must be in attendance at 3 o'clock, I left the college and thought myself better employed at the dissecting room of Kinnerton-street, and visiting the museum, and observing the surgical practice of St. George's Hospital, and withal hearing a sound and thoroughly instructive lecture upon the diseases of the spine from the President of the College himself.

I returned to the College at 3 o'clock, and waited till near 8 o'clock, and when about leaving, I was much grieved at being informed by a gentleman who was hurrying distractedly away, of the great number of rejections; *feeling sure* that many had been lulled into a false security, having been misled by observations stated to have been made previous to, and by others, during the examination, which had induced them to answer the questions hastily, or to attend unprepared for anything like the examination ordered by the "bye laws and ordinances" of the College.

I make no charge against the court of examiners, to whom, with one exception, I am unknown. I entertain the greatest respect for them, as well as for several of the gentlemen who grace the council, and who have contributed so much towards the better practice of surgery. I can readily understand how difficult they find the management of the *complicated reforming machinery* which they, in their judgment, have thought right to set in motion. They have it in their power, however, yet, to remove much of the deep-rooted hostility which is entertained against the College, by those who have before esteemed it an honour to be ranked among its non-compulsory members; and I venture to suggest as a step in the right direction, that all members of the College, whatever their standing, be allowed to present themselves for examination for the fellowship. That, as differences are known to exist between the examiners themselves, all gentlemen examined may be called upon, *viva voce*, to explain their views upon operative procedures, or the treatment of diseases, when they fail to give *routine answers*. That classification, according to merit, be adopted as at the London University; and that not more than one gentleman be required to perform the operations upon the dead subject at the same time.

The gentleman who is said to have ligatured a nerve for the subclavian artery, could not have done so from any want of anatomical knowledge. The operative part of the examination was truly farcical. I observed upon one side of the subject, four gentlemen cutting away and attempting to pass a ligature around the subclavian, brachial, femoral and anterior tibial arteries, at the same time. I found more difficulty in performing a similar operation upon the femoral on the opposite side than I had ever experienced in the living subject. It was late in the day, a dense fog darkened the theatre; the body was anasarous, and we enjoyed only the solitary and bungling assistance of a College porter. All the consideration of Messrs. Lawrence and Stanley could scarcely make this a pass affair.

The hurrying in of gentlemen like so many school boys without any personal introduction, and obliging them to wait for hours in the stone hall with scarcely a bench to sit upon, needs only to

be named to prevent the repetition of an annoyance which was loudly and generally complained of.

In conclusion allow me to observe, that I am at a loss to discover how the gentlemen who presented themselves for examination, can in any way be "disgraced" or identified with the proceedings of the College authorities.

I can truly assert that the subject of the College Charter did not even attract my attention until late in September last, when I was accidentally informed, that a gentleman, about eleven miles distant from me, was made a fellow. This intelligence caused me to make enquiry, and I was informed that such a distinction was intended only for surgeons of established merit, and those attached to hospitals containing fifty beds, except through examination, which would embrace anatomy, particularly surgical, physiology, pathology, therapeutics, and practical surgery. I at once, therefore, determined to present myself for examination, rather than be displaced from my professional position; although I might with some justice have been a suppliant for the honour, having been surgeon to the Lynn Dispensary; and in addition to holding two public appointments, had been for seven years one of the two surgeons of the West Norfolk and Lynn Hospital, containing thirty-five beds, and which, for its size, for its extent of surgical practice and liberal expenditure, is not exceeded by any other hospital in the kingdom.

I am, Sir,

Your obedt. servant,

CHARLES COTTON.

Examined Fellow and Member of the
Royal College of Surgeons, &c.

Ynna, 10th January, 1845.

To the Editor of the "Medical Times."

SIR,—The new Charter of the College of Surgeons, as far as relates to the Fellowship, appears, from the result of their late examinations, to be already, or at any rate, will very shortly be, a nullity, and the election of the Council, and the government of the College, will be confined to nearly as small a *selected* number as heretofore. I state this from the fact of 24 senior and 10 junior men presenting themselves for examination, and out of that number, 16 only of the former, and 6 of the latter were *announced* qualified. Among the juniors rejected, 3 are said to have been house-surgeons, 2 of them at a far-famed West-end hospital, and all rising men in private practice. A fourth, in addition to his practice, holds a high official situation at a celebrated Borough hospital. It is quite clear there has been some under-hand work, as the numbers stated by me agree with those expressed to the different candidates after their examinations, as having been successful. How is it, then, that the list, as published by the College, includes 24 names? Can Mr. Stanley explain this?

I feel quite certain, the examiners (perhaps, excepting Brodie, Lawrence, Guthrie, and another or two) must have crammed themselves for the occasion, and ought, therefore, to have remembered, and acted up to, that passage from holy writ, "judge not lest ye be judged," before playing their part with such dogged severity.

I am, &c.,

A MEMBER TOO YOUNG
TO BE REJECTED.

Pall Mall, Jan, 13th, 1845.

ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

(To the Editor of the "Medical Times.")

SIR,—I am glad to find, by your leading article of last week, that you are about calling the attention of your readers, and the Profession at large, to the attempt that is being made to lead, or rather mislead, Medical Reformers, and all who have at heart the best interests of the Profession, from the advocacy of those measures by which alone it can be regenerated, to the pursuit of an *ignis fatuus*, that can but deceive, to the establishing of a name without a reality, and to the support of a society which is formed for the

securing of an object, without principles to guide them in their career, or to govern them in their future conduct.

The Profession will not be deceived by such artifices; the Association of General Practitioners must declare the principles on which they intend to act, and the precise objects they have in view. If they refrain from doing so, they will stand self-condemned, and the Profession will interpret their silence as a proof of their unwillingness to commit themselves to the assertion of those principles for which Medical Reformers have been so long contending.

For many years past we have been denouncing the constitution of all our governing bodies as being wholly *irresponsible*, at least to the Profession, and evincing their consequent conduct towards the Profession, whose interests they have comparatively neglected; and now on the eve of obtaining some legislative relief, some change (it is hoped) for the better, we are called upon to raise our voices in favour of, and give our support to, a body, who in the very outset of their career, studiously avoid a single declaration that may commit them to the recognition of the principle of *responsibility*, which the dear-bought experience of past years has proved to be the only remedy for the existing grievances of the Profession.

Shall we stultify ourselves by so doing? Shall we thus negative the labours of past years? Shall we thus by the sacrifice of every independent thought and feeling, prove that we are unworthy of independence, and fit only to be governed as serfs, or dragged at the chariot wheels of some pseudo Medical Reformer? Shall we thus abandon the almost sacred cause of Medical Reform, and plunge into a chaotic struggle for something, of the nature and object of which we are utterly ignorant?

Who are the leaders of this movement, that call upon us to blindly trust our best interests in their hands, and place implicit confidence in them? What have they done for their professional brethren, and the Profession? What has their past conduct been? How long is it since they declared themselves Medical Reformers? Whose interests have they always consulted?

Let the Profession answer these questions by their acts. If these individuals have proved themselves worthy of confidence, yield it to them: if not, let it be denied them. For myself, I suspect the virtue that necessity enforces, and hesitate to confide in those whom, nothing but the apprehension of change, could force into the ranks of Reform.

The provinces are most interested in this question; the metropolitan practitioners will always be enabled, by local influence, and by personal connexion, to obtain some little protection from any body that may be appointed to govern them, but the provincial practitioners can only expect protection from—themselves.

If the present opportunity be lost, it may never be regained; we have succeeded, with the assistance of the press, in awakening the attention of the Government and the public to our wants; it rests with ourselves to decide whether we are worthy of success or not. I trust and hope, and expect, that my professional brethren will prove themselves worthy of the occasion, and act as men of thought and education, and as becoming men of liberal and independent principles.

If we must now retrograde, we may at some other time advance: if the cause of Medical Reform is to be betrayed, it shall not be abandoned; if the spirit, the intellect, the education of the present age, prove the struggle to be immature, a future, and I trust not far-distant time, will crown it with triumph,—another generation, of more liberal principles and more enlightened views, will shew themselves worthy of, and shall attain, success.

It becomes the duty of all true Medical Reformers to come forward at the present moment, and join with those who still, and will ever, advocate the just rights and privileges of the Profession and their professional brethren; amongst whom,

I have the honour to subscribe myself,

Your very obedient servant,

M. W. HILLES.

Pimlico, Jan. 13, 1845.

GRAJUITIOUS SERVICES.

(To the Editor of the "Medical Times.")

Sir,—In accordance with a resolution unanimously carried, at the last meeting of the London Hospital Medical Society, I beg to inform you, that the application by Mr. Brown, for the gratuitous supply of the *Medical Times*, was made without the knowledge of the body of the members, whatever might have been that of a few; and that such proposition was never brought forward at the meetings of the society, or in any way received official sanction.

By the insertion of the above in your next number, you will be but acting up to those principles of justice which you have always advocated.

I have the honour to be,

Your obedient Servant,

NATH. WARD, Hon. Sec.

London Hospital, Jan. 13, 1845.

ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

An exceedingly well-attended meeting of the provisional committee of this association was held on Tuesday evening, the 14th inst., at Hanover Square Rooms; Mr. Nussey in the chair; when several important communications, forwarded from different parts of the country, and containing names for enrolment, were read.—In accordance with a recent resolution for appointing honorary local secretaries, Mr. Terry and another gentleman were elected to fill that office for Northampton. The secretaries of the Tower Hamlets' Medical Association, who had been previously nominated by their own society to that office, were approved of by the provisional committee, and, together with the president, were elected members thereof. Mr. Chilvers, of New Burlington-street, and Mr. Hardwick, of Kennington, were also elected on the committee.

A letter from Oswald Copland, Esq., of Chelmsford, was then read, requesting precise information as to the objects and basis of the association; and stating that the medical men of Chelmsford and its vicinity were organising themselves, and were prepared to enrol themselves on the receipt of the required information.—A letter from Manchester, containing a list of names for enrolment, was also read. After which, Mr. Fuller made a communication to the effect that the association of general practitioners in medicine and surgery, for England and Wales, had passed a resolution on the preceding day, to merge in the present association, and presented a list of names for enrolment.*

BIBLIOGRAPHICAL RECORD.

FROM DEC. 14, 1844, TO JAN. 14, 1845,

Ribes (F.) *Memoires et Observations d'Anatomie, de Physiologie, de Pathologie, et de Chirurgie*, tome 3, 8vo. 7 fr. 50 c. Prix de l'Ouvrage complet, 3 vol. 8vo. 22 fr. 50 c.—Müller (J.) *Manuel de Physiologie*, traduit par A. J. L. Jourdan, 8vo.

Wagner's (R.) *Elements of Comparative Anatomy*, translated from the German by Alfred Tulk, 8vo. 9s.—Cox's (G.) *Agricultural Chemistry*, 12mo. cloth, 2s 6d.—Braithwaite's (W.) *Retrospect of Medicine and Surgery*, vol. 10, July to December, 1844, 12mo. cloth, 5s 6d.—Evans' (J.T.) *Lectures on Pulmonary Phthisis*, 8vo. cl, 7s 6d.—Andral's (G.) *Pathological Hæmatology*, an Essay on the Blood in Disease, translated from the French by J. F. Meigs and A. Stille, new edition, 8vo. phil. cloth, 6s.—Bartlett (E.) *An Essay on the Philosophy of Medical Science*, 8vo. Phil. cloth, 12s.—Bartlett (E.) *The History, Diagnosis, and Treatment of Typhoid and of Typhus Fever*, with an Essay on the Diagnosis of Bilious, Remittent and of Yellow Fever, 8vo. cloth, 12s.—Christison's (R.) *Treatise on Poisons*, in reference to Medical Jurisprudence, Physiology, and the Practice of

* A meeting of the Association of General Practitioners in Medicine and Surgery has been summoned, for the purpose of transferring the funds at their disposal to this association.

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of the Middle Temple, Barrister-at-Law, 8vo. bds. 24s.—Catlin's *North American Indian Portfolio, Hunting Scenes and Amusements of the Rocky Mountains and Prairies of America*, from Drawings and Notes of the Author, made during eight years' travel among forty-eight of the Wildest and most Remote Tribes of Savages in North America, large folio, 25 plates, half bound, £5 5s, colored and mounted, £10 10s.—Charlie's *Discoveries, or a Good Use for Eyes and Ears*, with illustrations, engraved by Thomas Williams, after designs by J. Pitman, new edition, square cl. gilt edges, 3s 6d.—Gilroy's (C. G.) *Art of Weaving by Hand and by Power; with an Introductory Account of its Rise and Progress in Ancient and Modern Times*, 8vo. numerous woodcuts, and 35 plates, cloth, 31s 6d.—Griffith's (C.) *Present State and Prospects of the Port Phillip District of New South Wales*, 8vo. cloth, 6s.—Guide for Passing Advent Holily, in which is found for each day a Practice, Meditation, Thoughts upon portions of Holy Scriptures, for the Seasons; Sentences from the Holy Scriptures and the Fathers, and One Point in the Incarnation. Translated from the French, and adapted to the use of the English Church, cloth, 6s.—Gurnall (W.) *The Christian in Complete Armour, or a Treatise on the Saints' War with the Devil; wherein a Discovery is made of the Policy, Power, Wickedness, and Stratagems made use of by that Enemy of God and his People*, 8vo. cloth, 12s.—Gurney's (J. J.) *Thoughts on Habit and Discipline*, 2nd edition, cloth, 4s 6d.—Hatfield (R. G.) *The American House-Carpenter; together with the most important principles of Practical Geometry*, 300 engravings, cloth, 12s.—Haughton (H. P.) *The Classical Student's Translation of Horace; or, the Works of Quintus Horatius Flaccus*, translated for Classical Students, foolscap, cloth, 8s.—Holly Grange; a Tale. By Madame E. de K—, Author of *Stories of Little Edward, &c.* foolscap, engravings, 6s 6d.—*Illuminated Magazine*. Edited by Douglas Jerrold, vol 3, imperial 8vo. cloth, 11s.—*Judah's Lion*. By Charlotte Elizabeth. New edition, fep. cloth, 6s.—Brallaghan, or the Deipnosophists. By Edward Kenealy, Esq., fep. 8vo. cloth, 7s 6d.—Knight's Library for the Times. *The French Revolution*, by Charles Macfarlane, vol 1, portraits and woodcuts, cloth, 6s.—*Remarks on the Fable of the Bees*. By William Law, M.D., 12mo. cloth, 4s 6d.—*Lawyers in Love (The)*; or, *Passages from the Life of a Chancery Barrister*. By the Author of "Cavendish," 3 vols. post 8vo. boards, 31s 6d.

DISSECTING ANEURISM OF THE ASCENDING AORTA.—Dr. Lees exhibited, at a meeting of the Dublin Pathological Society, a specimen of an unusual variety of aneurism of the ascending portion of the arch of the aorta. The subject from whom the specimen was derived was a woman about sixty years of age, who was apparently in perfect health on the day of her death. After breakfasting heartily, she suddenly screamed, fell back, and expired in five minutes. On opening the pericardium a large quantity of coagulated blood was found interposed between it and the heart, which was adherent at several points to the pericardium, the result of a former attack of pericarditis. The heart was hypertrophied. There was a rent about two inches long in the cellular coat of the posterior wall of the ascending aorta. The longer axis of this rent corresponded to that of the artery just where the pericardium is reflected from the aorta on the pulmonary artery. The external and middle coats of the vessel in this situation were separated from each other for a considerable space by a quantity of coagulated blood, which reached superiorly as high as the junction of the transverse with the descending portion of the arch, and inferiorly, as low as the base of the heart. The cellular coat having been slit up anteriorly, there was brought into view a large transverse rent in the internal and middle coats, not coinciding with the opening in the external coat. It was about an inch in extent, and was situated in the anterior wall of the ascending aorta, at the distance of an inch and a half above the heart. There was an atheromatous deposit in the mitral and aortic valves, and also between the internal and middle coats of the aorta and of the large vessels arising from the arch.

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SUMMARY.

JAN. 25

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE, BY D. J. CORRIGAN, M.D. Physician to the Whitworth, Hardwicke, and Richmond Hospitals, Lecturer on the Theory and Practice of Medicine in the Dublin School of Medicine, &c.:— Peculiar Form of Diarrhoea—Biliary Calculi—Peculiar variety of Jaundice—Its Treatment—Cirrhosis of the Liver	355
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LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. CORRIGAN, M.D., Physician to the Whitworth, Hardwicke, and Richmond Hospitals, Lecturer in the Dublin School of Medicine, &c.

LECTURE V.

CONTENTS.—Diarrhoea, peculiar form of; Biliary Calculi; Jaundice, peculiar variety of; treatment of Cirrhosis of Liver.

I SHALL proceed to speak of diseases of the liver: passing over some affections of the intestines—as dysentery and common diarrhoea—on which I content myself with referring you to books for information. But, before we enter on the subject of hepatic disease, allow me to call your attention for a few minutes to a form of diarrhoea, which you seldom or never meet with in the lower classes of society, but which is met with, with very great frequency, in females of the upper walks of life, and occasionally, also, in males. The persons most subject to this affection are females, of what is termed the leuco-phlegmatic temperament, characterised by weak, flabby, muscular development, and general indolence of constitution. In such persons, the menses may be either profuse, or sparing, in quantity; or they may be regular; but this is of no consequence: connected with this bowel complaint, you will always find more or less of leucorrhoea, which, on enquiry, you will find to have preceded the diarrhoea: as though it would seem that the mucous membrane of the intestines becomes affected just in the same manner as the epithelium of the vagina; these persons are also affected with “bruit de soufflet” of the heart, which is always audible to themselves, and causes them great anxiety. You will find them, also, labouring under catarrh, with copious secretion, accompanied by pain of a neuralgic character, here to-day and there to-morrow;—they get drooping and depressed in spirits,—lose all inclination for mixing in their usual society; and then their friends, fearing the occurrence of phthisis, become alarmed at their delicate state of health, and, in great consternation, look for advice. This train of symptoms would appear to be caused by the baneful effects of living much in fashionable life, and by stopping up late of nights in crowded rooms, to enjoy their pleasures. These evils, joined to the already existing one of a constitution habitually delicate, are quite enough to produce the disease in question. For the cure of this I have seen the Pharmacopœia unceasingly ransacked: I have seen the most powerful astringents tried, separately, and in combination with other remedies of the same character; still no good was done by them; while afterward the disease has yielded, and that quickly, under the exhibition of decoctum hamatoxyli, as recommended by Dr. Abercrombie, in doses of a wine-glassful, three times a day. I had, not long since, a lady under my care labouring with this distressing affection, in whom it was quickly subdued by this simple remedy.—We shall now take up the consideration of some diseases of the liver, in the first place stopping to make some few cursory observations on the treatment of biliary calculi. These remarks I intend to confine to

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pointing out to you the fit time for administering emetics in the present affection. A person will be awakened from sleep in the middle of the night by excruciating pain in the region of the liver, shooting towards the stomach, perhaps extending from thence backward toward the scapula. This continues for some time, when it ceases altogether, or undergoes a material alteration. This pain, during its continuance, being perhaps accompanied by nausea and vomiting, might be mistaken for peritonitis; but the jactitation of the patient will at once convince you that it is not peritonitis. Matters remain in this state for some hours longer, when pain and tenderness over the region of the liver ensue; the skin becomes hot, the pulse full and bounding, all betokening the near approach of inflammation; and you now perceive on examining the patient, that jaundice has set in. Now, what are you to do in such a case? You find jaundice present, caused by the hindrance which the calculus in the duct opposes to the free passage of bile, which, could the impediment be but removed, would again flow through the natural channel, and would no longer be taken up into the circulation. For removing this obstruction, may you now give an emetic? No!—you must not; for were you to do so in the present irritable state of the gall duct, you would to a certainty bring on the threatened attack of inflammation. Subdue this irritation first, by means of opium, in full and free doses; by fomentations and leeches to the side. Remove all pain and tenderness on pressure, then give an emetic; and by the powerful and constringent action which the operation of it induces, the calculus will be forced from the duct into the duodenum; and so powerful is its effect, that the calculus is often forced from the intestine into the stomach whence it is ejected by vomiting. I next wish to draw your attention to a form of jaundice of which our hospital has had many specimens during this winter. Many of you cannot fail to recollect the variety I allude to, after you shall have heard me describe it.

This form of jaundice is to be met with, generally, among the poorer classes of society, but it occurs, with very great frequency, too, among persons of the middle rank of life, who have, for the most part, led sedentary lives. We find it occurring in merchants, whose lives have been made uneasy by having met reverses in trade, or by engaging in unsuccessful speculations. We find it occurring in females, mourning over the loss of a husband, or a parent, while we as frequently meet with it in persons whose histories present nothing tangible to account for the disease. It sets in suddenly; sometimes we find the patient jaundiced all over in 30 hours, and this state of discoloration may continue for three days, three weeks, or as many months as weeks. In this form of jaundice, the pulse is regular, the tongue clean, the skin cool, and the appetite, in general, is tolerably fair; and we very often find, throughout the disease, the patient lively and cheerful, and able to perform the duties of life as well as ever. The only evidence of deranged health being, the jaundiced countenance, the white stools, and the urine loaded with bile. During this state of little, or no derangement, from the natural standard of health, if the slightest tendency to head-affection, such as delirium or

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coma, should set in, no effort of your art can save the patient. All is at an end; for the records of medicine do not present a single case of recovery, from the situation which I have just now described. I know, that, in works on practice of medicine, you find this disease either not noticed at all, or, if it is, merely as one of no importance; but than this, nothing can be more calculated to lead you astray; and I am confident, that were you to witness, as I have seen, the mother of a family, who had previously been in the enjoyment of comparative good health, snatched from the bosom of her family, and from all that endeared her to life, in four short hours: I am confident, I repeat, that had you seen this, you would agree with me in reckoning this affection as one of some importance. The most minute *post mortem* investigations discover nothing whatever faulty, either in the brain, liver, gall bladder, stomach, or intestines. With regard to its pathology, we are completely in the dark, but though I cannot give you any information on this head, yet as a set-off to this want of pathological knowledge on my side, I think that I can give you what you will prefer to this, namely, an unerring cure for the affection in question, whenever it shall present itself to you in your future practice.

Having seen many cases of this disease unavailingly treated in town by blisters and leeches to the side, by the exhibition of purgatives, alkalies, and mercurials; knowing many such cases which were deemed incurable here, that afterwards were cured by country quacks by means of nauseous medicines; struck with this fact, and reasoning from the effects on the stomach of the quack medicines which had been given for its cure, I determined to try the effect of emetics in it. The event was completely successful, and I can assure you, that in an ample experience of four or five years since I first adopted this line of treatment, I have not had a single failure. In general, I am not wont to speak sanguinely of any remedies but of those on which I can place implicit reliance, and the present occasion gives me an opportunity of speaking most favourably of the medicine which I have just been recommending to you. For the cure of this disease, it will be quite unnecessary for you to prescribe mercury, or any other medicine, save an emetic of ʒss. ipecacuanha every second night until the jaundice disappears. This frequently occurs after the action of the second emetic; even it will not be necessary for you to have recourse to purgatives, as the ipecacuanha in most instances relaxes the bowels; but, if you do order purgatives, let them be of such a sort as will not colour the faeces—so that you may perceive if the bile is again being propelled into the intestines. Of the medicines not liable to this objection, the best you can select are decoctum aloes compositum, and magnesia usta. By carrying into operation in your future practice, the routine which I have just sketched out for you, I am confident you will be able to add to mine, your unqualified approbation of the benefit derivable from the use of emetics in this form of jaundice. We have now considered two forms of jaundice; the one where it arises from the impaction of a calculus in the “ductus choledochus communis,” in which the patient becomes dis-

coloured all over in twenty-four hours, and which discoloration spontaneously disappears in some short time after the exciting cause has been removed. The other, when the jaundice arises from mental causes (most frequently) and in which the discoloration is often fully established, as soon as in the prior instance, and which may continue for three days, three weeks, or three months, just as the ease may be, before proper treatment be adopted. We have now to consider jaundice as it arises from chronic diseases of the liver, where, in place of coming on quickly, as in the two varieties above mentioned, it takes a much longer period to develop itself:—a period extending from three weeks, or a month, to three months and upwards, not being fully formed, even after such a lapse of time, as in the other forms: the eyes not presenting as deep a tinge of yellow, nor the countenance either: but in place of this, they assume a peculiar greenish-yellow, dirty hue, which having once seen, you never can forget, as furnishing a pathognomonic sign of malignant disease of the liver. Into the consideration of jaundice, produced by such diseases as fungus hæmatodes, or as it is called, medullary sarcoma of the liver, I shall not stop to enter, nor shall I commence giving you a history of cancer of that organ, as, in doing so, I would be taking up your time by giving you a detailed description from systematic works, on practice of medicine, to which I shall refer you for information on these particulars, and proceed at once to the consideration of Jaundice, produced by that peculiar disease of the liver, which Laennec has termed cirrhosis, from the idea that the affection, in question, was a tubercular one. This opinion has been proved an erroneous one; however the name of the disease shall ever remain sacred, in honour of the immortal genius who first applied it. In this disease, the liver becomes contracted, hard, and shrunken to even one-third, or less, of its natural size, while its surface becomes studded with numerous elevations, which might, at first sight, be readily mistaken for deposition of tubercles. This seeming tubercular elevation, and reduction of size, in the liver, is caused by a property which lymph, effused into any texture, possesses of contracting upon itself. This contractility of lymph may take place in one or four weeks, in one or four months, as it may be, since the cause producing the effusion of lymph has begun to operate. How is it, that this peculiar state of the organ in question is produced? Into the cellular tissue, forming the matrix of the gland, lymph is effused. In the healthy state, this cellular tissue of the liver is not visible, but, in consequence of lymph having been effused to a considerable extent upon its surface, this cellular tissue becomes very much thickened, and if a section of the liver be made while in this state, then thickened bands of cellular tissue will be plainly seen, running, irregularly, into the substance of the liver. In process of time, this lymph obeys a law of nature, which governs it universally, when effused in any texture of the body, that is, its organised membranous bands begin to contract, each one upon itself, and, in doing so, bring the neighbouring bands into closer approximation to them. The consequence is, that the acini, or granular structure of the liver, owing to the force of these contracting agents, become elevated into seeming tubercular prominences. Laennec, therefore, in ascribing to this disease the origin which he did, was undoubtedly wrong. These membranous bands of cellular tissue, irregularly distributed through the liver, in their thickened state, present a white appearance, which contrasts strongly with the red colour of the acini. This contractility of effused lymph is not confined to the liver alone. We find it occurring daily in numerous other organs and tissues. It takes place around the rectum in inflammation of that gut, or as it is termed "dysentery;" when, in some weeks or months (just as it may happen) after the occurrence of the disease, the lymph, which is thrown out in the cellular tissue surrounding the intestine, contracts in this manner, and produces stricture of the rectum. We see it taking place also in the urethra, both from

gonorrhœa and other causes; and to such an extent does this proceed sometimes in the eye, that we frequently perceive the iris adherent to the capsule of the lens, or to the cornea in front, while, in consequence of the contraction of their membranous adhesions, the diameter of the pupil becomes shortened to such a degree as to allow, but very imperfectly indeed, the transmission through its contracted circle of the waves of light to the retina. In consequence of the contraction of the lymph, the liver is thus reduced in size (and to show the extent to which this takes place, just look at both these cases: one an example of a contracted liver taken from a boy, the other an example of contraction of the same organ in an old person); the following are the results:—the vena portæ and its ramifications become narrowed and contracted in their calibre, so as no longer to allow of the free transmission of blood through them, which is returned from the veins of the intestines. This contraction produces, in the latter, congestion to such a degree, that by an effort of nature to relieve itself, ascites is produced, but it nevertheless continues to increase until the radicles of the intestine burst and give rise to melanic hæmorrhage from the bowels, or bring on melanic vomiting; both or either of which quickly prove fatal. On our next evening we shall resume this subject.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicêtre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c. Translated with Notes illustrative of some important doctrines of Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.
(Continued from page 317.)

Autopsy.—The bones of the skull are thin and white; the dura mater seems to be distended like a bladder; after dividing it, I find a layer of blood about two lines thick, adhering to the internal surface of the arachnoid, and enveloping the whole right hemisphere; this effusion is of a dark brown aspect, the blood having lost its colour; the residue seems solid and presents a commencement of organization, in which some venous vessels can be seen distinctly.

The effusion has occurred evidently between the pia mater and the brain. The meninges are removed without difficulty, but they are tinged with the colour of citron from their prolonged contact with the effusion; this yellow tinge extends over the whole hemisphere; it does not penetrate through more than one half of the cortical substance, stopping in its middle at a strongly marked red line, which divides this substance into two very distinct shades, the one yellow, the other almost scarlet.

Throughout this lobe, the whole substance is nearly in the natural state, rather firm than soft; it is white, and looks as if polished.

In the left hemisphere, the dura mater appears puffed up in the same manner, and on opening it a similar effusion is found extending over the whole of this region of the brain; but the blood is black, liquid, and flows away through the opening. It is easy to see that in this place the hæmorrhage is quite recent; it occupies a corresponding situation to the effusion of the opposite side; but they are of different dates, since the paralysis of the right side did not occur till three months after that of the left side, and, after the second attack, life was prolonged only four days.

In all the left lobe, the cortical substance is similarly red in its middle portion; the external portion, which is bathed in the effused blood, is livid and dark. This colour must be taken as an effect of mechanical imbibition, the colour being yellow in one lobe and dark in the other. But the remarkable circumstance, in regard to both, is this, that the imbibition stops at the middle layer of the cortical substance.

The white substance appears healthy; the optic tracts and corpora striata are slightly injected.

The right lung contains several small caverns in a state of suppuration; the intestines are inflamed in several places.

Reflexions.—We at once recognize, in the general redness of the middle layer of the cortical substance, the cause of the delirium under which she laboured when she was brought to the Salpêtrière, and which, though calm at first, became subsequently very violent. This delirium is afterwards complicated with two intermeningeal hæmorrhages, at an interval of three months from each other. The first takes place in the right cavity of the encephalon, and paralyzes at once the limbs of the left side. This fact is interesting in several respects, more especially as furnishing us with a useful lesson for appreciating the lesions of the cortical substance. This substance, it is evident, was for three months in constant contact with blood, and becomes tinged with yellow in consequence. During all this time, the imbibition does not penetrate beyond the external layer of the cortical substance, being arrested at the middle layer. This result I have myself verified by experimenting with colouring matter, with a view to determine the phenomena of cerebral imbibition.

If, for instance, we steep a piece of brain in common ink, the colouring matter will scarcely penetrate it, not at least till ten, fifteen, or twenty days after, and when putrefaction takes place. The cortical is much more spongy than the white substance, and yet, although it be constantly kept in the ink, it takes eight or ten days before its external layer begins to be coloured. Hence, the phenomena of irritation must be more transient in this first layer, from the greater difficulty with which imbibition takes place in it; and this explains the sudden disappearance of the momentary congestions resulting from drunkenness. Accordingly, in these congestions, the sensitive and intellectual faculties are disturbed but momentarily. On the other hand, however, when the injection, from any morbid cause, penetrates into the middle layer, it then produces continuous delirium, or acute mania, as we see in this case.

The second complication alluded to, was the intermeningeal hæmorrhage, which, a few days before death, produced paralysis of the right side. Here, again, the imbibition is found in the periphery of the cortical substance, but it is exceedingly slight, the contact with the blood having lasted only four days. We may further remark, that the general supracute affection of the cortical substance, of which traces were evident, notwithstanding the mechanical imbibition to which it had been subjected, was more than sufficient to shew the organic cause of the intellectual disturbance.

Case 4.—Marie B., aged 60, of a constitution still robust and full, was sent from the Hotel-Dieu to the Salpêtrière, 8th Dec., 1834. She had been a month in that hospital, when she became on a sudden violently agitated. Nothing more was known of her history. On admission, her symptoms were: hard, frequent, and irregular, pulse; hot, dry skin; tongue natural; the eyes expressive of astonishment and anxiety; her utterance is quick, and she insists on being set at liberty. She imagines that she is in the custody of the police; her ideas are incoherent, and wander continually. The limbs are perfectly supple, and present symptoms of either general, or partial, paralysis; the other functions are natural.

The maniacal state continued without abatement, night or day, till the 12th January,—thirty-four consecutive days. She can now no longer move; she lies on her back, and cannot reply to any question. She is in a state of profound coma, which, from the statement of the nurse, came on suddenly the day before. The limbs are flexible and free; the skin burning hot; the eyes fixed and dull. She betrays no sign of pain, by contracting her features, when the skin is pinched sharply. These symptoms continued till the third day, when she died.

Autopsy.—The skull is thick, but slightly injected, and adheres to the dura mater so strongly, that they cannot be separated without employing great force, nor without leaving large patches of the dura mater, especially in the frontal region, adhering to the internal table. The pia mater is

thickened throughout, whitish, uplifted by a thin wave of serum. It adheres by its external surface to the arachnoid, but is free from adhesion with the brain.

The convolutions of the brain are very deep, numerous, and small, and several of them in the superior region appear atrophied, not larger than a line in diameter, and leaving in several places a void which is filled with serum. On the surface, the cortical substance is deeply injected,—especially throughout the entire base of the brain. In the superior parts, it is covered with a whitish pellicle, which is easily removed by scraping with the back of the scalpel; the middle layer of this substance is of a violet rose colour, and bloody almost throughout its whole extent.

The white substance is also deeply injected with blood, and in patches of a violet colour; but its consistence appears to be augmented in some places to such a degree, as to constitute a veritable induration, which extends equally to the optic tracts, corpora striata, cerebellum, and annular protuberance.

In the thorax, the left cavities of the heart are hypertrophied, with dilatation of the right cavities. There are a few ossifications at the aortic valves; in the other viscera, nothing remarkable.

Reflexions.—I find in the adhesion of the dura mater, and the thickening of the pia mater, the traces of old affections, which, in the absence of information, makes it presumable that she must have had, from time to time, attacks of insanity of variable duration; not that I regard these lesions as direct causes of the disorders which I suppose to have existed, but as indicating that the brain had suffered several times, and that the effects of those attacks had extended to its membranes.

In the last month, the cortical substance begins again to be inflamed; the maniacal delirium, with fever, supervenes; the irritation augments; the cortical substance becomes redder, more violet, and an albuminous exudation is secreted around the convolutions.

This was the real cause of the last attack of mania, which finally, on the 12th January, becomes suddenly complicated with a general congestion of the encephalon; and this congestion, which is particularly manifest at the base of the brain, and in the cerebral centres, destroys life in four days. It may be presumed that, but for the induration of those parts of the brain, the general congestion would have given rise to hæmorrhage in some part of the lobes, and then, instead of observing profound coma with mobility of all the limbs, we should have had a hemiplegia, or paraplegia. This case is curious, from the frank and rapid progress of the acute cerebritis.

Case 5.—Anne D., age 34, of robust constitution, was admitted into the Salpêtrière, 4th of October, 1834; at the age of 19, she had brain fever; her health however had been good from that time, till the month of September, when her projected marriage was broken off, and she suffered serious losses in her little trade. She experienced a most violent attack of mania, during which she broke and destroyed every thing she could lay hands on. She was brought in this state to the hospital. Her utterance was evidently embarrassed. On the 10th November, the whole of the right side became paralysed, and she remained in a comatose state for 10 days. On the 21st, her delirium and speech returned, but the paralysis remained the same. On the 7th Dec., the right arm was observed to be contracted, and could no longer be extended. She utters piercing shrieks if any one touches it. The symptoms persist for a month longer, with brief alternations of demency and maniacal reaction. Large eschars form on the sacrum, and she dies on the 8th January.

Autopsy.—The skull, thick, injected, heavy, and difficult to be broken; the dura mater healthy: the arachnoid opaque, thickened, and uplifted by reddish serum; it adheres, in several places, to the convolutions of the brain, portions of which are torn away with this membrane, leaving rugous and eroded patches in the external cortical substance. The convolutions generally are adherent to each other, and appear as if flattened on themselves; their anfractuositics do not seem to possess their

usual largeness and depth. Throughout the superior and anterior part of the brain, the cortical substance appears to be covered with a true pellicle, of a whitish, albuminous appearance, and which can be scraped and removed with facility, shewing the middle layer of the cortical substance, of a red colour, beneath it; this substance, moreover, presents, throughout its entire extent, a very remarkable violet injection.

At the posterior part of the right lobe, there is a profound alteration; in this situation, the convolutions of the brain seem as if formed into a granulated cyst, with which the meninges are united firmly, and form a kind of external sac. This cyst penetrates deeply into the brain, and presents the traces of a ramollissement, partly absorbed and in progress towards cicatrization. All around, and in the interior, the substance of the brain has the appearance of hard curds.

To this alteration I attribute the paralysis of the left side, and the contraction of the arm; the entire left hemisphere is, moreover, much more red and injected, than the right.

The ventricles, sufficiently distended, contain a good deal of serum. The base of the brain throughout is white, solid, natural, and presents a striking contrast with the strong injection and general state of phlogosis observed throughout the upper part of the brain, and in the right lobe especially. The other splanchnic cavities are healthy.

Reflexions.—The more we study the affections of the brain, the more surely do we find their results to be uniform, and referable to well marked primitive types, especially in the acute state. Here we find, in the first place, thickening of the meninges, then a whitish pellicle on the surface of the cortical substance, and lastly, beneath these two alterations, redness and phlogosis of the cortical substance. Now, in our view, the two first lesions are but the consequence of the third, that is, of the state bordering on inflammation of the cortical substance. This state gives rise to the albuminous exudation which covers the surface, and which, in its turn, extends the effect of disorder to the meninges; and thus, by an analysis of the morbid appearances, we are enabled to reach the true cause of the mania, and to explain the symptoms depending on each of these alterations; whereas, if we were to note them down simply in the order in which they were observed, we must fall into inextricable confusion. At the present day, we are in no want of autopsies; but we want the spirit of induction, to unravel results so various and apparently so confused. In our opinion, the true cause of the delirium in this woman was the redness of the cortical substance, which constituted a true acute cerebritis, a true acute irritation of that part, which produced the maniacal symptoms, from the 4th Oct., to the 10th Nov.

But then a fresh complication occurred—paralysis of the right side, which shews a new and more profound alteration: the right arm becomes contracted, and then the symptoms of the insanity become more decided. Stupor, coma, and maniacal excitement, succeed each other at intervals.

The autopsy shews the real cause of these super-added disorders, in the posterior part of the right lobe; a veritable inflammation of this lobe is grafted on the pre-existing irritation. This is followed by prompt, local disorganization of this lobe, and, as a consequence, by paralysis. The ramollissement then proceeds slowly, stopping at the posterior convolutions; absorption and cicatrization begin; but the patient has not strength enough left for this new effort, which therefore remains incomplete, and the eschars cause death.

In this case, therefore, we first observe violent irritation of the cortical substance, causing an explosion of mania; a month later, a ramollissement, and inflammatory disorganization, in the posterior right lobe, causing paralysis and contraction of the arm; the inflammation becomes chronic, and the eschars in her exhausted state cause death.

Case VI.—Josephine B., age 44, has already had several attacks of mania, and has been several times in the Salpêtrière, as a patient. She is again admitted, 12th November, 1834, in a state of the most violent acuteness, tearing her clothes, and vociferating unceasingly. Shut up in a cell with a straight waistcoat on, she contrives to break

her bedstead, and insists on having the straw on the ground. On the 8th February, she complains of a sense of suffocation; she has violent palpitations, her delirium and restlessness remaining the same. On the 10th, during a cold night, her feeling of suffocation becomes most painfully increased, and she dies.

Autopsy.—The skull is extraordinarily hard and thick; it seems like ivory, and in several places is more than half an inch thick, even in the temporal region, usually so thin. The dura mater is so firmly incorporated with the inner table, that they cannot be separated at any point. The arachnoid is thickened, of an opal colour, and, from there being a quantity of serum beneath it, has the appearance of jelly.

Externally, the cortical substance appears white, but, in cutting into each convolution, a marked line is quite perceptible at the periphery, indicating the presence of that whitish pellicle which we assimilate to those albuminous exudations, that, under certain circumstances, arise from inflammation of some tissues.

Under this layer, in the subjacent part of the cortical substance, a violet-red circle is observed, indicating the focus of the inflammatory irritation of these parts. This is met with throughout the entire extent of the cortical substance; the corpora striata are so red, that they seem as if wholly composed of muscular tissue. All the white substance is injected, hard, varnished, and glutinous; the ventricles are large, but contain no serum. The cerebellum is healthy.

The heart is of enormous size; its right cavities are filled with black blood; the aortic cavities are thickened, and contain but little blood; the abdominal venous system is gorged with blood. The lungs are pale, healthy, and crepitating. The aspect of the intestines is natural.

Reflexions.—This case supplies much matter for interesting reflexion. We shall here consider it only in its relation with the disorder of the intellect. We may remark, that the almost sudden death in this case was produced by the great hypertrophy of the heart reaching its final term; that, moreover, the cold, whose action is so fatal in these affections, must also have contributed to hasten death; and that, in fine, the blood, through this action, having been suddenly stopt in the abdominal venous system, we ought most surely, and without the suspicion of congestion from any other cause, to find in the brain the real character of the alteration that produced the mania. And hence, we find it with the greater certainty in this case, from the abdominal congestion having produced decoloration in all the organs.

The middle layer of the cortical substance is red, like muscle, throughout its entire extent; it is covered with a thin whitish coat, which we must suppose to be of an albuminous nature, and to indicate the result of a violent irritation in the subjacent layer. These alterations, in our opinion, sufficiently account for the exaltation and furor of the last maniacal attack.

As to the causes of the several attacks, which the patient had suffered formerly, and at long intervals, we thus explain their traces: We say that the brain had been several times congested, as it was in the last attack; that, in consequence of each successive congestion, there was also a consecutive alteration of the meninges; that these oft-repeated lesions at last reached the dura mater, which also became highly irritated, and contracted firm adhesions with the skull; that, in this morbid state, the dura mater attached to the bones increased their size and density by an abnormal supply of nutrition; and thus I explain the ivory consistence of the skull, and its enormous thickening.

This connexion of the affections peculiar to the brain, with those of its membranes, and, as a consequence, with those of the skull, has been hitherto but little studied; yet their dependence on each other is most close; just as the affections, either chronic, or even acute, of the lungs, at last extend their influence to the pleura, and even to the conformation and structure of the ribs, whenever these affections occur repeatedly, or when they become chronic.

The death of the patient was, undoubtedly, caused by the hypertrophy of the heart, the pulsa-

tions of which were suddenly arrested by the influence of a low temperature. This is a common termination of some forms of aneurism, and one which is frequently observed at the Salpêtrière.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c. &c.

(Continued from page 232.)

DISTINCTIONS BETWEEN PUS AND MUCUS.

It was first suggested by Hippocrates to test the matter of expectoration, by heat. The sputa were to be thrown upon the fire, and, if the exhaled odour were fetid, this was regarded, amongst other signs, as an indication that the disease was mortal. (1)

Celsus Aurelianus proposed to distinguish pus from mucus, by the former sinking in water, and by its emitting an offensive odour when thrown upon burning coals. (2) The latter test was also advised by Celsus. (3) Brugmann proposed to distinguish between pus and mucus, by leaving them to putrefaction. The former, he says, becomes acid prior to decomposing, and evolves a fetid smell; not so the latter. (4)

This subject was extensively, and somewhat minutely, investigated by Mr. Charles Darwin, whose conclusions and statements are as follow:—

1.—“Pus and mucus are both soluble in the vitriolic acid, though in very different proportions; pus being much the less soluble.

2.—The addition of water to either of these compounds decomposes it; the mucus, thus separated, either swims on the mixture, or forms large flocci in it; whereas, the pus falls to the bottom, and forms, on agitation, an uniform turbid mixture.

3.—Pus is diffusible through diluted vitriolic acid, though mucus is not; the same occurs with water, or a solution of sea salt.

4.—Nitric acid dissolves both pus and mucus; water added to the solution of pus produces a precipitate, and the fluid above becomes clear and green; while water and the solution of mucus form a dirty-coloured fluid.

5.—Alkaline lixivium dissolves (though sometimes with difficulty) mucus, and generally pus.

6.—Water precipitates pus from such a solution, but not mucus.

7.—Where alkaline lixivium does not dissolve pus, it still distinguishes it from mucus; as it then prevents its diffusion through water.

8.—Coagulable lymph is neither soluble in diluted nor concentrated vitriolic acid.

9.—Water produces no change on a solution of serum in alkaline lixivium, until after long standing, and then only a very slight sediment appears.

10.—Corrosive sublimate coagulates mucus, but not pus.

From the above experiments, it appears that strong vitriolic acid and water, diluted vitriolic, and caustic alkaline lixivium and water, will serve to distinguish pus from mucus; that the vitriolic acid can separate it from coagulable lymph, and alkaline lixivium from serum.

And hence, when a person has any expectorated material, the composition of which he wishes to ascertain, let him dissolve it in vitriolic acid and

(1.) This practice was subsequently adopted, and most strenuously recommended, by Lieutaud (Synopsis Universæ Praxeos Medicæ, Amst. 1765.), and more lately Raulin has expressed his belief in its sufficiency for the diagnosis of consumption (Traité de la Phthisie Pulmonaire, 1784, 8vo. Paris.) In 1792, Dr. White stated, in an Essay, that pus, generated without ulceration, becomes acid by keeping, and does not putrefy; but that the pus of an ulcerous surface or cavity affords a fetid smell, when exposed to heat. (Quoted in Dr. Wilson's Treatise on Febrile Diseases, Lond., 1803, 8vo.)

(2.) Morb. Chron., Lib. 2, cap. 14.

(3.) De Re Medica, Lib. 3, sec. 22.

(4.) Güterboch, Op. Cit., p. 215.

in caustic alkaline lixivium, and then add pure water to both solutions; and, if there is a fair precipitate in each, he may be assured that some pus is present; if in neither a precipitate occurs, it is a certain test that the material is entirely mucus; if the material cannot be made to dissolve in alkaline lixivium by time and trituration, we have also reason to believe that it is pus.” (5)

From a review of Mr. Darwin's experiments, Dr. Broughton arrived at the following conclusions:—

1.—“Sputum being mixed and agitated with a little water, no change takes place if it be mucus; but if any pus is present, the mixture becomes turbid.

2.—If the sputum be dissolved in an equal part of caustic alkaline lixivium, it is mucus; but if it be rendered more viscid, or somewhat like the white of an egg, it is pus.” (6)

Sir Everard Home considered the globularity of pus to be sufficient to distinguish it from all other animal fluids. (7)

Another method of distinguishing pus from mucus was proposed by Grasmeyer. It consists in dissolving the matter in its own volume of warm water; an equal quantity of a saturated solution of carbonate of potash is then to be added to it, and the mixture set aside. If it contain pus, a transparent jelly will subside in a few hours; but this does not occur if mucus only be present. (8)

Dr. Good says that the coagulability of pus, by contact with muriate of ammonia, “is its specific test.” (9) To John Hunter, however, is due the merit of this discovery.

It occurred to Dr. Young, to discover a delicate test of distinction between pus and mucus, founded upon their relative optical properties. “If we put a small quantity of the substance to be examined between two pieces of plate glass, which may be carried in the pocket for the purpose, and, holding it near the eye, look through it at a distant candle, we shall observe the appearance, even in the day time, of a bright circular corona of colours, of which the candle is the centre: a red area, surrounded by a circle of green, and this again by another of red,—the colours being so much the brighter, as the globules are the more numerous and more equable. If the substance be simply mucus, there will be no rings of colours; although sometimes there is a sufficient mixture of heterogeneous particles, even in mucus, to cause the appearance of a reddish area only about the candle.” (10)

Pus has further been distinguished from mucus, by rendering water turbid when agitated with it. But Andral says that, in his experiments, the water was never rendered milky by pus extracted either from the pleura or peritoneum. (11)

Preuss believes that the absence of oxide of iron is a certain criterion of the fluid being mucus. (12) But Wood found iron in the tracheal mucus of a young man whose lungs were sound; he also found it in the mucus of the duodenum and stomach. (13)

The distinction between pus and mucus, proposed by Güterboch, rests upon the circumstance of the former containing albumen and fatty matter, neither of which exists in pure mucus. (14)

(5.) Experiments establishing a Criterion between Mucilaginous and Purulent Matter, 1780.

(6.) Webster's Life of Dr. Pitcairne; delivered as the Harveian Oration for 1781, Edin. p. 39.

(7.) Diss. on the Properties of Pus, p. 36, et seq.

(8.) Gren's Handbuch, vol. 2, p. 433.

(9.) Study of Medicine, 4th edition, vol. 2, p. 21.

(10.) Young on Consumptive Diseases, 1815, p. 22.

(11.) Clinique Medicale, trans. by Spillan, p. 462.

(12.) On the Analysis of Crude Pulmonary Tubercles. Berol, 1835.

(13.) Dissertatio de Pure, p. 42.

(14.) “Hinc liquet, satis multa nos habere inter pus et mucus discrimina, quorum nescio an nihil potius ad quotidianum usum commendetur, quam ista facilis intellectu albuminis et adipis reactio. Quum vero statu morbo albumen eum mucus mixtum (ut ex gr. in pulmonum oedemate) secerni possit, reactio adipis ad pus a mucus judicandum optime mihi esse videtur..... pus enim, quum

Wood obtained the following results in some comparative experiments upon pus and mucus. The fluids were separately dissolved in acetic acid. (15)

	Tracheal Mucus of a healthy man.	Puriform Bronchial Mucus.
Triacetate of lead.....	White precipitate	No change
Ferro-cyanuret of potass	Slight turbidity	Green precipitate
Sesquichloride of iron...	No change	Green turbidity
Sulphate of iron	White turbidity	No change
Sulphate of copper	Slight blue do	Ditto
Sulphate of alumina	No change	Ditto
Nitrate of silver	Ditto	Ditto
Infusion of Galls	Abund. wht. sedt	Abund. wht. sedt.
Nitric acid.....	White precipitate	No change.
Hydrochloric acid	Ditto	White precipitate

Becquerel has drawn up the following table of comparison between pus and mucus: (16)

Mucus.	Pus.
1. Viscid	1. Viscid and thick
2. Transparent or opaque	2. Opaque and yellowish-white
3. Neutral	3. Alkaline
4. Very little fatty matter	4. Much fatty matter
5. Very little altered by ammonia	5. Made gelatinous by ammonia, and finally dissolved
6. Charred in a spirit lamp, giving out occasionally a slight flame	6. Burns in a spirit lamp with a lively flame
7. Before the microscope, composed of thin plates with occasional globules.	7. Do. globules of a diameter from 1-1260th to 1-1889th of an in.

Mr. Fowndes says: “the peculiar ropiness, produced with an alkali, is the best character that can be given for distinguishing pus from mucus.”—Chemistry, p. 516.

The distinctive tests of pus and mucus, each secretion being pure and free, are by no means difficult either to comprehend or to apply; but the morbid varieties, which these fluids present, are often a source of much perplexity to the chemical pathologist.

There are three processes which I employ to decide upon the presence of pus in sputa; they are simple and easy of management, and I have never known them to fail when used with care and caution. They are as follow:—

1.—Spread the sputum thinly upon different plates of glass or mica, and examine it under the microscope. If pus be present, it will display the characters already mentioned under the head of its microscopic tests.

2.—Diffuse another portion of the sputum through distilled water; agitate it occasionally for two hours; apply heat, gradually raised to the boiling point, and maintain that temperature for about half a minute. If pus be present, albuminous flakes will be formed, finally depositing a sediment, heavy, flocculent, or granular; and fatty matter will swim upon the surface of the fluid (after it shall have cooled), generally recognizable by the naked eye, but always sufficiently answerable to the microscope or to the action of ether.

3.—Exhaust a third quantity of the sputum with successive portions of ether. If it contain pus, the etherial solutions, evaporated, will leave considerable residue of fatty matter.

These tests should be employed singly, and in succession. To the solitary use of any one of them it may be objected: firstly, that the globules of pus are sometimes, though rarely, smaller than natural, and, conversely, that the globules of mucus occasionally acquire an increased size, so that the microscopical test is not an infallible one for the two fluids; secondly, that mucus secreted under high nervous excitement, or during active local

adipis magnam copiam continet, flamma fulgens comburitur, quam ei, qua resinae ermentur, eonparem; mucus vero si ardescit, gasa tantum paululum flagrantia emittit.”—De Pure et Gramlione. Berol. 1837, pp. 23-26.

(15.) Diss. de Pure, p. 42-3.

(16.) Thomson's Animal Chemistry, p. 537.

inflammation, often contains albumen without a single trace of pus; and thirdly, that fatty matter may impregnate sputum, and yet no pus be present.

(To be continued.)

ON THE TREATMENT OF HYPOCHONDRIASIS,

By F. MICHEA, M.D., Laureat of the Academy of Medicine, &c. &c.

(This memoir, forming part of a work, *Traité Pratique de l'Hypochondrie*, to which a prize was awarded by the Academy of Medicine, is forwarded by the author expressly for publication in the *Medical Times*.)

The practitioner, in order to succeed in the treatment of hypochondriasis, must always bear in mind the various modifications which this affection may present, and if not in every, at least in many, cases, be cognisant of the nature of the causes which produce it. But, most authors, absorbed in their exclusive and systematic opinions, have neglected this rule, and it is owing to this fact that so many efforts have hitherto proved sterile. To supply, therefore, as much as possible this deficiency, the treatment of the varieties of hypochondriasis will be examined under three different heads.

I. Treatment of Idiopathic or Primitive Hypochondriasis.—In this species, as a defect in the powers of the mind, a pure and simple monomania, is the origin of all the morbid symptoms, it is principally against this defect, or aberration of the intellect, that our remedial agents must be directed. Now, in diseases produced under the influence of causes purely psychological, the only remedies we possess, are those which act on the mind. Baghvi laid great stress on this important therapeutical law, which unfortunately is neither sufficiently appreciated, nor understood, by the generality of practitioners. In these cases, he does not positively exclude all pharmaceutical means, but he recommends their administration within very limited bounds; he says, they ought to be prescribed with reserve and prudence, giving but few, and especially refraining from those which act energetically. In fact, by administering numerous and violent remedies to individuals affected with essential aberration of the intellect, we render the disease more dangerous and more complicated.

The therapeutical agents, which act on the mind, may be divided into two classes;—1^o *General*, or those common to all kinds of alienation;—2^o *Special*, or exclusive to the species of lypemania described in this article.

1^o General means.—*Exercise of the body.*—This constitutes one of the most efficacious means among the remedies of this species. Orbesius, Sydenham, and Frederic Hoffman, recommend, strongly, *riding on horseback*. But if authors are unanimous as to its efficacy, they differ greatly in the explanation they give of its mode of action. Some are of opinion—and those just mentioned are among the number—that it modifies advantageously the corporeal functions; whilst others, with Sauvages and Cullen, say that it acts especially on the mind. Both opinions are correct; but, in the present instance, the first, being completely foreign to my subject, will be passed over in silence.

The celebrated Professor of Edinburgh recommends, also, *exercise in a carriage*, especially when the person is himself the driver. The tragic poet, Alfieri, perceived that his melancholia disappeared as soon as he threw down his pen and assumed the whip. Cullen recommended, likewise, hunting, and, in general, with moderation, all kinds of bodily exercise, provided a certain degree of skill be requisite, and that they are performed in the open air. Joseph Franco lauds swimming, billiards, tennis-ball, fencing, dancing, &c. Gardening and carpentry may be very useful. But, in the choice of these various means, the taste of the individual must be consulted; nor must one alone be employed to the exclusion of the remainder.

2^o Voyages, Travels, &c.—Cullen placed them before the preceding. In fact, they are more ad-

vantageous, inasmuch as the patients are obliged to take more constant and greater physical exercise. Again, by removing them from their home and customary occupations, all subjects that pre-occupied their minds, leaving disagreeable impressions, are avoided, and new objects, as well as a greater variety of amusements, attract their attention.

But, ought sea voyages to be preferred to travelling by land? Notwithstanding the high authority of Joseph Franco, I coincide in opinion with Dr. Falret, and say that the latter are preferable; because, in the former, the mode of life is too uniform, and, as Dr. Forget has observed, many sailors, especially officers, become hypochondriacal during long sea-voyages. However, they may be recommended, if the patient, instead of remaining idle on deck, occupy himself actively among the ship's crew.

For excursions on the continent, some countries must be chosen in preference to others; and, in this respect, none can equal Switzerland, where the sublime is found united to the picturesque; or Italy, the cradle of the fine arts. One of my patients was radically cured after having resided two months in the latter country (see my book, Case 12th); and another was considerably relieved by a trip to Paris (Case 41st).

3^o Intellectual Occupations.—Celsus advises hypochondriacs to exercise their memory, repeating aloud what they have learnt by rote. Cælius Aurelianus recommends such patients to cultivate their vocal organs; to read works full of grammatical errors, and, while so doing, to endeavour to correct the faults. J. Franco praises chess and cards, amusing plays, and the society of cheerful and agreeable persons. To these may be added the following: music, drawing, painting, botany.

4^o Other Passions, used as a Corrective.—Loyer Villermé said, that sexual intercourse ought to be prohibited; but, with Actius and Montanus, I profess a contrary opinion, especially if these desires, instead of originating in mere animal desires, are founded on the appreciation of moral qualities; because, then, the passion, having a purer and higher end, has a more powerful and more lasting effect. It is on this account, and to avoid the fatal excesses to which sensual desires may lead, that Joseph Franco only advised Platonic love. Among the cases quoted in this work, there is one (Case 41st) in which love contributed considerably to the cure; unfortunately, the individual was unable to gain the object of his affection, and the disorder, after a short period, relapsed.

Some facts, recorded, prove the efficacy of paternal or maternal affection. Dr. Barras states, that the care he took of his only daughter, affected with phthisis, and the grief he experienced when he lost her, contributed greatly to cure him of his hypochondriasis. Loyer Villermé asserts, that he knew a woman who was cured of her malady, as soon as, by the advice of her physician, she became pregnant. I witnessed a similar case; here, however, the cure was not complete before the accouchement (Case 7th). Doubtless, these means are useful, by producing the sentiments, just mentioned, in persons affected with hypochondriasis; but one much more simple and more easy, is, to inform them of the supposed death of a child, a parent, or any other person very dear to them.

Some authors have asserted, that the perplexity caused by a law-suit, the news of the loss of wealth, &c., has produced an advantageous effect on the minds of some hypochondriacs. It may, therefore, be useful to create in their bosoms cares or emotions of this kind. Stratagems may likewise be had recourse to, so as to call into play other sentiments, not less energetic, as honour and esteem. For instance, we may write anonymous letters, filled with those insults and calumnious insinuations which seem to touch them most. Again, in those who have received a good education, and who mingle in the higher classes of society, we may attempt to excite ambition, love of sciences, or of glory. It was, thus, that the gain of a prize for poetry was highly advantageous to a person affected with this disease, as related in Case 41st. Finally, in every case, religious sentiments should be excited,—divine love, as recom-

mended by George Cheyne;* for nothing shews the insignificance of man, and displays his pitiable condition, so much as thoughts fixed on infinite space, or eternity.

All these general means of moral therapeutics have but one object in view: to prevent the hypochondriac brooding over his thoughts; to oblige him to forget his mania; to restore the equilibrium of his mind, by substituting a series of ideas of quite a different order. The psychological means, which remain to be examined, exercise an influence of a very different kind; for, instead of acting indirectly on the disease, they attack, as it were, the root and essence of the fixed idea.

(To be continued.)

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 16th, 1845.

On Stricture of the Œsophagus.—According to Professor Velpeau, there are several varieties of this disease, and they are far more numerous than those of the urethra. In the latter case, they are generally produced by a lesion either of the mucous membrane, or of the sub-mucous tissue, and are constituted by a lardaceous thickening of the part. In the former, besides the thickening of the parts, degenerescences of all sorts (colloid, encephaloid, melanotic, and fungous tumours), and various kinds of ulcerations, especially of a syphilitic nature, are met with. The first is generally preceded by the ingestion of some irritating caustic substance, frequent attacks of cynanche, or an affection of the digestive organs: the second, when touched, is soft, painful, and bleeds easily; the third variety is characterised by the commemorative symptoms. In respect to the consecutive accidents, the Œsophagus may be compared to the cornea, for in both, even when the cure is obtained, the functions of the part are more or less disturbed, and even, in some cases, abolished; for instance, though, by an appropriate treatment, a syphilitic fungus may be made to disappear, still the stricture persists, and may produce fatal consequences. Finally, let the cause, or the nature, be what it may, the principal indication in the treatment is to endeavour to dilate the canal by means of sounds.

On the Action of the Fifth Pair of Nerves on the Retina: by Dr. Taignot.—The author, after quoting the opinions of various writers, enumerates the different views, *pro* and *con*, as to the influence of the fifth pair on sight; and states that, in presence of such contradictory opinions, it is perhaps prudent to refrain from drawing a positive conclusion, until new facts come to the support of one view or the other. However, there is a circumstance which, in the analysis of the diseases of the fifth pair, is worthy of attention; viz., the presence or absence of amaurosis, according as the ganglion of Gasser is, or is not, affected. Does not this ganglion possess some influence on the organ of the senses, and the eye in particular? According as the lesion affects the intra-ganglionic, or cerebral, or the extra-ganglionic, portions of the fifth pair, or even the ganglion itself, may not the sight be perverted, or abolished? May it not be admitted, that the ophthalmic branch, which is in communication with the two nervous masses, receives a double influence, that from the encephalon producing the general sensibility of the organ, and that from the ganglion of

* Exponamus porro quid ad sanitatem corporis amor divinus conferat.

Si enim rem quamque pro dignitate suâ amantis Deum unice et infinito, cæteras res nullo (saltem qui ad Dei amorem collatus nullus sit) amore prosequeremur; simplex et unica nos cura, tenerit, omnia que nostra cogitata, dicta, facta eó unice collimarent, ut Deum unum impensius et porro impensius diligeremus. Hinc omnia anxietate de rebus quibuscunque sollicitudine liberaremur. Est autem ea sollicitudo et anxietas de rebus externis cura magno animis nostris cruciatui. At animi vexatio et anxietas plurimorum morborum origo et supradictis facile conspicitur.—*Tractat. de Infirmor. Sanitate*. S. 25. Londini, 1726. pp. 194-199.

Gasser presiding over the special sensibility of the retina; and that these two properties, united in the normal condition of the fifth pair, may be separately abolished in some pathological states? Thus, the lesion of the intra-ganglionic portion of the trigemini abolishes only the general sensibility of the ophthalmic branch, whilst that of the ganglion of Gasser causes not only the loss of general sensibility, but likewise that peculiar to the retina. (*Gazette des Hôpitaux*).

Remarkable case of Polydipsia.—Dr. Fallot, of Namur, relates the following curious fact, in the *Journal de Médecine de Bruxelles*. A soldier, *ætat* 29, was sent for examination, being supposed to be affected with diabetes, to such an extent as to render his being dismissed from his corps necessary. When questioned, he related, that he had been subject to this infirmity from infancy, and that more than once he got a whipping from his father and a good drubbing from his elder brothers, for having wetted them involuntarily, during the night. Being by trade a shoemaker, he found it impossible to remain with his employers, as he was obliged every moment to leave his work to drink and to make water: when in Paris, he was compelled to employ the greater part of his small earnings in purchasing water, and during a pilgrimage to Pistoie (Italy) he often, when at a distance from a dwelling, drank with delight his urine. The only disease he had ever suffered from was hæmoptysis, about a year ago. Want, and the impossibility of gaining his livelihood, induced him to enlist. When examined on the 20th July last, his state was found to be as follows: general health good; complexion ruddy; muscular system developed, not thin; skin, though dry, neither rugous nor arid. These symptoms were incompatible with a long standing diabetes; further examination was therefore requisite, and to render it more conclusive, he was separated from his comrades; his drink was given to him whenever he needed it, and his urines as ejected were saved. The appetite was good, natural; the bucco-pharyngeal mucous membrane presented its normal colour and humidity; pulse natural; respiration easy; digestion good; saliva and perspiration acid; sleep long and deep; during the night, the patient took no drink. The average quantity of liquids, taken during 24 hours, was about 24 quarts, and that of the urine expelled about 25. The latter immediately after evacuation was limpid, like water; inodorous; without action on litmus paper; when exposed to the air, in a very short time it gained a musty, excessively disagreeable, smell, and became acid: no change either in quality or quantity, when the alimentation was of a nutritious, or of an opposite, nature; density 10.08; mixed with yeast, and placed in a favourable condition to produce alcoholic fermentation, no effect took place; on examining the quantity of urea contained in two quarts of urine, it appeared that this substance was not so abundant as usual; but on multiplying the quantity given by the totality of the urine, the diminution was found to be but relative, the absolute proportion being equal to that furnished in the normal state; hippuric acid was not present. The blood contained, in 1,000 parts.

Fibrine	0.002
Globules	0.146
Water	0.795
Solid Substances	0.057

1.000

After remaining in the hospital 22 days, he was discharged as incurable, his infirmity being incompatible with the duties of a soldier. No remedial agent was employed, because the chronicity of the disease precluded the possibility of a cure, and even were it practicable, no symptom existed on which the treatment could be founded, since no functional disturbance existed.

The Editor of the *Journal de Médecine*, after recording the foregoing case, adds: if this fact is uncommon, as far as its intensity is concerned, it is not equally so with respect to its nature. Doubtless, it is not frequent in an idiopathic form, or independent of some nervous affection, to which it may be attributed; but it is to be met with in hysterical and chlorotic individuals, in whom it

forms one of the innumerable functional disturbances which indicate the existence of these two morbid states; in these cases, the treatment is that of chlorosis and hysteria. After copious hæmorrhages, it is not uncommon to meet with intense polydipsia, which yields to nourishing food, good wine, and preparations of iron; remedies which, in other circumstances, increase the thirst. Two cases, similar to the present, were observed by the author of these remarks: the one in the wards of Dr. Rayer, at the Charité, which was ameliorated by the administration of antispasmodics, principally valerian; the other in a wine merchant, residing in the Rue de Sevres, who got better when submitted to a nourishing diet, and alkaline drinks. But, in this affection, is the *polyuria* the cause or the effect of the *polydipsia*? It would appear that, in almost every case, the disease commences with the latter; whilst in nervous affections, like hysteria, an abundant aqueous diuresis may exist without extraordinary thirst, and *vice versa*; it soon, however, disappears, and seldom, if ever, assumes the chronic form. In diabetes mellitus, the principal characters are, an aberration of the nutrition, and a wasting away; and here the two functional disturbances, thirst, and diuresis, appear simultaneously, but, contrary to idiopathic polydipsia, independently of the aberration of the nutrition; polyuria seems then to be one of the most important phenomena, or, in other words, it is the aberration which causes polydipsia and diuresis to take place simultaneously. Finally, the prognosis in idiopathic polydipsia is not serious, and in this respect differs from diabetes mellitus, as much as one disease can do from another.

Extirpation of the eye.—Professor A. Berard has lately, in two cases, had recourse to the method proposed by Dr. Bonnet, of Lyons, and since then adopted by Drs. Stœber, of Strasburgh, and Cunier, of Brussels. It is performed in the following manner: after incising the conjunctiva, as in the operation for strabismus, it is raised by a hook, and all the muscles, except the rectus externus, successively divided; three-fourths of the eye are thus exposed to view. It must then be seized with the hook, and, with a curved scissors, the optic nerve be cut, and finally the rectus externus: by this method, the less vascular parts of the eye only are intersected:—tendons, conjunctiva, and optic nerve; consequently, there is less pain than by the ordinary method, and no hæmorrhage. The consecutive phenomena are likewise not so intense, there being little or no fever, pain, or suppuration; besides which, as the tissues, forming the orbit, are untouched, the lids are not so sunken as when the orbit is emptied. As to the lachrymal gland, Professor B. thinks that may be left, but that further facts are necessary ere this question can be decided.

On Luxation of the Humerus.—In a case of this affection, in which Dr. Robert, surgeon to Beaujon Hospital, performed the *post mortem* examination, the following lesions were discovered: slight infiltration of blood into the sub-scapularis, to the anterior surface of which muscle the axillary vessels and nerves adhered strongly; the deltoides having been dissected, detached inferiorly, and raised, the loose filamentous cellular tissue, which unites it to the anterior and external surface of the capsule of the articulation, was found to be thickened and changed into a fibrinous layer of a light rose colour; the least movement overcame the resistance offered by this recently formed membrane, and the luxation observed during the patient's life was reproduced. The head of the humerus placed itself under and inside the coracoid process; the whole bone performing, at the same time, a slight rotation on its axis from within outwards, so that the articular surface, instead of being directed towards the glenoid cavity, was turned forwards, the head of the bone in this position being covered only by the deltoides; the anterior and external portion of the capsule was considerably torn, but quite sound every where else; the thick fibrous layer, which completes externally the bicipital groove, was torn near its insertion on the smaller tuberosity; the groove no longer contained the tendon of the biceps, but was half filled up in consequence of the inflam-

matory and swollen state of the neighbouring fibrous tissues; the tendon of the biceps, placed on the inside of the articulation, surrounded the corresponding side of the glenoid cavity; the two tuberosities were bare, their surfaces uneven and deprived of their periosteum; the supra-spinatus, infra-spinatus, teres minor, and sub-scapularis, had been torn from their insertions, but without removing with them the slightest portion of bone; their extremities were visible in the cavity of the articulation, a part of the teres minor alone being confounded with the capsule; the surface of the articulation was of a reddish colour, and it contained a notable quantity of synovia, of the same colour. Dr. Robert admits, with Professor Velpeau, three varieties of luxation of the humerus inwards, towards the axilla:—1° The sub-scapular; 2° The sub-pectoral; 3° The sub-clavicular. He considers the case just described as of the second species, and, from the lesions observed, concludes that the patient ought never to be permitted to move his arm until the organization of the new tissue, which replaces the torn capsule, is complete.

On the Arabic Treatment in Inveterate Syphilis, Employed in the South of France, when the Ordinary Remedies have Failed. By Dr. Jaumes.—This method, introduced 150 years ago, it is said by a Spanish apothecary, is composed of pills, an opiate, a tisane, and a peculiar diet, denominated *diète sèche*.—1° *Pills*. R. Hydrargyr. viv., deuto-chloruret. hydrargyri, pulv. fol. sennæ, pulv. rad. anthem., pyreth., pulv. agaric., aa. ʒss.; mellis q. s. Rub the mercury with the deuto-chloruret, until the globules disappear; then add the powders, and with the honey make a mass, which must be divided into pills of from grs. iv. to grs. v. each. Two to be taken daily.—2° *Opiate*. R. Rad. sarsapar. ʒv., rad. smil. chin., fol. sennæ aa. ʒiss. coce. fruct. coryll. avell. torrefact., ʒj. fruct. caryoph. aromat. ʒj.; mellis q. s.; m. sumat ʒii. ad ʒss. bis in die.—*Tisane*. R. Rad. sarsapar., rad. smil. chin. aa. ʒij., aq. bull. lb. iv. m. ft. infus. in die sumend.—*Diet*; consists of bread, raisins, walnuts, figs, burnt almonds. The mode in which these remedies are administered, is as follows: the first thing in the morning, a pill and a cup of the tisane; an hour after, a dose of the opiate, and a second cup of the tisane; in the evening, the opiate and tisane, then the pill and tisane; during the day, the remainder of the tisane to be taken; no other drink allowed, even at meals. In this composition, the deuto-chloruret is decomposed, and a new mercurial compound is formed, of which the precise nature is yet unknown, but to which the beneficial effects are attributed. To obtain a cure, the treatment must last from thirty to fifty days, though it is seldom requisite to go beyond the fortieth. Sometimes, salivation appears towards the close, but does not constitute a serious complication, as it yields readily, so soon as the remedy is ceased to be administered. Dr. Jaumes quotes two cases of inveterate syphilis, of two years' standing, cured radically by Professor Lallemand after a treatment of thirty to forty days. (*Journal de la Société Pratique de Montpellier*.)

Case of Premature Labour, produced by the Introduction of Tents into the Vagina: by Professor Schœllir, of Berlin.—Mrs. Richter, *ætat* 36, who had been delivered before her time in 1841, became *enceinte* in July, 1843, and felt the movements of the fœtus on the 12th November. Her first child, still living, is a little girl, who was born at the commencement of the thirty-second week, without any difficulty; weight, 4½ lbs; length, 16 inches; diameters of the different parts of the head: biparietal, 2½ inches; occipito-frontal, 4 inches; from the occiput to the chin, 4½ inches. The small diameter of the brim of the pelvis being three inches, Professor S. considered it possible to defer the accouchement until the commencement of the thirty-fourth week. On the 3rd March, a brisk purgative was administered, which produced numerous evacuations, and on the evening of the 4th, by means of the speculum, the vagina was filled with lint, and frictions made on the abdomen; during the night, slight pains in the loins occurred.—5th. Lint renewed; nothing particular observed.—6th. In the evening, the cervix

uteri was found to be slightly dilated, and feeble pains from time to time took place.—7th. Tent applied for the third time, and was taken out on the 8th, the cervix uteri allowing two fingers united to enter.—9th and 10th. The secale cornutum was administered; pains became more and more intense, and on the evening of the 10th, the membranes burst, after which the pains gradually decreased, and, on the 11th, the cephalic extremity changed its position, and presented the face; fortunately, by means of exterior pressure, as recommended by Wigand, it was brought back to its original position.—12th. After a quiet night's rest, gtt. xv. of the tinctura opii having been administered, the uterine contractions recommenced, and were very intense. At 4, p.m., a boy was born, in an apoplectic state, but which was soon restored to life. He weighed 6½ lbs; was 18 inches in length; and the diameters of the head were: biparietal, 3½ inches; occipito-frontal 4½ inches; from the occiput to the chin, 5 inches. The after-birth came away shortly, without any accident. Four months have since elapsed, and the child is still thriving.—*Berlin Med. Zeitung.*

New Formula for Blistering Plaster.—M. Louradour recommends the following preparation, as preferable, in some cases, to the ordinary emplastrum lyttae: R. Resin. elem., styrac. liquid. aa. ℥iv. cer. flav. ℥v. camph. pulv. ʒj.: pulv. mel. vesicat. ʒviij. Melt, at a gentle heat, the elemi and the wax; then add, first the styrax, and then the Spanish fly, leaving the mixture on a gentle fire for half an hour. It must then be removed, and stirred with a spatula, until nearly cold, when the camphor, previously finely powdered, is to be added.—*Journal de Chimie Medicale.*

Wound of a Branch of the Posterior Tibial Artery; Ligature of this Artery; renewal of the Hemorrhage; Ligature of the Cruralis; Cure: by A.T. Chrestien, M.D., Professor agrégé at the Faculty of Medicine, Montpellier.—Louis Amédée, gardener, ætat. 20, while at work, pricked his left leg just below the malleolus internus; immersion in cold water failing to check the hæmorrhage, burnt rags, and a band, were placed on the part, and this had the desired effect. In all probability, this would have sufficed, had not the patient walked too soon, causing the hæmorrhage to re-appear. The same remedial agents were employed with a similar result, but were rendered fruitless by a new imprudence. Dr. C. felt convinced, as the *molimen hæmorrhagicum* would continue to increase, that the only efficacious remedy was the ligature of the posterior tibial artery, and consequently proposed the operation. The patient, however, refused, stating that as the renewal of the hæmorrhage in both cases was owing to his imprudence, in all probability it would not recur, as, enlightened by experience, he would be more careful. The pulse, being full and hard, prevented Dr. C. sharing this opinion; and at 6, a.m., the next day, (6th June) the blood began to flow again, though the patient had not got off his bed. Being now frightened, he consented to the proposed operation. The ligature on the wounded spot was out of the question, on account of the time that had elapsed since the accident, and the inflammatory state of the parts; as to that of the artery at the upper third of the leg, Dr. C. was deterred from attempting it, on account of the difficulties experienced by Deschamps, Logand of Leeds, and Bouchet of Lyons; he, therefore, determined upon performing it at the lower part of the second third of the leg, where the artery is situated between the tendo achillis and the tibia. The operation was accomplished, the only difficulty being to find the artery, on account of the feeble state of the patient; the ligature being applied, the wound was united by the interrupted suture, and strips of adhesive plaster, over which pledgets of lint, compresses, and a bandage, were placed. The next day, the parts were so swollen as to necessitate the removal of the apparatus, and the wound was allowed to suppurate, instead of being united by the first intention. Things went on pretty well for about ten days, when all at once the hæmorrhage re-appeared, and, on examination, the artery was found to be obliterated where the ligature had been placed, but the collateral branches had brought the blood to the inferior portion, and

thus reproduced the hæmorrhage. Compression having failed, the ligature of the crural artery was proposed as the only resource; and after much hesitation, and only after another attack of hæmorrhage had taken place, was it acceded to. It was promptly performed near the crural arch; the only accident, which followed, was an abscess at the part primitively wounded, which necessitated an incision. A month after, cicatrization was every-where complete, and in six weeks the patient was walking in the garden. The tingling and diminished temperature, mentioned by many authors as consecutive to the ligature of large arteries, were not referred to, because the former was very slight, and the latter was only felt for a few days.—*Journal de Chirurgie.*

Prize proposed by the Société de Pharmacie de Paris: 1° Gold medal, worth £20.—Determine by precise experiments, the degree at which alcohol is the best for the preparation of medicinal alcoholic tinctures, and what quantity of alcohol is absolutely necessary to dissolve the active parts of the substances, most frequently employed.—Memoirs, in French or Latin, must be sent, post paid, to M. Souheiran, Secrétaire-General de la Société de Pharmacie, Rue de l'Arbalete, Paris, before the 1st of August, 1845.—2° Gold medal, worth £20. Perform an analysis of the scilla maritima; endeavour, especially, to obtain the acrid and fugitive, as well as the bitter and fixed, principles, which the plant appears to contain, and, at the same time, give a complete history of these products. Therapeutical experiments must be added, showing the medical power of these substances, and the analogy existing between them and the root.—3° Gold medal, worth £20. On the action of alkaline bases on azotised organic substances.—The Society does not demand the examination of the mode of action of the alcalis on a great many substances; and, without naming any one in particular, still the entire action of alcalis on azotised substances proceeding from organised beings, the different reactions which take place, the analysis of the various products &c., must be given, so as to be able to draw from the facts general conclusions. The Society wishes to fix the attention principally on the four neutral principles contained in the human body,—fibrine, albumen, gelatine, and caseine; and, at the same time, states that, however interesting a memoir may be, which treats of the products obtained from organic substances, it cannot be included among the number of those recompensed by the Society. Memoirs in French or Latin must be sent as above, to M. Souheiran, post-paid, on or before the 1st July, 1845.

Academy of Sciences. Sitting of the 13th of January, 1845, M. Elie de Beaumont in the Chair.

On the comet discovered last July.—Mr. Thos. Maclean addressed the following letter to M. Mauvais, M.A.S. "Cape of Good Hope, 31st of October. I have the honour to acknowledge the receipt of your notice and calculations of the comet discovered by you on the 7th of last July, and to state that, in consequence of a similar notice from Greenwich, received two days before, Mr. Mann had, in my absence, searched for, and discovered, the comet without any difficulty. The observations are going on, and will be continued with energy. As soon as the places of the stars of comparison shall have been determined by means of the meridian instruments, the comet will be referred to them. I give the following approximate readings of the small pointing circles of the telescope, for the observations already obtained."

		Hours		Minutes	
October 27th.	Cape M. S.	16	..	12	
"	28th.	15	..	51	
"	29th.	16	..	56	
"	30th.	16	..	0	
		Hours	Minutes	Seconds	
R. A.	12	..	38	..	0
"	12	..	36	..	56
"	12	..	35	..	32
"	12	..	34	..	12

On the Actual State of Quarantine for the Plague.—Memoir read by Dr. Aubert Roche. The author, from his researches, asserts that the annual loss to France is about £480,000 (12 millions of francs);—that Marseilles opposes all change, not from fear of contagion, but in order not to lose the monopoly

of the commerce of the Mediterranean, which in 1843 amounted to 136 millions of francs (about £5,440,000), or 5-9ths of its annual receipts;—that as far as the public health is concerned, and considering the facts just pointed out, in reference to the chaos of the sanitary laws, and the absence or the abolition of quarantines in the neighbouring states, may not the question be asked: of what use are they to France? or are they not injurious, rather than useful. He also asserts that, whoever would study this subject, with impartiality, would soon be convinced that our sanitary laws are very detrimental to our interests in the East, and that they cannot preserve France from the plague, since, if this disease is contagious, it may be imported by a passenger, via England, or by merchandize, via Antwerp.

Anatomical and Physiological Observations on the genus Acteon, Eolide, Venilie, Calliopsce, Tergipe, &c. by M. Souleyet. The author lays before the Academy plates, to prove the assertions by which he combatted the opinions of M. de Quatrefages concerning the organization of certain molluscs;—the facts there demonstrated shew: 1° That the circulatory organs exist in the Acteons and five other species, (Zephirine, Acteonie, Amphorine, Paonie and Cheelid.) 2° That veins exist in molluscs which have a heart and arteries. 3° That there are respiratory organs. 4° That circulation and respiration cannot be performed by any other organs. 5° That an intestine exists, and that it is because it escaped the researches of M. de Quatrefages, that he assigned an erroneous position to the anus. 6° That the description given by M. de Quatrefages of the gastro-biliary apparatus in the Eolide is incorrect. 7° That the description of the organs of generation in the phleboteræ is widely different from that given by M. de Quatrefages. Finally, the author terminates his memoir by the description of the genus Acteon.

On the Saccharine or glucosic Fermentation: by M. Bouchardat. In this memoir, the author examines the following questions. 1° What are the various substances which, like diastase, cause starch to ferment? 2° What are the substances, which prevent the action of diastase on starch and on the glucosic, henzoic, salygenic, and alcoholic fermentations.

On an easy and certain Method of Performing Catheterism, even in the most Difficult Cases: memoir read by J. G. Maisonneuve, D.M.P.—In the hands of the ablest and most experienced surgeons, catheterism, in cases of retention of urine, is often a difficult and sometimes a dangerous operation, and in those of an inexperienced surgeon, it is daily a source of serious accidents. Of late, numerous methods have been proposed to facilitate this operation, and Dr. Maisonneuve proposes the following. Introduce into the urethra a very small gum-elastic bougie, and, when it has reached the bladder, slip over it a catheter open at both ends. The passage of the latter inwards is facilitated by a bit of silk passed through it and then tied to the extremity of the bougie. To cause the catheter to penetrate easily and without pain into the bladder, it is sufficient to push it onwards on the bougie, drawing gently all the time on the silk. This method has succeeded in all the cases in which the author employed it, some of these being very difficult ones; and from these facts, he concludes: 1° That catheterism, performed in the way just described, is of all the known methods, the easiest and most certain. 2° That it succeeds wherever the other methods are applicable. 3° That it succeeds where the others fail. 4° That it sets aside all painful trials, all ruptures of the canal, all false passages, and all the accidents which they give rise to. 5° That, to perform it, no peculiar skill is needed; on the contrary, it may be employed by persons not at all accustomed to such an operation. 6° That it enables us to set aside the numerous instruments proposed to overcome the different obstacles encountered.

On the Canchalagua, (Chironia Chilensis, Winslow): by M. Ferdinand Lebeuf, Pharmacien at Bayonne. This plant, originally from Chili, where it is frequently employed, is given, likewise in Spain, in sanguineous congestions, and in all cases in which it is requisite to act on the blood, and regulate the circulation. It was for the first time made

known in 1707, in France, by M. Lepas, D.M.M., who prescribed it in pleuritis, catarrhus suffocans, rheumatismus, febris maligna, &c., when the febrile symptoms were not very strong. The dose must be from 3j. to 3ij. thrown into boiling water, and after infusing for seven or eight minutes, the patient must be made to drink it as hot as he can bear it; in order to remove the disagreeable taste, any substance of a similar nature may be added. M. Ackermann, in 1843, published a memoir on this subject; and Ruiz, in 1796, stated that many Spanish practitioners confounded it with the *chironia centaurium*. Finally, says the author, in conclusion, a plant which, in the country where cinchona grows, is considered the equal of this precious bark, is, certainly, worthy of attention. Thirty-two pounds were forwarded as a sample.

M. Arago announced to the Academy, that a new comet was seen at Berlin, on the 28th Dec.; at Hamburgh, on the 3rd January; and in Paris, on the 10th January.

M. Gannal addressed a letter, requesting that the new processes of embalming be sent to a committee who can thus judge of the comparative merits of his and other methods. This request was acceded to.

Academy of Medicine. Sitting of the 14th Jan. M. Caventon in the chair.

On the Epizootia.—M. Dupuy recalled the attention of the Academy to the 2nd paragraph of its regulations, where it is said that it is its duty to study epidemics and epizootias. This subject is of the highest importance. France has lost upwards of a thousand head of cattle, and that in a short space of time; now, supposing each to be worth £8, it makes a loss of £8,000. The inhabitants of Paris purchase daily about £1,200 worth of milk; now, as it is notorious that the liquid, sold as such, contains one-third water, evidently £400 is paid daily for water sold as milk.—The president stated that the proposition should be submitted to the Conseil d'Administration.

Dr. Gimelle read some remarks, in reply to the objections made to his report on Dr. Robert's memoir on "Fractures of the Neck of the Femur." 2nd, A report on a memoir on the same subject by Dr. Loreau, *Professeur Suppléant* at the Preparatory School of Medicine, Poitiers.—Dr. Lagneau remarked that he had dissected an old fracture of the neck of the femur, in which the inferior portion penetrated deeply into the superior, and that, consequently, this lesion was possible.—Dr. Gimelle, in reply, said that he did not deny the possibility of the lesion, but merely stated that it was not common.

Professor Roux commenced the lecture of a memoir on fungus hæmatodes, and aneurismal tumours of the blood-vessels of the bones. At four o'clock, he was interrupted by the president, who informed him that the Academy was about to be formed into *Comité Secret*; the termination of the memoir was, therefore, postponed until the next sitting.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

(From our Correspondent, Dr. MUSPRATT.)

*Liebig's Third Lecture.**—Having brought under your notice, in the last lecture, the numerous and interesting analogous compounds, emerging from the decomposition of *urea* and *sulphocyanide of ammonium* by heat, I shall now treat of the three isomeric acids of cyanogen; but, before doing so, I will direct your attention to their respective formulæ, in order that you may understand more clearly their decomposition and properties.

Hydrated Cyanic Acid..... H O, Cy O

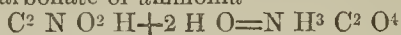
Hydrated Fulminic Acid.... $2\text{H O, Cy}^2\text{O}^2$

Hydrated Cyanuric Acid.... $3\text{H O, Cy}^3\text{O}^3$

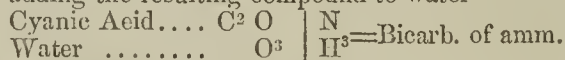
You will now perceive, that these three acids possess exactly the same composition, but are quite different in constitution.

* It may not be uninteresting to the reader to learn, that the first paper that emanated from the now renowned Professor of Giessen was upon fulminic acid and its compounds.—M.

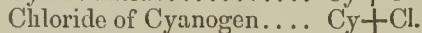
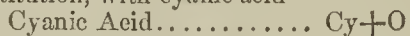
The first is formed, when yellow prussiate of potash is heated to incipient redness, with access of air, care being taken to stir the mass with a spatula during the operation. The acid, in a free state, reddens litmus, but it cannot be kept uncombined for any length of time, as it is, by the assumption of two atoms of water, transformed into bicarbonate of ammonia—



We also effect this metamorphosis by conducting dry nitric acid over cyanic acid, and then adding the resulting compound to water—



The gaseous chloride of cyanogen corresponds, in constitution, with cyanic acid—

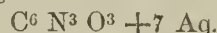


The oxygen in the former being replaced by chlorine.

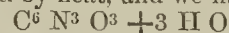
Chloride of cyanogen is formed by passing a current of chlorine gas through cyanide of potassium. The decomposition, which here takes place, is as follows—



The cyanuric acid is formed under a variety of circumstances, but the safest method for its preparation is from *melan*; a portion of the latter is dissolved in warm sulphuric acid, then mixed with much water, boiled for four or five days, and evaporated. A very impure acid will, in this manner, be obtained, but as cyanuric acid is soluble in sulphuric and nitric acids, without suffering decomposition, it is readily purified by being dissolved in one of these menstrua, and precipitating by water. The composition of the crystallized cyanuric acid is—

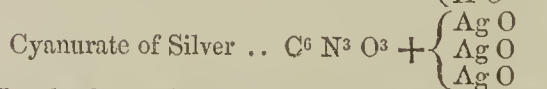
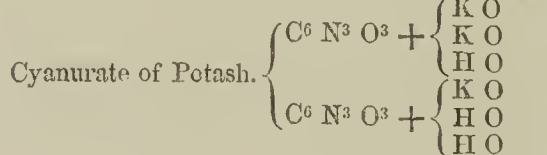
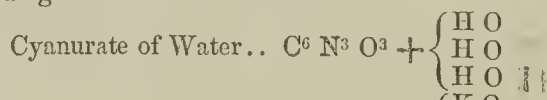


Four atoms of its water are, however, very readily expelled by heat, and we have—



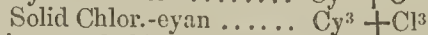
It gives three series of salts—a characteristic belonging to tribasic acids only.

I shall now represent to you the formulæ of its leading salts—

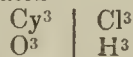


In the last salt, you will see, that the three atoms of basic water are replaced by three atoms of oxide of silver.

The solid chloride of cyanogen is analogous, in constitution, to cyanuric acid, as will be seen on contrasting the formulæ—



and it is remarkable that, when the latter is added to hot water, we obtain the former collaterally with hydrochloric acid—



Cyanuric acid is slightly acid to the taste; dissolves sparingly in cold, but copiously in boiling water. When we use muriatic acid, as its solvent, we obtain it, on cooling, in an anhydrous and crystalline state. The cyanurets are all readily decomposed, when brought in contact with any of the mineral acids.

The fulminic acid is bibasic, and, when separated from bases by the mineral acids, undergoes decomposition, yielding hydrocyanic acid, and a host of other products. It is generally formed, when acting upon the nitrates of silver or mercury, with a mixture of nitric acid and alcohol.

The cyanic and cyanuric acids, it is well known, under certain circumstances, afford urea, but I was not fortunate in obtaining this body from the fulminic acid, until the last summer. I procured it by first heating the fulminate of silver with copper, and then submitting the resulting compound (fulminate of copper) to the action of hy-

drosulphuric acid; urea and sulphuret of copper resulted.

I shall now draw your attention to some remarkable and varied decompositions, that take place when cyanogen is left for some time in contact with water. We found, on examining the fluid, that it contains—

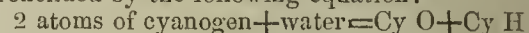
Hydrocyanic Acid.

Cyanic Acid,

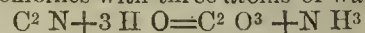
Oxalic Acid,

Formic Acid and Urea.

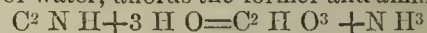
The formation of the first two is readily comprehended by the following equation:—



How are we to account for the formation of the oxalic acid? Why, its production is readily explained, when we assume, that one atom of cyanogen combines with three atoms of water—

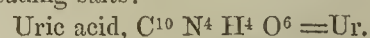


The principal source of the formic acid is the hydrocyanic acid, which, combining with three atoms of water, affords the former and ammonia—



Lastly, the cyanic acid unites with three atoms of water, giving carbonate of ammonia, which, remaining for some time in the menstruum, yields urea.

These metamorphoses show, evidently, the peculiar tendency that cyanogen possesses of forming new and distinct bodies, by the assumption of one, two, three, or more atoms of water, and will partly tend to explain some of the ephemeral changes that take place in the human body, and more especially in that interesting secretion—the urine, concerning which so many vague theories have been broached. In concluding this lecture, I shall place before you the formula for uric acid, as well as the formulæ of some of its leading salts:—



Urate of potash, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{K O} = \text{Ur} + \text{K O}$ soluble in 85 parts of water.

Urate of soda, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{Na O} = \text{Ur} + \text{N}^2\text{O}$, soluble in 124 parts of water.

Urate of ammonia, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{NH}^3 = \text{Ur} + \text{N H}^3$, nearly insoluble.

Urate of magnesia, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{Mg O} + 5\text{Aq} = \text{Ur} + \text{Mg O} + 5\text{Aq.}$

Urate of lime, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{Ca O} + \text{Aq} = \text{Ur} + \text{Ca O} + \text{Aq.}$ soluble at 212°

Urate of barytes, $\text{C}^{10}\text{N}^4\text{H}^4\text{O}^6 + \text{Ba O} + \text{Aq} = \text{Ur} + \text{Ba O} + \text{Aq.}$ do. at 212°

In the next lecture, the action of peroxide of lead and nitric acid upon uric acid will be explained.

By SIGISMUND SUTRO, M. D.

Radix Euphorbiae villosae seu Palustris, given in Hydrophobia.—In June 1843, several men, as well as horned animals, who had been bitten by a mad wolf, came under the author's notice. The former were brought to the hospital, when Dr. Sowinsky sponged the wounds, moistened them with strong hydrochloric acid, and then applied compresses, steeped in decoct. euphorb. villos. and subsequently the ung. canthar. Dr. Sowinsky met with a peasant, who adopted the following method: burning out the bitten part with a red hot iron, and then washing with decoct. euphorb. villos; at the same time giving, internally, before breakfast, a wine-glassful of the latter (3j to the pint), and continuing till no more vomiting ensued from taking it (generally, from 3 to 4 days). On the ninth day, another similar dose is given, which is again continued till toleration of the remedy. Sowinsky gave, on the first day, a wine-glassful of the strength of 3j. to the pint; on the second day, $1\frac{1}{2}$ 3; the third day 3ij. Vomiting ceased on the 4th day, with all; the remedy was continued to the 9th day. After the lapse of three weeks, the author again administered the remedy, but in none did it re-excite vomiting; and they were all dismissed on the 35th day, with directions to present themselves again, in case the smallest symptom of illness should appear. In ten days more, one returned, complaining of sickness, and pain in the bitten part, upon which the latter was again cauterized, and the above remedy administered internally for four days. A second patient also returned, who had had for three days

pains in the seat of the injury, at the same time complaining of sleeplessness, headache, sickness, and the symptomatic horror of liquids. Notwithstanding a second cauterization of the spot, bandaging with ung. canthar., and euphorb. internally, with several other remedies, the patient died on the fifth day. The other patients were, now, brought back to the hospital, and the remedy in question administered for three days more, and they have all enjoyed perfect health since. In the government of Kiew, 4 peasants and one child were bitten by a mad cat; the latter soon died of hydrophobia, and one peasant was attacked with the usual symptoms, but was treated, as well as the other three, with rad. euphorb. villos., and all four were saved. In the hydrophobic patient, the symptoms at first increased, but, after half an hour, vomiting ensued, accompanied by diarrhoea and abundant perspiration. According to age and constitution, from $\frac{3}{4}$ ss. to $\frac{3}{4}$ ij. of the infusion were given daily for three months. He also employed it in animals. The following case is then related: the individual (who had adopted the above treatment in the cases just mentioned) was called to a person apparently dying, and found her hydrophobic in the highest degree. He ordered her to take at once a full dose of the decoct. euphorb. when she fell asleep, perspired profusely, and quickly recovered, after vomiting and diarrhoea had taken place.—*Dr. Krebel in Medic. Zeitung Russland's.*

Cure of a Case of Paralysis of the Right Fore-arm and Hand, by Frictions with Black Soap.—A workman, ætat 40, applied to the author on account of paralysis of the right fore-arm and hand, which he ascribed to a cold caught two years ago. At first, a dull pain was perceived in the joint and a fatiguing sensation in the hand, but, in spite of the most active remedies, sensation and volition were gradually diminished, and eventually lost, in the right arm and hand, from the elbow down to the tips of the fingers; the arm was also much wasted. The author found the suffering arm colder than the healthy one; pinching, or pricking, caused no pain; the radial pulse was thready and slow; the axillary and left radial pulse rather accelerated. The hand hung down relaxed; the fingers were contracted, and, after being stretched, they immediately returned to their former position. The roots of the nails were bluish; the upper arm was rather less in size than on the left side; the muscles of that part were soft, and contracted at the patient's will. After the author had increased the patient's general strength, by diet, &c., he endeavoured to improve the vitality of the paralyzed arm. For this purpose, the whole arm (from the shoulder down to the points of the fingers) was strongly rubbed with *sapo niger*, and enveloped in a circular bandage; the wrist was supported by two splints, and the hand put into a stiffened glove. When this treatment had been continued for 20 days, the hand became swollen and red; the application of the soap caused a burning sensation, and was consequently discontinued, when the skin peeled off. The arm continued to be dipped in cold water, and daily extension performed on the parts. The skin appeared more sensitive, and the patient felt some warmth in it. A weight of 2 lbs. was then tied to the hand, with which the patient tried to swing the arm, and to bend it at the elbow. When the desquamation was over, black soap was again applied in the same way; but after even six days' application, great swelling ensued, with inflammation of the arm, and, at the same time, violent febrile symptoms. The patient felt a sensation of heaviness, and heat in the arm, and throbbing downwards to the points of the fingers; the parts were, therefore, again bathed with cold water. Many furuncles now appeared on the upper and fore-arm, and ulcers around the nails. When the fever had disappeared, as well as the desquamation of the whole arm, the paralysis gradually gave way; the fore-arm, hand, and fingers, could be moved at will, and ultimately they acquired their normal flexibility and power, through continued exercise. Two patients, who suffered under nearly complete paralysis of the lower extremities, were restored, in a very short time, by similar treatment.—*Dr. Ruppins, of Dresden, in Hufeland's Journal.*

On the Use of Muriate of Zinc in Syphilis, as employed in the marine hospital of Kronstadt. The complications of syphilis with scorbutus and scrophula are very frequent in the above hospital. After primary chancres, with scorbutic complications, secondary symptoms generally occur very quickly. The ulcers become unhealthy-looking, irregular, and very painful; bubos almost constantly occur, running into a state of gangrene; a copper-coloured eruption takes place, quickly running into ulcers; condylomata appear on the scrotum, anus, and arm-pit; pains are felt in the bones and joints; hectic fever, pulmonary diseases, dropsy, &c. occur, and not unfrequently lead to a fatal termination. Ordinary measures, in these cases, failed; iodide of potassium was of service only now and then; while mercury, and low diet, cannot be employed, where hectic symptoms are present. Under these circumstances, chloride of zinc was used, according to Hanccke's prescription, but the ointment, employed by him, appeared, in most instances, too strong. (*R. Mur. zinc. 3j., adipis suill. 3j., cum acid. mur. 3ss.*) The result of 200 cases showed, that chloride of zinc is certainly useful in different forms of primary and secondary syphilis (particularly if the skin be the seat of disease), and that it generally agrees well with scorbutic individuals, whilst nourishing diet, &c., is given. Thus, several scorbutics, with syphilitic complications, and exanthemata, were completely cured, in several instances, by this agent; but, in some cases, it was necessary to discontinue the remedy, for a time. Injurious consequences were never perceived, when it was employed with caution. The author does not yet presume to decide, whether, by the chloride of zinc, in primary syphilis, the secondary symptoms will be more safely guarded against, than by other remedies. In secondary syphilis, it was always necessary to employ the remedy internally, as well as externally. Its effect was excellent in herpetic-syphilitic ulcerations of the extremities; chronic or indurated bubos were, also, frequently removed by it; and injections of the remedy effected the cure, in old standing gonorrhoea, in a few days. Condylomata quickly disappeared on employing the ointment; but it did not, generally speaking, prove successful against syphilitic pains of the bones: in only one instance, did it render essential service in a syphilitic affection of the nasal bones, which caused the patient violent pains during the night.—*Dr. Lang in Medic. Zeitung. Russlands.*

Hydrargyr. Deuto-ioduret., in Chronic Eruptions of the Skin.—A young and healthy woman suffered repeatedly from an eruption on the right side of the face, which could not be classed under any distinct species. Many remedies were employed, and occasionally the patient seemed to improve for a time; but the disease invariably relapsed, and exhibited the same inveterate characters as at first. The excoriated parts were of a reddish-brown colour, new vesicles appearing from time to time. The eruption gave no pain; but, frequently, was accompanied by a very troublesome itching and burning sensation. After the disease had lasted for two years, Professor Hoffmann was consulted, who recommended the external use of the ung. hydrarg. deuto-iod. gr. ij. (*Axung. porc. 3ij., hydrarg. deuto-iod. gr. ij.*) On the third day after its employment, the whole surface was dry and pale, and the epidermis peeled off in scales. By frequent washing with bran, a complete cure was effected within a few days, and the skin reassumed its former colour and softness. 2nd Case.—A young healthy girl, of fair skin, was affected with the appearance of large yellow spots on the neck, shoulders, and throat. Before Dr. Hoffman was consulted, various remedies had been tried in vain. The author ordered the ointment in question, to be rubbed into one of the affected parts at night; next morning, it was as white and fine as the normal skin; and, consequently, the whole diseased surface was subjected to the same treatment, and the same successful result ensued. Dr. Hoffmann, emboldened by the results which he obtained in these instances, applied the remedy in severe, and troublesome, cases of freckles, and always found them disappear under its influence.

Effect of Lemon-juice in Scorbutus.—In the month of December, of last year, a scorbutic patient was brought to the hospital of Gnesen. The face and head were much swollen; the parotid and submaxillary glands enlarged, indurated, and very painful to the touch; the tongue tumefied, and the entire internal surface of the cavity of the mouth covered with spongy ulcers, which secreted an offensive ichor. The mouth could not be opened, and thus the patient could not make himself understood when speaking. Swallowing was very difficult, and only possible by great effort and pain. The strength was greatly exhausted, and sleep failed entirely. Cort. chin., ratanh., mineral acids, and alum, caused no improvement; but the dangerous symptoms were at last completely removed by abundant doses of fresh lemon-juice, and the external use of a diluted solution of creosote.—*Ibidem—Dr. Papke.*

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

THEORY OF RESPIRATION.—Dr. Kemp has examined the principal facts connected with the phenomena of respiration, and draws the following conclusions; first, that respiration, urinary secretion, and exhalation, so far as regards the moisture formed by the excess of hydrogen in the matters eliminated, stand in a certain determinate relation to each other; and their relation is such that, if one of these functions vary in intensity, the others will vary also, either directly, and in that case the elimination of tissues becomes increased in proportion, or inversely, in which case they may be considered as mutually compensative. Secondly, that the excess of oxygen absorbed, with respect to volume, over the volume of carbonic acid exhaled, is fully explained by the circumstance, that the quantity of oxygen in the effete matters is not sufficient for the oxydation of the hydrogen. The theory, however, does not suppose that this change is confined to any one part, the lungs for instance, but occurs in every portion of the animal frame, in which the elimination of effete matters takes place through the agency of oxygen. Thirdly, that the same laws, both of organization, and disintegration, are observed in gramivorous, as in carnivorous mammalia, and that these laws act under precisely similar conditions; nor is it necessary to suppose that in the former class of animals, the non-azotized portion of the food affords carbon for the production of carbonic acid in the lungs, nor is it consistent with structural or physiological facts, that any part of the amylaceous portion of the food is converted into carbonic acid before its assimilation and adaptation to some part of the animal frame. The carbonic acid is in fact as much the result of elimination of effete matter in the one class of animals as in the other. Fourthly, that neither is the bile a source of carbon for the lungs, as it is not adapted for the elimination of that element under the conditions which are present, viz.: under the influence of moderate heat, oxygen and moisture, but is required for the assimilation of the non-azotised portion of the food. Fifthly, that these theoretical deductions are borne out by chemical and physiological observations, so far as carnivorous and gramivorous mammalia are concerned. The biliary fluid and chyle of serpents and birds not having been examined, the data for explaining the process of respiration, as it occurs in them, have not been ascertained.

ANEURISM OF THE RIGHT SUBCLAVIAN.—Mr. Key commenced an operation on a young woman, who was affected with aneurism of the right subclavian, his object being to tie either the innominate, or both the subclavian and the carotid near their common origin, as the state of the parts, when disclosed by the knife, might render most advisable, because, prior to the operation, no clear indications of disease of the innominate or arch of the aorta could be discovered. Dr. Hughes, however, was of opinion that the innominate was implicated. The completion of the operation was prevented by the existence of a tumour connected with the innominate, which, after death, proved to

be an aneurismal enlargement of the upper part of the innominate and origin of the subclavian, pressing on the right bronchus. There was also a mass of diseased glands connected with it.

HYSTERIA AND SPINAL IRRITATION.—Mr. Fearnside narrates at great length, a case of hysteria, complicated with spinal irritation, occurring in a strong young woman, of the sanguine temperament, and florid complexion, and presenting some phenomena of an intermittent character. Quinine was consequently prescribed for a few days, and afterwards bleeding and cupping was practised several times, with marked relief on each occasion, but followed invariably by relapse. The carbonate of iron in the naseent form was then administered, combined with myrrh, and a pill containing assafoetida and henbane was exhibited at bed-time. The good effects of the change were soon apparent, but the patient continued under treatment too short a time to admit of permanent benefit. Mr. Fearnside, in remarking on the case, says, the true nature of this affection would seem to consist in an irregular distribution of the blood through the nervous centres generally, and the spinal cord in particular. This view is supported by a consideration of the circumstances under which it is most usually developed, as well as by the effects of treatment. In young females, it is usually seen in connexion with irregular or scanty menstruation; but in addition there appears to be required a peculiar condition of the nervous structures themselves, either congenital or the result of a peculiar mode of life,—causes long operating, and tending to deteriorate the general health, and induce excessive nervous sensibility. From the peculiar mobility of the nervous system in females, most of the cases of this affection occur in this sex. The same state would appear to be more rapidly produced by a blow or fall, especially upon the back. In subjects who possess this faulty organization, whether congenital or acquired, a peculiar state of the nervous centres is readily induced, characterized in particular by undue development of the functions of the nerves arising from the posterior division of the spinal cord; hence the great sensibility of the parts to which these nervous fibrils are distributed, and hence the tenderness upon pressure over the spine, from the cutaneous branches of the posterior division of these nerves ramifying in the integuments near the vertebral column. In some instances, the anterior portion of the spinal cord, and the motor properties of the nerves thence arising, are affected in some degree; pressure over the upper dorsal spines occasioning, by reflected irritation, severe paroxysms of dyspnoea. As regards the spinal irritation, it appears probable that a fall upon the back which this patient had sustained, was one link in the chain of causation. But, as before remarked, it is in particular states of the system that the influence of such accidents is most perceptible. A similar observation will apply to the development of hysteria. In the present case these affections supervened only after the patient had undergone the debilitating treatment required for subduing a tedious and painful disease, after long-continued confinement in-doors, and late hours, all causes highly conducive to the production of that state of the nervous system which appears to be the essential element of their nature. As is generally observed in examples of these affections, they were associated with a disordered state of the menstrual function; small as is the actual amount of fluid thrown off by this channel, its due elimination has much influence in maintaining a healthy state of the female habit.

WARTY EXCRESCENCE NEAR THE ANUS.—Mr. Daniell was consulted by a deaf and dumb girl, about 15 years of age, who had a warty excrescence growing on each side of the anus; it extended over and filled up the fossa made by the buttocks, and resembled, when those parts were drawn aside, a large orange which had been cleft in twain. He satisfied himself that it had no connexion with the interior of the rectum, but that it was merely a diseased cuticular growth. Small tumours of a similar description were attached to the eyelids. As the base of the tumour on each side was equal to its surface, he determined to try the effect of a double ligature, employed in the same manner as

for common nævus, but on one side only at a time. Sloughing followed this operation, but in so small a degree that he resolved to remove the growth by dissecting away the whole of the diseased skin, not only under the tumours, but round about them, and in this he succeeded, there not having been any return of the disease. The girl has now arrived at full puberty, the catamenia are established, and the eyelids are free from excrescences.

ENORMOUS STEATOMA.—Mr. Daniell has narrated, in the *Provincial Medical Journal*, the case of a farmer, of Cranfield, Bedfordshire, who applied to him in the spring of 1840, complaining of pain and uneasiness in a large tumour, which had existed for thirty years, and occupied a space commencing from the top of the shoulder, running over the deltoid muscle, dipping slightly into the axilla, and stopping about the middle of the humerus. It appeared to be steatomatous, but was so exceedingly painful at times, that his rest was disturbed by it. About the centre of the tumour was a red spot, upon which he could not bear the slightest pressure, and precisely under it was a hard substance, as though an extraneous body had been introduced into it. An operation was recommended; on the 16th of June, the tumour was removed in two minutes and a half; it was a mass of fat; but on opening it, it was discovered to have in its centre a deposit of bony matter—a complete ridge of ossific deposit, about three inches in length. The tumour weighed two pounds and a half entire, but as many little portions of fatty matter were taken away afterwards, it is probable that the whole tumour was little short of three pounds. It was only necessary to pass a ligature round the main vessel, which might perhaps be about the thickness of a crow-quill. The patient did well, and has not suffered in the least since the operation.

REVIEWS.

A Report of the Obstetric Practice of the University College Hospital, London. By E. W. Murphy M.D., Professor of Midwifery, &c. Dublin, 1844.

This pamphlet presents to the reader the results of practice in the University College Hospital, and is decidedly a step in the right direction. Perhaps the subject might have been wisely delayed until more statistical facts had been accumulated—for the utility of these things increases in a cube-like proportion with their number; but we are not disposed to quarrel with it, on that account, so far as to leave unwelcomed the actual donation before us. A gift-horse should not be looked too closely in the face; though here it may bear the strictest investigation.

The first subject is the commencement of menstruation, shewing the result of 552 cases, of which:

3	commenced at	9 years of age.
0	.....	10 "
15	.....	11 "
37	.....	12 "
57	.....	13 "
107	.....	14 "
119	.....	15 "
110	.....	16 "
57	.....	17 "
34	.....	18 "
9	.....	19 "
6	.....	20 "
3	.....	21 "
2	.....	22 "
0	.....	23 "

This table proves, Dr. Murphy thinks, that the commencement of menstruation is irregular, and that it is not confined to any thing like a positive age; so confirming the view of Mr. Robertson. But the latter gentleman goes further, and states, "that the time of the menses appearing, is regulated more by constitution than climate," an opinion which has been ably refuted in our pages. We should like to ask Dr. Murphy if the ages from 16

to 23 are fair cases to be enlisted in this enquiry? How very many, if not all, of these may have laboured under constitutional disturbance? In fact, matured for menstruation, but incapable from diseased action? Enquiries of this nature should be confined to healthy constitutions only, for if every young female must be included, who, from disease, has the natural functions obstructed, there is no end to the difficulties of this question. Indeed, in the very report under consideration, Dr. Murphy gives at page 7, a case of pregnancy of a female, age 23, who had never previously menstruated. Now it is self-evident if a female can conceive, she would have been equally able to menstruate, if diseased action had not interfered, and hence we surmise that of the 552 cases, 111 are of an age that should be excluded from the enquiry, unless good health were proved beyond doubt to be possessed by the subjects.

The next table presented to us, is that of catamenial periods, the result of 591 cases, of which:

2	were with an interval of 14 days.
77	..... 21 "
9	..... 24 "
2	..... 25 "
1	..... 27 "
496	..... 28 "
1	..... 30 "
2	..... 35 "
1	..... 42 "

It is almost impossible to view this interesting table without becoming a convert to the law of periodicity, as regards the magic number seven. The two great masses in the above table are at 21 (three times seven), or 28 (four times seven).

Again, Mr. Robertson gives 100 cases, of which:

1	Interval	14 days, (twice seven)
28	.....	21 days, (three times seven)
61	.....	28 days, (four times seven)
10	.....	Irregular.

It becomes a question of interest, if all the differences from three times seven, and four times seven, are not simply irregularities, and that those two intervals are the most natural, viz., 21 or 28 days; the small numbers intermediate of 21 and 28, favour the assumption, that if a female goes beyond 21 days, it is five to one she will go to 28 days—which is the true natural term.

Duration of pregnancy falls next under consideration: the particulars of 186 cases are recorded, commencing the calculation from the last appearance of the catamenia; and to prevent error as much as possible, the number of days that the female was accustomed to have, between the periods of menstruation, is deducted from the full amount. Thus, if the full amount of days from menstruation to delivery was 328 days, and 28 days her usual interval, it reduced the duration to 300; or if 21 days was the usual time, the duration would be 307 days, and so on. In this table (which with these precautions is not infallible) the most frequent period is 285 days. The shortest period 186 days (as this could not be considered a matured birth it ought to have been omitted). The longest period was 352 days, more than eleven months!!! We shall dismiss this table with a few observations on the two cases of protracted gestation, of which the Professor gives some particulars; the first:

Matilda Kelly, æt. 26; 342 days; menstrual interval 28; duration 314 days.

Martha Palmer, æt. 33; 352 days; menstrual interval 28; duration 324 days.

Matilda Kelly's last appearance of menstruation was on September 1st. 1841. She was de-

livered August 9th, 1842, of a putrid child. "She said she was perfectly conscious that she was pregnant soon after the last appearance of the menstrual discharge." Now, if the author gave this female so much credit as to tell the hour when she conceived, he might have omitted his usual deduction of 28 days, which would have made the woman's case a greater wonder. All her previous pregnancies were of nine months only. The second case was a similar one: Martha Palmer ceased to menstruate the first week in March 1843, and was delivered, on the 16th of February 1844, of an average sized child. Dating conception from the middle of March, the period of gestation would be 338 days (more than eleven months)! Now we would ask the worthy professor if it has never occurred to him, that a female might have menstruation checked for one, two, or more periods, and not be pregnant during those periods, but might become pregnant many weeks after the first disappearance, and that this is the most probable solution of many recorded cases of protracted gestation? Again, it is somewhat credulous to believe a female's statement that she could tell the exact time of her conception. With these exceptions, the table of the duration of gestation is a valuable one. To it are also added the results of 577 cases of cows, in reference to which we must bear in mind, that we can correctly ascertain the date of coitus promoting conception in those animals, whilst we must ever be at a loss, except in a few peculiarly situated cases, in the human being. For instance, in a case of rape, where pregnancy follows, we know the date of coitus, and delivery, but these cases are too few to form statistical conclusions upon.

On parturition, the author gives the result of 467 cases.

Sex.—boys 248, girls 222, three cases being twin cases.

Delivery.—Natural 449, forceps 4, perforation 2, version 2.

Presentation.—Vertex 447, face 7, feet 6, arm and shoulder 2, not given, 8.

Result, mother.—Recovered rapidly 454, slowly 10, died of puerperal fever 2, cholera 1.

Result, child.—Living 443, still-born 19, putrid 4, premature 4.

Cause of death.—Prolapsed funis 2, strangled by funis 1, shoulder with hæmorrhage 2, knees presented 1, hæmorrhage 1, forceps 1, perforation 2, before labour 2, unexplained 7.

We cannot but observe that, in 467 cases, of which 449 were natural, 19 deaths are rather numerous. The unexplained, prolapsed funis, and strangulation by funis, also speak less favourably of hospital practice than we could wish.

Expulsion of placenta. Within one hour, 362, retained two hours, 25, above two hours in 23, interference necessary in 21, of which 11 were from inertia, 4 irregular contraction, 6 adhesion.

The author lastly enters into some clever details of instrumental operation, hæmorrhages, and puerperal fever. The two last items are worthy attentive perusal, containing many excellent practical remarks. The report is further illustrated by a very excellent plate of pustules, derived from the uterus of a female who died of puerperal fever.

On the whole, the report is highly valuable, and we hope to see it followed out in reference to Professor Murphy's future experience: creditable to him as a contribution to medicine, it is useful to others as an exemplar.

NOTICES TO CORRESPONDENTS.

Vindex addresses us a long and learned letter, objecting to the custom of gentlemen who have not graduated at Universities, assuming the title of Doctors when receiving a "license" from the College of Physicians. He proves, very conclusively, that the College is not the source for the M.D. diploma; insists that the Directors General of the various public services of the country should not sanction its employment, save by men who have graduated at a University, and dilates on the presumption and arrogance of those who, without full title, employ it; asseverating further, that a privilege so usurped will lessen the attractiveness of our Universities. What would our correspondent have? At this hour of the day depend for the supply of all our English doctors on the two Universities? To make the doctor's degree, depend, not on well tested ability, but statutory grant? There were M.D.'s before there were statutes, and, please heaven! there shall be M.D.'s now without them; nay, if necessary, in defiance to them. It is not by lessening M.D.'s, or forming them into a select set of *ci-devant* university youths, that medicine is to be advanced, the profession honored, or society served. Wherever there is competency, there let there be the title that indicates it. There may be some medical men who deserve to be M.D.'s with especial and still more strongly marked distinction; but there is no medical man who should be less. Let a Paris, a Chambers, or a Copland, be a Senior Fellow; let the present Licentiate be a Junior Fellow; let the General Practitioner become a Licentiate; which one would suffer because all were M.D.'s? The practising druggist and the quack might lose:—no other.

R. B. sends us a contribution to the illustration of the many mischiefs of quackery. He assures us that the West of Ireland is infested with impostors, who cheat the poor and ignorant by the aid of the public press (shame to it!) and under the protection of the law. R. B. insists, very forcibly, that the ignorant, as the children of the State, should not have their health and lives trafficked with; mutilation and murder committed on them for miserably paltry gains—and that medical men should not be left to the audacious rivalry of mock doctors, who make up, in ingenious impudence, what they want in ingenious skill.

The press of political matter, this very political week, has excluded to our regret, several articles, we had hoped to have laid before our readers: among those are Dr. Rigby's reports, Dr. Costello on lithotomy, and our pencilling of Dr. Elliotson.

M.D.—We have already noticed the meeting further than its importance deserved.

An Admirer.—Assistant-Surgeons, in the Navy Department, when in full-pay Service, receive 7s. per day, for the first three years. After that, the pay rises to 7s. 6d., to 9s., &c. The letter should be sent to Sir W. Burnett, Admiralty Office.

W. B.—The work has come to hand.

We have received the reports of some medical meetings, which we cannot, this week, notice. The secretaries have our best thanks.

C. M.—We do not know what are the qualifications insisted from an Irish dispensing surgeon. We imagine they partially vary with the tastes of the subscribers. A Magister Chirurgiæ of Glasgow would register as a Licentiate of Surgery, we imagine. The bill is not specific on this point, however.

"Quæstor."—We think the Lectures of Pinel, now publishing in the Medical Times, the best things published on the subject. The work of Esquirol is, however, very valuable: and should have been translated into English before this.

X. Y.'s letter on Mr. Gutteridge and his pretensions is inadmissible. We understand that the mischievous infatuation of that gentleman has at length left him homeless; and it would not be to our taste to add reproaches to misfortune. A well-informed contemporary boasted, a day or two before Mr. Gutteridge was sold up, that he had achieved a triumph. Yelled on to his ruin, first; his ruin was then called triumph.

We cannot allow any controversy in our pages on Mr. Eisenberg's supposed claims to be Chiropodist to her Majesty. If we are well-informed, that illustrious lady boasts that she has no corns.

Listener.—We hardly know how to deal with our correspondent's question. It has a touch of the ludicrous.

A mass of correspondence is before us, which shall receive due attention.

A clever hand-bill has been sent us, proposing a respectable Quack College, to qualify any body, of any place, to be a medical man (unregistered) under Sir James Graham's Bill, in from three to six months. The difficulty of assuming any title, implying that the Practitioner is a legal one, is supposed to be got over by dubbing the members of the new College, "Consulting Practitioners."

A Subscriber.—The Middlesex Hospital is in Goodge Street. Dr. Ashburner is the obstetric physician. There is an extensive out-of-door midwifery practice.

Mr Norblad's letter controverting our view of the Salt Hill Case, will appear next week. We are compelled to postpone it with great regret.

The report of the last meeting of the Royal Medical and Chirurgical Society will appear next week.

THE MEDICAL TIMES.

SATURDAY, JAN. 25, 1845.

L'audace, l'audace, et encore l'audace!—DANTON.

WELL, after twenty years of aimless, driftless, characterless agitation, we are got to "the beginning of the end!" So long on the eve of action—we are at length in it! Events, like clouds, are thickening over our heads: the fear or hope of what shall come is in every man's mind: something for good or ill, and quickly, very quickly, betides us: and while every word or act of each of us tells on the future event—that event, great and momentous, whatever happens, must come speedily. Woe, now, to the short-sighted and narrow-minded ruler: the grievous suffering of doing right (novel and humiliating task!) is the least punishment that awaits him!

All eyes, of course, are turning to the College of Surgeons, all thoughts centering on it as the present battle-field of Medical Reform, the Waterloo of British Practitioners. It has brought nine-tenths of the grievances of the Profession into train for a decision that will influence all. A blow struck here, decides the fate of the whole campaign. And how stand the forces? On the one side, we have nearly a dozen, dainty, purse-proud Councillors, amazed into terror, frightened almost to the recovery of a moment's good sense; and asking, like misers of virtue, from the wiser associates they have over-ruled—"What is the least we can do, and be saved?" On the other, we have an outraged, and fiercely-hostile Profession, exclaiming, in no doubtful language,—"Justice or extinction!" Is the issue doubtful? We must mis-manage our forces shamefully if it be.

The rumour goes, that though Sir James Graham has professed his anxiety to have everything conceded that may bring the members in harmonious relations with the College, a minority of the Council, headed by the mercenary Iscariot of Surgery—Lawrence—intrigue to make the concessions so small as to be worthless. Let us tell these gentlemen what they would achieve if successful. "You will seal the fate of the College of Surgeons as a great scientific institution. The fiat of ruin has been issued against it: the elements of its destruction exist abroad, in the minds of the members: there is around it, and about it, what must inevitably be its extinction, unless you gracefully and speedily adopt the most extreme measures of concession and liberality. More than ten thousand members are in complete antagonism to you: hundreds of them feel towards you the revenge of a Zanga, implacable—insatiate: all have open purses for your punishment: hundreds are ready with their fortunes for your ruin. The daily press is with them: the

Times and *Chronicle* have branded your injustice as decisively as ourselves: the Medical Press, is, without an exception, against you: by the profession, by the public equally denounced, you can turn for support and applause but to those poorest and most suspicious of all authorities—*yourselves*. Be obstinate about your miserable corporation trifles, and what will happen? The *Times*, the *Chronicle*, and ourselves, now giving you a modified support in the confident hope that you will use it to conciliate your members, will withdraw, leaving you to the fate of which you appear so enamoured. The *Times* has already proclaimed that its support is conditional on your adopting to the full the improvements your majority, if permitted, are for recommending: the *Chronicle* speaks the same language in the emphatic manner in which, while advocating an extension of your utility, it has denounced your wrongs to your members: and, for our parts, we may in all humility avow, that we have no notion of standing for ever between a bigotted clique that will forget nothing and learn nothing, and its long-due doom. These are grave circumstances—but there are more. The Apothecaries are prepared to undergo any transformation, from compressing themselves into a pint-pot to swallowing a sword, to retain a corporate position in the Profession. Their time, their talents, their scientific standing, and—what is, perhaps, more—their money, are ready for any body, or any thing, that will give them legislative salvation. The body of General Practitioners, outraged by you, are but too ready to reciprocate the overtures made by them: an Association is rising, that, with wise management, will hold the Profession in its folds; its destiny in its hands. Be obstinate, be foolish, and no Journalist, no Surgeon, no Minister, no Government can save you. Brodie, who brought you into the difficulty, can no more rescue you than Frost the Chartists ho took with him to Newport. Graham's place—which depends on one more defeat—would be the price of his prolonged support of you; and if you even weathered the storm during the tenure of this Ministry—an impossible event—you would inevitably be shipwrecked the next. Your Institution, then, is in its greatest peril: it trembles, at this instant, on the brink of ruin: yet it is the time, opportune and of great moment, when you can as easily build up as destroy it: a high charge for the insignificance of too many of you, and for whose results we should have grave fears, if the intimation of Government, seconded by the practical good sense of the better part of your associates, did not augur brighter things.

But you are, perhaps, heedless of the fate of the Institution, in some small hope that it will last your time, and that selectness of official rank will make up for any decay of the College itself; like witty fellows, extending to your Collegiate rule the principle that too plainly marks your scientific career—doing nothing for the posterity which has done nothing for you. But pause. The business is much more personal than you may fancy. The hatred that is now fermenting in each man's bosom will soon rise to public execration. Surgical associations, headed, from policy, by your equals, who have escaped the stigma of participation in your wrongs, and composed of thousands of surgeons who have suffered by you, will cut you off from professional communion, and denounce you by your proper names, individually, as traitors to your order. The ceaseless object of Scorn's pointed finger, it will

be dangerous to lecture—*mad* to enter a public assembly, even of the College, and in practice, who will have confidence in the half-crazed surgeon playing your antics before high Heaven? You may hold your places in the Council, but to every useful or honorable purpose, you will stand expunged from the map of surgery. You will be as far from the honours and profits of science as you may now prove yourselves from its deserts!"

We confess, we have been hurried into some warmthful bitterness in remonstrance with men who, unequal to their responsibilities, are squabbling about straws, when the fate of a National Institution is at stake. We are angry that a bare chance should exist of such men exercising, a limiting, a cramping influence on measures which are worse than worthless, if they achieve not a complete conciliation of the whole Surgical body. We remember that the College of Surgeons might be made an establishment glorious to English civilization, and serviceable to the science of the world; a *pleasurable* honour to each member, a *serviceable* one to each ruler, and we cannot view the imperilment of such a general boon through the genteel ineptitude of a few bigots or overgrown schoolboys, without exhibiting some trace of temper; nor contemplate, without reluctance, the possibility of our at length abandoning the character of mediators, and joining the many who cry "we have vainly tried the tree many seasons; uproot it, as worthless, for destruction!"

Seize occasion by the forelock.

PROVERB.

The all absorbing topics connected with the new Bill, and still more with the recent charter, have so largely entrenched on our time and space, that a matter of immense practical importance to the whole profession has for some time been escaping, if not our attention, at least our actual services—we mean the question of Poor Law Medical Relief. This is, nevertheless, a moment when something should be done, or much may be lost. Parliament last session, at considerable expense and trouble, collected the materials on which members can base a speech or a motion, without the chance of a Ministerial put off, on the ground of the necessity of "Inquiry," of having "a Committee, &c.," and, we understand, that Lord Ashley is determined to introduce a measure on the subject, if the Medical Profession will only duly support him. It would be unwise indeed to lose so favourable an occasion. We urge, therefore, on our readers who feel with us how infinitely injurious to the high standing and due remuneration of medical men, is any plan of medical attendance conducted on the principles which have hitherto characterised our system of Poor Law management, to immediately set themselves in communication with their members before they reach town for their Parliamentary duties, and to impress on them personally the necessity of such an alteration as may reconcile our position as Poor Law doctors with that as gentlemen. By-and-bye, we may talk about petitions; at present, we should secure the members themselves. We would suggest, that gentlemen having intercourse with Members of Parliament on the New Bill, should not lose the opportunity of a word in season on the question of Poor Law remuneration. If two birds can be killed with one stone, so much the better.

The Council of the College of Surgeons, met again last night, (Thursday) for further deliberation on the details of the Supplementary Charter. We hope on an early day to say with what result.

—Facies non omnibus una,
Nec diversa tamen.

By this motto, we intend to say that we are treating an old subject after a new fashion. We have already commented at large upon fresh air,—upon its necessity, its uses, and the mischief of its deprivation; but the tale is not fully told,—we have still a few unuttered thoughts and facts which claim a place in our register, before we can exchange this topic for another.

We terminated our last article by alluding to, and illustrating, the beneficial influence of free and pure air both upon body and mind. We gave a solitary, though a striking, example of it, and we have other examples in our remembrance, which are not of inferior value. We stated that people with large chests are more cheerful, courageous, and enduring, as a rule, than others of an opposite configuration; and they are chiefly so for the same reason that the countryman is more lively and vigorous than the citizen of a densely populated town. The state of health, or "condition," as it is termed, into which a man may be brought by training, is often extraordinary. This training, it must be understood, consists in nothing more than regular exercise and living. The most salubrious and retired country places are usually chosen, and there the man, under the guidance of an experienced trainer, performs his systematic duties. He retires early to his bed, which is a mattress, with sufficient covering to ensure a suitable warmth, without encouraging unnecessary perspiration. He rises betimes in a morning, and after a general washing and rubbing, partakes of a slight repast, and commences his day's work by a quick walk of a few miles. He then returns home, and eats with what appetite he can. After a short rest, he is again exercised until his next meal time, and so on, throughout the day. His diet is chiefly confined to the lean of underdone beef and mutton, fowl, and stale bread. He takes two or three glasses of sherry, with, perhaps, a little old ale daily. The distance he is made to walk and run, every day, varies from ten to forty miles. He begins with what he is conveniently able to bear, and increases his exertions in proportion to his increasing strength. By these means, a man is shortly brought from a state of plethora and listless inactivity, to one of liveliness, energy, and endurance. Body and mind are alike invigorated and improved; but the benefit is mainly referable to the air and exercise. No training, however skilfully conducted, would bring a man into good condition who had to breathe an impure atmosphere.

In proof of the influence which even temporary physical education exerts upon the human frame and its stamina, may be mentioned the following example: In the summer of 1839, we had an opportunity of witnessing one of the trial-races of Osceot, at that time one of the swiftest runners in England. On the occasion we speak of, he ran one hundred and twenty yards in eleven seconds; his pulse, just before starting, beat sixty-one strokes per minute, and at the termination of his extraordinary feat, it beat only ninety-four! When it is further taken into account, that, whilst in the act of running, he never made a complete inspiration or expiration, the performance can be considered little short of wonderful. We were informed by the man himself, that though he was naturally remarkable for nimble-footedness, he was anything but "good-winded." Two months previously, he had been taken from a stocking-frame, and, by a process of merely careful training, was brought into the state of bodily condition alluded

to. Had it been possible for him before commencing to train, to have run the distance in the time stated, the effort, if it had not killed, would have nearly asphyxiated him. He would have been breathing for his life, and his pulse could not have been counted. As it was, at the completion of his task, he breathed without difficulty, and his pulse was increased only thirty-three beats per minute! After such evidence as this, and it is only one of a multitude of examples with which the world is familiar, no man, not actually diseased, need despair of becoming active and vigorous, if he will only attend to the simple rules which are to guide his physical discipline. The man of whom we have spoken had not a good chest, for which reason he could not under any circumstances have run a long race, and his configuration of thorax was even opposed to an effort of speed for a short distance, but the natural obstacle was overcome, for the time being, by temporary training! We are, perhaps, not justified in saying, *ex uno disce omnes*, but, at least, we can say, that if two short months of rigid living, and exercise in pure air, can do so much for a man's constitution and strength, how much more permanent service may be done by a continued observance, though in a milder degree, of the principles we have laid down. How many listless and enfeebled frames would be roused, refreshed, and made fit for the wear and tear of a protracted life! How many minds sinking into imbecility from actual lassitude, or oppressed by the melancholy of fancied cares, would be stirred by the busy and cheerful objects of worldly enterprize! We would fain teach the man too ardently devoted to learning, to science, or to worldly business, that with all his toil, and care, and penury of time, he is not a gainer; he may appropriate to his idol object an hour that should be sacred to his own service, and in so doing he is a loser of twain; let him husband his moments as niggardly as he will, there is a certain reckoning which he must daily have with himself, a certain time for his own rest and refreshment, and if that time be not granted, it becomes no matter of idle debtorship;—day after day registers a fresh account against him, and, at the end of a few years, the unsuspected fact of premature old age is announced by decrepitude, decay, and death. Ah! how little does it then avail a man, that, with all his gathered wisdom, he has only been reaping sorrow—that his lamp of life has burned brightly and beautifully, but withal, too fast—that he has drank deep of the intoxicating draught of ambition, and has not lived out half his days—that he has crowded rapidly, into one gorgeous mass, the reputation of intellect, and the honour of a name, and, yet, at this devoted shrine of popularity, himself stands a solitary, distinguished victim, the last pausing place of his life being a Trophy and a Tomb. In regarding such splendid folly, we can only sigh, and say: "alas, poor human nature!" The picture is not overdrawn—we have seen its reality often—we have watched more than one friend light his own pathway to the grave—we have seen him struggle with an angel intellect for an honour, when his life was the cost! We have ministered at his bed-side, when the fitful fever of existence was sinking into the nothingness of death—we have hung upon his dying words as though they were the echoes of an Oracle—we have endeavoured therefrom to read the great lesson of the Past, and to keep it as our guide and guard when penetrating the mysterious Future—and we have read but one lesson, and learnt but one truth, from this painful experience,

and it may be summed in the fact, that we have never seen a man on his death-bed, how bright soever his reputation, or how honoured his name, but regretted that he had purchased a parting celebrity at so dear a rate. Reader, this is not an idle digression—there is much meaning in it—cavass it well, for it may suit thy purpose—should it avail thee, our best wishes will follow it as it serves thy welfare!

But we must return to data and facts. We will illustrate our meaning by referring to the habits of medical students. Than these, no class of men can be found whose career furnishes more ample and accurate evidence of custom and education both upon body and mind. We know them intimately; a few years ago we were in their ranks, and whilst moving amongst them made them a subject of careful study. And they deserve to be studied, for in their lives and conduct they mirror all the good and evil of mankind. From amongst them may be picked the faithful representative of any character, whether ordinary or eccentric, which can be found in the widest walks of cultivated life. From the polished gentleman, the finished scholar, the rare genius, the great and good man—*homo factus ad unguem*—through every intermediate shade of contrast, down to the rude boor, the illiterate, unintelligent, and degraded, every specimen of humanity may be met with amongst medical students. Like the innumerable streams which feed a vast expanse of ocean, they are the offspring and delegates of all climes, and, as if the epitomizers of the whole race of Adam, they represent every caste, and creed, and character. You may find amongst them men of all religions, and men of no religion, men of every political faith and opinion, men of every prejudice and persuasion—anything and everything in fact, of which humanity is capable, may be found in this singular and unselected body of men. We are much attached to them, we owe to them the grateful remembrance of much friendship and favour, of many hours beguiled by innocent and happy relaxation, and of many more, we hope, sacred to the purposes of useful improvement. With many a brilliant name, now alas! celebrated only in epitaph, and with others, receiving at this moment, in every quarter of the globe, the recompense of honourable and honoured studentship, it was our unworthy privilege to be associated in the ties of friendly intercourse; hours passed in the society of such men were chronicles that we now feel it a glory to reflect upon—each could say to other, in recounting his "college days."

We passed them, not in revelry or wine,
But search of deep philosophy,
Wit, eloquence and poesy,—
Arts which I loved, my friend, for they were thine.

We may some day give the world the leading features of a student's life, and illustrate it by anecdotes; but at present, after this little, and we trust pardonable, *episode*, on an extraordinary class of beings, we must return to our *epic*, that is, to our legitimate subject, in so far as the habits of Medical Students have a relation to it. Every man with the least faculty of observation, living in a University town, must be struck with the difference, both in appearance and manner, of students at the beginning and the end of a session. This difference just represents extreme states of strength and weakness, and these are owing to the relative habits of the men—at one time in country air, and engaged in athletic pursuits, and at another time breathing the impure air of a small room, in a confined ill-ventilated situation, toiling by night and day, with scarcely a moment's relaxa-

tion, at some favorite or prescribed intellectual task. These variations of living are a heavy onslaught upon the chances of a man's life; nor is it any wonder that the student, how good soever his constitution, should find an early grave. The naturally strong, as a rule, suffer earlier, and in greater numbers, than the naturally weak;—these, from constitutional inducements and necessities, seek temporary rest and repose, and so spare their systems the sad havoc of relentless labour:—those, relying upon their sinew and strength, persist in toil and privation, until, either the last resources of life are exhausted, and a sudden, unexpected, grave is the issue, or the vital energies are so shattered by fatigue, as to leave only debility and decrepitude, the miserable recompense of unmitigated application. These are facts familiar to the experience of every man, who has passed through the career of Medical Studentship, and yet, momentous as their warning is, they have never been brought with sufficient explicitness before the world. For want of a due knowledge and observance of them, many a family has lost its hope of future honor, and a profession the chances of a noble ornament. We entertain the subject with a feeling of such deep interest, that we shall enter into it as explicitly as we may be able, in a future number.

THE "TIMES" ON THE PROPOSED SUPPLEMENTARY CHARTER.

(From the Times of Tuesday.)

We confidently hope that the medical profession may rely on the correctness of the announcement of a change in the policy of the Council of the College of Surgeons; and that, in the main, the details of that change (which we gave yesterday in an extract from the *Medical Times*) will be adopted by the majority of the Council, and sanctioned by a supplementary charter. It is well known that the existing charter is a mere hole-and-corner concern, procured by personal influence to carry the crochets of a few *dilettanti* medical reformers into effect; and that its failure is already established as an indisputable fact. Of this its concoctors and the Home Secretary must by this time be well aware, and, therefore, we have the less difficulty in giving credit to the report as a whole. Assuming that our contemporary has not been misinformed, we would now urge on the Council the absolute necessity of not coming to any final conclusion on the details of a supplementary charter without a previous consultation with some of the general practitioners, capable of fairly representing the feelings and wishes—even the prejudices, if such there be—of the most respectable of their brethren. Such a practical display of deference to them would not only be a piece of justice, but it would do more than mere justice can effect. Without in any degree compromising the Council, or lowering their dignity, it would be a measure of peace, and would tend to allay much of the irritation occasioned by their late conduct. Let us have some evidence of an honest endeavour by them to repair the mischief occasioned by that conduct, and we shall exert whatever influence we may happen to possess for the purpose of securing cordial unanimity in the profession.

The first point mentioned by the *Medical Times* is the admission to the fellowship now and for the future of all members of the college, whether practising pharmacy or not, as soon as they shall have attained 10 or 15 years' standing. On this we have to observe that some distinction ought, as a matter of justice to be drawn between existing and future members. All existing members, taking the time when the present charter came into effect as the period for drawing the line, became members on the faith of their having, so far as they were general practitioners, an equality of professional standing among themselves. Future members came in on a different footing. We do not, as the distinction between fellows and members is intended to raise the standard of professional qualification, insist on the whole of the existing members being made fellows at once. There must be give and take in all such arrangements. But we have insisted that, as regards existing members, the test of their quali-

cation for the fellowship shall be one to which they can submit without degradation—that of age or standing—and we again urge the necessity of admitting them at *seven years' standing or thirty years of age*. The Council must remember that they have to satisfy the *majority* of their 12,000 members, and that this cannot be done except by treating them liberally. The consequences of a large creation of members at once would, we suspect, be much more favourable to the progress of the profession than may at first be suspected. If the majority of the 12,000 are admitted to the fellowship at once, and the rest of them come into it in the course of a few years, the stimulus to students to qualify themselves for the fellowship will be much increased. They will soon find that if they mean to start with good prospects of speedily getting into practice, they must place themselves on a professional equality with those whom they intend to rival in seeking the confidence of the public. As regards future fellows, ten or even fifteen years might without any injustice be chosen as the qualification by seniority; but the existing members have a right to insist that the seniority applicable to them shall be as low as is consistent with the fair working of the charter. It must also be remembered that the junior existing members have passed much more strict examinations than those which many of their seniors underwent, and that, except so far as practical experience is concerned, of which the examination of a student for the fellowship cannot be professed to be a test, the surgeons who have passed the College since 1837 may well claim to be considered better educated men than their brethren who have been in practice 15 years and upwards. On the admission of surgeon-accoucheurs to the Court of Examiners, we shall have to make some observations soon. At present we content ourselves by suggesting to the Council the propriety, if not the necessity, in the event of their abandoning their pure-surgery character, of making that Court COMPLETE, by adding to it examiners in medicine, chymistry, and *materia medica*, as well as in midwifery. We cannot, however, postpone a suggestion, to which we beg to direct the most serious consideration of the Council, on the arrangements for admitting surgeons practising pharmacy to seats in the Council. It does not follow, that because the pure-surgery test is abandoned, therefore all general practitioners are to be equally eligible to a seat at the Council. The difficulty is in drawing such a line as, while the *mere practice* of pharmacy shall no longer be a disqualification shall tend to raise the professional character of the fellows by securing their following a *strictly professional line of practice*; and this difficulty may, we are inclined to think, be readily solved, by drawing that line between those who follow the profession of a general practitioner as a *profession* and those who follow it as a *trade*. A broad and clear distinction between the two classes already exists, and we have reason to believe that it is steadily increasing. The one class of general practitioners prepare the medicines which they prescribe, but depend for their emoluments on what they do as *professional men*. The other class likewise prepare those medicines, but they depend for their emoluments on what they do as *tradesmen*. In other words, some general practitioners charge for their attendance, advice, and assistance, but make no charge for the medicines they exhibit; while others charge nothing for attendance, advice, or assistance, and make all their profit out of pills and plasters, powders, draughts, and embrocations. The natural tendency of the one line of practice is towards the increase of professional respectability, and the raising of the scientific character of the practitioners. The as natural tendency of the other is towards the lowering of that respectability, and the depreciation of that character. But still that line, if adopted, should not be drawn so as to have any retrospective operation. Many of the most respectable existing practitioners have, by the force of circumstances, been compelled to charge for their drugs because no other charges would be submitted to by their patients. Let there be a legal disqualification attached to the making of such charges after a given future day, and hundreds of general practitioners in all parts of the country will be delighted to avail themselves of the

opportunity afforded to them of making a firm stand against the custom of charging for the drugs they send in, instead of charging for the skill and care they exercise.

We are not aware of any plan which would be found to operate more favourably than this in raising the standard of respectability among the general practitioners; and we therefore commend it to the most careful consideration of the council. If taking all sorts of medical cases does not, under the present regulations of the college, detract from the "purity" of a surgeon, there is no reason why the mere making up of medicines should not be as consistent with "purity." The difference between putting on a plaster and spreading one, between administering an enema and compounding it, is one of degree only, and not of principle. The difference between being paid for the exercise of skill evidenced in the first instance by a prescription written on paper, and being paid for the exercise of skill evidenced in the last instance by a prescription spread on leather, is also one of degree only, and not of principle. The difference between being paid for advice, whether accompanied by a slip of paper or by a bolus,—the charge in either case being for the advice alone, and being paid for the drugs sent in, is one of principle, and not of degree; for it is the difference between a professional man and a tradesman—between a surgeon and a mere apothecary,

SOCIETY AND THE DOCTORS.

[A fortnight ago, we had occasion, in a note to the clever letter of Quid Pro Quo, to say a sharp word or two on the system of gratuitous medical attendance which is now driving the profession, as regards, *many*, to pauperism, and as regards *all*, to social degradation. The *Young England*, the week after, gave us the following article; which, while giving a useful lesson to our only medical coroner, puts the question of gratuitous services with a force and pith that must do good.]

"Society is a great fellow. Not that we find fault, by any means, with Society for talking big in his corporate capacity of humanity, philanthropy, benevolence, and all that sort of thing, which looks so uncommonly well on paper, and sounds full in the mouth. Nor do we doubt Society's right to keep his individual members in as humane and charitable a disposition as is possible, from the selfish nature of mankind, to do; we merely wish to inform that respectable gentleman who calls himself Society, that if individuals have duties to perform towards him, he has duties to discharge towards individuals; that if they fail in their relations towards each other, that should form no excuse to Society in behaving ill to them; and in short, that Society need not expect every virtue from the individuals composing it, while bringing none.

Let us now consider, without fear or favour, how Society treats the medical profession, and whether the medical profession deserves such treatment.

A surgeon is sent for to attend a sick person—we now simply state a case occurring only the other day,—in the discharge of his professional duties he is ready to go,—in the discharge of his duty to himself and family, he inquires who is to pay him; the reply to this reasonable, and in a man who gets his livelihood by an arduous profession, natural, inquiry, is, imprecations and abusive language; the surgeon declines to attend the patient, and the patient unfortunately dies. Society taking no more trouble than to order a coroner's inquest. The inquest is held; the surgeon states the facts above stated; he states, moreover, that he frequently was knocked up to attend paupers—the children of Society; to exercise his humanity, skill, and attention upon them, without getting a farthing; that he has himself knocked up the butcher, to get materials for making beef-tea for the patient, and was refused with butcher-like expressions; that he lived by his profession; that his time was his means of life; that, in this particular case, he was preparing to attend the patient, when he was revolted by the abuse of those who solicited his aid.

Society, represented by the coroner, or his deputy, we forget which, waxed exceedingly indignant. The poor practitioner was informed, with ludicrous gravity, "that if he got no money, he should have found sufficient recompense in the esteem of his fellow-men;" that he should be ready, at all hours of the day and night, to do society's business, in the way of his profession, for nothing. "Humanity," said the coroner, "is a great thing." The jury, among whom might or might not have been the butcher who refused materials for beef-tea, became humane and benevolent, as it cost them nothing, and "fully concurred in the observations of the coroner."

Now, let us see whether in his conduct towards this poor medical man, Society did not on this occasion exhibit himself a most unfeeling, as well as an impudent, fellow.

A man determines to invest his time and money in obtaining the diploma of the College of Surgeons. Very well. Does Society educate him for nothing? Does Society feed, clothe, and lodge him while walking the hospitals, attending lectures, or undergoing the disgusting details of the dissecting room, for nothing? On the contrary, Society takes a thousand Protean shapes to extract money from the pockets of this very man, whom it victimizes afterwards for not running like a lamp-lighter to do its business gratis.

In the shape of a Professor, Society dives into the pockets of the student for fees, for lectures, demonstrations, and hospital attendance; in the shape of a landlady and tradespeople, it makes him pay through the nose for everything he has, and, sometimes, for things that he has not had; in the shape of a college, it makes him pay for his diploma, before it admits him to examination.

Nor has Society done with him then.

When he sets up an establishment, Society expects that he will conduct himself in an honest, straightforward manner, paying everybody his due; and having laid down this due, and having laid down this law for him, Society, when, through its parsimony, inhumanity or neglect, an outcast perishes in its streets, empanels a coroner's jury of this very tailor, butcher, shoemaker, baker, to victimize this doctor, who is so inhuman as to inquire who is to pay him; this hard-hearted practitioner who, expecting to pay, has the audacity to expect to be paid.

But we are told by the coroner, who by the way was paid for his services, that humanity is a great thing—a sacred duty—paramount to considerations of profit and loss. Very good—very fine. But let us extend this principle. Are coroners, judges, lawyers, and coroner's juries to have the benefit of it?

Humanity, we presume, is not limited to physicing paupers for nothing; humanity is not a merely medical virtue, though Society seems to think so.

The prompt administration of justice is humanity; yet what judge on the bench administers justice for nothing? It is humanity to investigate the causes of sudden or suspicious deaths, yet did any man ever hear of any coroner who sat upon any jury, since the time of Alfred, without being paid his fees and his mileage? To feed the hungry, to clothe the naked, to visit widows and orphans in their afflictions, is humanity, yet we hear of no tailor, butcher, baker, who refuses to give bread, beef, and clothes for nothing, being told by coroners' juries, that "if he gets no money, he gains the esteem of his fellow-men."

Will the esteem of his fellow-men feed the poor doctor, or clothe his wife and children, or pay house-rent, or taxes, or appear upon his frugal board in the shape of a leg of mutton and trimmings? Will the esteem of his fellow men preserve him from rusty clothes or an empty stomach, from a distress for rent, or from the Insolvent Court?

Let him go to the workhouse with the esteem of his fellow-men in his pocket, and he will be set to break stones, or pick oakum, just the same as if his fellow-men did not esteem him in the least; and when he dies, after a life spent in gaining the esteem of his fellow-men, by running after sick paupers for nothing, let his widow go before a police magistrate for relief, and she will be lucky,

indeed, if the esteem of her late husband's fellow-men enables her to take change out of a sovereign.

Medical men are fair game—their profession is a noble, humane, and liberal profession; therefore, be sure, they are expected to be noble, humane, and liberal enough never to expect payment; they are advertised for in the same way as tallow-candles and scrags of mutton, and for the same use—the use of the parish poor; therefore, be sure, they must be gentlemen disdaining payment!

They have been, and still are, a profession foolishly charitable, and criminally benevolent, to the injury of themselves, their families, and their fellows; therefore, Society takes them at their word; if they work for nothing they get no thanks, and if they don't work for nothing, they are rebuked by juries of butchers, bakers, and tailors, who glory in the chance of sitting, once in their lives, in judgment upon a gentleman.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. IV.

Evidence of Dr. Southwood Smith continued. Evidence of Mr. N. B. Ward.

We concluded our last notice by citing from Dr. Southwood Smith's evidence, a description of two filthy places, called Punderson's Gardens, and Lamb's Fields, the existence of which, in the heart of a great metropolis, would scarcely be credited, were it not affirmed on unquestionable authority, and rendered probable by the experience of every medical man practising among the poor of our large towns. That such places are to be met with in other parts of London, may be gathered from the answer of Dr. Southwood Smith to the following question of the Commissioners: "Did you find in the district which you personally inspected, many houses in which water is not laid on the premises for domestic purposes, and in which there are no privies?" "In Bethnal Green, there are whole streets in which there is not a single house with water laid on the premises; in some parts of this district, for the use of the houses of several streets—for example, for all the houses in Cranbrook Street, Old Ford Street, Charlotte Street, Grosvenor Place, and Twigg Folly—there are but two pumps. In one crowded part of this district, I found the poor inhabitants deprived of water altogether, because the owner of the houses had had some quarrel with the Water Company, and the Water Company had wholly stopped the supply of water." "Great numbers of houses are without privies."

Two pumps to five streets; and a scarcity of privies, and the supply of water cut off by a quarrel between the landlord and the Water Company! Well may Dr. Smith exclaim, "It is fortunate that air is more accessible than water, and that its supply does not depend on landlords and water companies." He might have added, leave that to the Commissioners of Sewers. They cannot exclude it; but they can poison it.

Now that we have been led to speak of landlords, and their disastrous quarrels with water companies, let us see what answer Dr. Southwood Smith gives to the following question. "Are the small landlords regardful of the sanitary condition of their tenements?"—"In the former Parliamentary Inquiry on the Health of Towns (what a reproach is conveyed in this short sentence—"former Parliamentary Inquiry on the Health of Towns!"), abundant evidence was collected to shew that the smaller landlords obtain proportionally the highest rents, and that they are most unscrupulous with regard to the condition of the houses let to the poor tenants." This statement is fully confirmed by a striking instance, too long for quotation, but of which the following is an abstract. One four-roomed house in a small court, called Shepherd's Court, in which fever had extensively prevailed, contained no less than ten cases of fever (four in one room, and three in each of two others). The parish surgeon found that different families had, in succession, occupied these

rooms, and become affected with fever. On his representation of the case to the parish officers, all the sick were removed from the house as soon as possible; but no remonstrance on the part of the parish authorities could induce the owner of the house to cleanse and whitewash it, or to do anything to put it into a state of greater safety; and he was only at last compelled to this simple and cheap act of humanity, by an illegal interference of the magistrate before whom the case was taken.

The poor, then, would seem to have little to expect from the sense of justice of their landlords; let us see what they can do for themselves. "The poor in general," says Dr. Smith, "are too ignorant, and too apathetic, to take proper care of themselves, even in matters which far more obviously concern their interests than the construction of their dwelling-houses. Two classes which live in the most wretched hovels, complain the least of their condition, which will never be bettered until the more instructed interfere to improve it; but were they ever so well informed, and anxious to bring about a better state of things, they have no power to effect any change. They must be near their work; and their poverty will induce them to take the cheapest houses they can obtain, closest to their place of work." Hear this, ye Commissioners of her Majesty's Woods and Forests, who turn the poor by hundreds out of the houses which they have found convenient to their places of work, only that ye may crowd them into places not one whit better than those from which ye have driven them. How long must the poor man remain the sport of landlords, water companies, commissioners of sewers, and metropolitan improvements? He is no sooner comfortably settled in Punderson's Gardens, or Lamb's Fields, with a small interest in a pump, and no fear of intrusion from the Commissioners of Sewers, than he receives notice to quit from the Woods and Forests, when off he starts in search of a lodging, as near as possible to his former residence, for which, in all probability, he will have to pay the price of the increased demand for accommodation, created by this cruel invasion of his territories. This injustice is converted into bitter mockery by the consciousness that he is all the while the victim of the very improvements which were advocated on the ground of the benefit they would confer on the class to which he belongs.

The landlord, then, will do nothing but exact an exorbitant rent for houses unfit to be inhabited; the poor man himself is either too ignorant, too indifferent, or too powerless, to help himself; the Commissioners of Sewers abandon him; the Woods and Forests hunt him like a wild beast from one end of London to another. To whom shall he resort in his distress? Will the Government help him? To be sure they will. They have shown the best disposition in the world. They have collected a vast deal of valuable information, they know all about Punderson's Gardens, and Lamb's Fields; they are most desirous of doing all they can for his comfort. Our streets for the future are to be wider, our houses are to be much better built, we are to inhabit cellars no longer, and it is now fairly to be expected that, as party walls have been long insisted on as means of preventing the destruction of property, a supply of water and proper sewers will be given us to preserve our lives from fever. But when are the good intentions of the Legislature to take effect? It is for existing things that legislation is urgently required. We do well to provide for the future, but the present ought not to be kept out of sight. Dr. Southwood Smith points out two regulations as being of permanent importance, and of universal application to the dwelling-houses of the humbler classes—the prohibition, under adequate penalties, of the letting of any house as a dwelling-house in which water is not laid on, and to which there is no privy sufficiently screened from view. To the enforcement of these regulations he sees no practical difficulty: nor do we. Will the legislature have the moral courage to compel the landlords to the performance of their duty? We shall see. They must first expect a little discussion as to the meaning of the phrase "rights of property." Have they the courage to put a reasonable inter-

pretation upon it? We shall see.

The following statement is not unimportant:—"It happens, unfortunately, that while the humbler classes naturally require in their localities and dwelling houses, greater helps to cleanliness than the classes above them, the former have invariably had less of these external aids than the latter. People in good circumstances, who live in good houses, in the more open and less densely populated neighbourhoods, can maintain tolerable cleanliness, with fewer facilities for that purpose than the poor, who live in small houses, and in close and crowded localities. Yet, as a general rule, while the first class of streets are cleansed once a week, the second class are cleansed only once a fortnight, the third class only once a month, and the lowest class never; though, of course, the worst,—for the very reason that they are the worst,—ought to be cleansed daily. In like manner, with regard to dwelling houses, it is the smallest, and the least convenient, that have no water laid on, that are without privies, and that are wholly destitute of every other means of removing excrementitious and noxious matter?" Is the Strand a first or third class street, or does it belong to the class which is never cleansed? If it belong to the first class, what must the worst class of all be?

We now enter more into particulars with regard to the inside of the houses; and the first point to which our attention is directed is the small number of rooms inhabited by the families of the poor. "A mother and her son, being an adult, sleep in the same bed. Grown-up females and unmarried young men sleep in the same room. A man, his wife, and his wife's sister, the latter being an adult, sleep together in the same bed." These are fragments from the evidence laid before the Children's Employment Commission. "I have myself," says Dr. Southwood Smith, "seen a young man, 20 years of age, sleeping in the same bed with his sister, a young woman sixteen or seventeen years old. That incestuous intercourse takes place under these circumstances there is too much reason to believe; and that when unmarried young men and women sleep together in the same room, the women become common to the men, is stated in evidence as a positive fact." We will not dwell upon this painful subject, for it is not strictly within our province, but pass on to notice another point alluded to by Dr. Southwood Smith, namely, the state of the air in the apartments of the poor.

The air within the houses of the poor is even more foul and unwholesome than that which surrounds them. Thus, Dr. Southwood Smith says, "It sometimes happens to me in my visits, as Physician to the Eastern Dispensary, that I am unable to stay in the room even to write the prescription. I am obliged, after staying the necessary time at the bed-side of the patient, to go into the air, or to stand at the door, and write the prescription; for such is the offensive and unwholesome state of the air, that I cannot breathe it even for that short time. What must it be to live in such an atmosphere, and to go through the progress of disease in it?" What, indeed!

The condition of the workshops of the poor is at least as bad as that of their houses. Take a tailor's workshop as an example. Eighty men working together in a room 16 or 18 yards long, and seven or eight yards wide, close together, knee to knee—the room, in summer time, what with the heat of the men, the heat of the irons, and the heat of the candles together, 20 or 30 degrees higher than the heat outside—the heat and closeness such, that tailors from the country faint away in the shop, and visitors complain of the heat and smell as intolerable—the men sitting as loosely as possible, the perspiration steaming from them. In winter these foul places are still more unhealthy, as the heat from the stoves and candles and the closeness, is much greater. Cold currents of air streaming in at every crevice, perpetual squabbling about opening windows—the old hands, from long habit, inured to the heat, conspiring to stifle the new-comers—in the very coldest nights the rooms so hot, that large thick tallow candles (quarter of a pound candles) have melted and fallen over from the heat—the young hands unable to

work full time, the old hands losing appetite, thirst taking the place of hunger, and gin of food. Intemperance in this, as in many other instances, a sort of necessity, and not merely a depraved appetite for a destructive poison.

The tailor's workshop is, perhaps, the worst specimen of an unhealthy class of buildings devoted to sedentary occupations. But they are all very much alike, differing in degree of unwholesomeness, but all most fatal to health and life.

Let us now glance at a pound-shillings-and-pence statement referring to the "tailor's occupation." It appears that no inconsiderable sum is raised annually by the united contributions of the masters and journeymen in this trade, for the benevolent purpose of affording assistance to destitute workmen in sickness and old age. There is a benevolent institution for the relief of aged and infirm tailors to which the annual subscriptions of the masters amount to £800, and the annual subscriptions of the journeymen amount to £525, making a sum total of £1,325, annual subscription. This sum is distributed in the relief of sickness, and of the infirmities of old age; but no contribution is raised to prevent the production of sickness and of early superannuation. Yet a comparatively small sum, expended under scientific direction, and the ventilation of the places of work, would prevent sickness, and retard the period of superannuation, probably to such an extent as to justify the following statement:—"If the employers and the men had been aware of the effects of a vitiated atmosphere on the constitution and general strength, and of the means of ventilation, the practicable gain of money from the gain of labour, by that sanitary measure, could not have been less, in one large shop, employing 200 men, than £100,000. Independently of subscriptions of the whole trade, it would, during their working period of life, have been sufficient, with the enjoyment of greater health and comfort by every workman during the time of work, to have purchased him an annuity of £1 per week for comfortable and respectable self-support during a period of superannuation, commencing soon after fifty years of age."

We have here an illustration of the prevalent custom in England of all classes, from the highest to the lowest, of substituting inadequate, and ineffectual, yet costly efforts at alleviation and cure for cheap and certain methods of prevention. The master crowds his men into a narrow space, without making any provision for ventilation, which might be effected at a comparatively small cost, and having, by this means, exposed them to sickness, early superannuation, and premature death, subscribes what he doubtless considers a handsome sum to repair the mischief he has inflicted on them. The men, in their turn, second his efforts by opposing all manner of obstacles to the admission of air into their workshops, and then subscribe sums equally splendid in amount, but equally inadequate, and thus these worthy representatives of English ignorance, obstinacy, and extravagance, play their part in the great drama of national distress. If a debtor and creditor account between masters and men could be drawn up, it would run somewhat thus:

Master tailors, debtors to their men by attacks of sickness and deaths, due solely to want of proper ventilation; by expenses and losses contingent on the same; and by spirituous liquors necessary to counteract the depressing effect of foul air, say	£10,000
Creditors by	800

Balance	£9,200
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We do not guarantee the accuracy of this account; indeed, the debit side would be probably much higher, perhaps three or four times as high. A penny a day, spent by every journeyman in London on gin or beer as a direct consequence of the hot foul air he is obliged to breathe, would amount to four or five thousand pounds a-year: a not insignificant fraction of the sixty millions spent every year on intoxicating liquors.

In reply to questions relating to ventilation, Dr. Southwood Smith states, that, "after much experiment and labour, the means of affording good

and cheap ventilation have been discovered, and are familiar at least to some few scientific persons; and there cannot be a doubt that, under their direction, a vast progress might be made towards removing the most grievous of the existing evils." but he expresses his conviction that many years must pass away before such knowledge can become generally diffused among the people, nor does he see how it can ever be applied to their use, without some special agency for carrying it into practice: and he adds:—"It has been justly stated, that it is only when the public health is made a matter of public care by a responsible public agency, that what is understood can be expected to be generally and effectually applied for the public protection." Again:—"The evils arising from the want of a due supply of pure warm air can really be remedied in no other way than by affording that supply. Charity cannot cure the sickness produced by the want of pure air, and, when it puts forth its utmost exertions, all that charity can do to mitigate the suffering, arising from this cause, is next to nothing."

Is it not worse than nothing? What is charity, as it is commonly understood and practised, but a combination of ignorance and idleness? Money given away to save the trouble of spending it wisely, and consequent ignorance of the right way of using it. Take the case of the master-tailors. It is to the point. They subscribe £800 a-year for the charitable support of men whom nothing but their ignorance and negligence has impoverished. The men, if they could have known what was due to themselves, would have demanded fresh air as a right, instead of accepting £800 a-year as a charity. In ninety nine cases out of a hundred, if men were only just, they need not be charitable. Charity, at the best, is only a make-shift, and ought never to be regarded in any other light. Let Old England beware how he allows Young England to resort to the idle custom of distributing alms by the hands of the clergy. We warn the young gentleman that he will be guilty of the worst folly of the worst times—giving alms instead of providing work, preserving health, and inculcating self-dependence.

But we must not be too excursive, for we have yet to notice the important suggestions which conclude Dr. Smith's Evidence. In answer to the question:—"Do you not consider that a material saving would be effected, even in money, by an agency which, though attended with some expense, should better provide for the public health?" He says: "I think a very moderate cost would provide for a system of supervision of the public health, which, even on the ground of economy, would be highly advantageous to the public. There must, of course, be some authority to carry out and enforce obedience to the measure, whatever it may be, on which the legislature may decide, relative to drainage, sewerage, and construction of dwelling-houses, and the provisions for supplying those houses with the means of ventilation and cleanliness. The body to whom the administration of such a law is intrusted, whatever its particular enactments may be, must obviously require professional knowledge—such as the peculiar knowledge of the civil engineer, the architect, and the physician. A commission combining eminent individuals, each the most eminent in his respective science, whose services could be obtained, each devoting his whole time to its business, and a part of whose duty it should be to see that the surveyors who must superintend the operations in detail are persons possessing the requisite science and practical skill, and of whose qualifications and mode of performing their work, the members of a board so constituted would be competent to judge; such a commission, armed with proper authority, and responsible for its exercise, would not only enforce a general obedience to the law,—but in carrying the measure into practical operation, by acting on a general and well-considered plan, by employing as agents those only who possess the requisite science and skill, and by exercising a due control over them in the execution of their work, would save the country hundreds of thousands of pounds." Such an administration would have to make provision for

the regular and responsible personal inspection of "the localities in which disease is most apt to arise and spread"—for "the verification of the fact of death"—for ascertaining "the cause of death, and the circumstances connected with the operation of that cause, whether in the locality, the dwelling-house, in the particular apartment in which the deceased expired, as well as the actual condition of the survivors." Such duties as these would, of course, devolve upon a well-educated medical man, who might give very important advice respecting the burial of the corpse, and the proper disposal of it up to the time of interment. If the death was due to any epidemic disease, he would report to the proper authorities concerning any local agency capable of removal which might have caused, or conduced to the production of, the disease in question. The detection of crime, the improvement of the registration, and several other obvious advantages, are specified as resulting from such an administration, which it is suggested might be advantageously connected with the present system of Poor-Law relief, as recommended in Mr. Chadwick's able Sanatory Report. As this plan has been detailed at great length in that Report, and has been long before the public, we shall not enlarge upon it here, but shall hasten to bring Dr. Smith's evidence to a close by quoting the concluding paragraph.

"I would express my conviction, derived from much observation and some experience, that the most general and depressing of the evils of which we have been speaking, are capable of being gradually removed, and of being almost wholly prevented in future; and that this is a consideration which should encourage and animate the labours of the Commission. No Government can prevent the existence of poverty; no benevolence can reach the evils of extreme poverty, under the circumstances which at present universally accompany it; but there is ground of hope and encouragement in the thought that the most painful and debasing of these circumstances are adventitious, and form no necessary and inevitable part of the condition of that large class of every community which must earn their daily bread by their manual labour. Those adventitious circumstances constitute the hardest part of the lot of the poor, and these, as I have just stated, are capable of being prevented to a very large extent. The labours of a single individual—I mean those of the illustrious Howard—have at length succeeded in removing exactly similar evils, though somewhat more concentrated and intense, from our prisons; they are, at least, equally capable of being removed from the dwelling-houses and work-places of the people. Here then is a field of beneficent labour which falls legitimately within the scope of the legislator, and which is equally within that of the philanthropist, affording a common ground, beyond the arena of party strife, in the culture of which all parties may unite, with the absolute certainty that they cannot thus labour without producing some good result; and that the good produced, whatever may be its amount, must be unmixed good. I will only further express my hope and belief, that the earnest and anxious labour which has been already devoted to this subject, both by individuals and by the legislature, and which still continues to be devoted to it, will not be made in vain."

We echo all these benevolent wishes, and take our leave of Dr. Southwood Smith with sincere respect for his long and disinterested services, rendered to the cause of reasonable charity and true economy.

The evidence of Mr. Nathaniel Bagshaw Ward, surgeon, the ingenious inventor of the botanical cases, may be compressed into a comparatively small compass. Its chief object is to show the importance of light to the proper growth and development of young persons, and the health of adults. He quotes Dr. Edwards' experiments on the tadpole, shewing that their metamorphosis does not take place when light is excluded, and his observation, that persons who live in caves and cellars, or in very dark and narrow streets, are apt to produce deformed children; and that men who work in mines are liable to disease and deformity beyond what the simple closeness of the air would be likely to produce. He also cites

a case from Dupuytren, which is altogether inconclusive, and a more decisive instance on the authority of Sir James Wylic, who states that the cases of disease on the dark side of an extensive barrack at St. Petersburg have been uniformly, for many years, in the proportion of three to one, to those on the side exposed to strong light. Upon these grounds Mr. Ward rests his proposition, "that as much light be admitted into the dwellings, both of the rich and the poor, as can possibly be admitted;" and he especially insists upon the necessity of this supply of light during childhood.

Mr. Ward also adds his testimony to that of all the witnesses who have had any experience of the dwellings of the poor, as to their filthy and unwholesome condition, and he especially mentions Rosemary Lane with its mingled population of pigs, and children.

The only other part of his evidence which requires notice, is that which refers to the humanizing effect of flowers on the poor. Its most important feature is the strong probability it establishes, of the good effect of light on health, and the consequent importance of open streets, and well lighted houses. This part of the evidence reminds us of a certain window tax, which has been strongly objected to on the ground of the obstacle it presents to the free admission of light into the houses of the poor.

In our next number we shall proceed to analyse the evidence of Dr. Arnott.

MEDICAL REFORM IN THE COLONIES.

By RICHARD DE GUMBLETON DAUNT, Esq., M.D. and L.M.; and late Honorary Secretary of the English Medical Society in Paris.

To the Editor of the Medical Times.

Nothing but a persuasion of the efficacy of perseverance in the attainment of any end, as expressed in the axiom of St. Hermas-Pastor, "*concupisce opus tuum, et salvus eris*," could induce me to renew my representations on Colonial Medicine, and I now urge upon the Medical Associations in England and Ireland, for the last time, the necessity of embracing, in their plans of medical reform, an improvement in the medical administration of the British Colonies. Although I am now, by my residence in Portuguese America, removed from any suspicion of interested views, still as my experience of the abuses of our colonial medical organisation is so personal, I shall refrain from entering in detail into the subject, and confine myself to the statement of a few facts and grievances, and to assuring all interested, that an astounding amount of abuse and corruption will be found, on enquiry, in our present Colonial Medical system. It is a fact little known in England, that in all the colonies a number of civil medical appointments, varying in value from £50 to £300 per annum, exist, and, instead of being at the disposal of the heads of our educational institutions, as a means of rewarding and stimulating talent and industry, they are uniformly filled by the home or local executive, by any who, in the absence of all other qualification, have well studied the old monastic rule of obtaining promotion (if we can trust the Mediaeval Satirists), viz.:—

"Bene dicere de Priore, facere officium suum taliter qualiter, Sinere mundum ire quomodo vadit."

In the Cape of Good Hope alone, are about eighteen civil medical appointments, which, with the exception of Dr. O'Flinn and Mr. Atherstone, are filled in a way most discreditable to all concerned. Besides the injury thus done to the Profession, one equally great is inflicted on colonial society, which is deprived of the civilising influence which the presence of so many well educated and moral heads of families would impart; and it must be remembered that in our colonies, generally, the Government salary to a prison, or district, medical officer, places the possessor above competition, and prevents any other medical man from settling in his immediate neighbourhood, with a likelihood of success; so that the responsibility of the Government, in the nomination, is thus much greater than in places where the population will support several physi-

cians and surgeons. Another great bar to the formation of a well-informed Colonial Medical Corporation, is the unblushing way in which the military, and sometimes naval, medical officers of the station practice their profession among the civil population, to the great injury of the civil practitioner, whose most lucrative clients are thus drawn from him. So long as a competition so unequal in colonial society is permitted, no highly educated civil practitioner can find it, *en regle generale*, worth his while to endure the privations of colonial life. Surely, if representations were made at head-quarters, military medical men would be obliged to conform to the standing orders, which forbid any officer holding the royal commission to devote his time to objects of private gain. *En finale*, we have the all present abuse of Apothecary Practitioners, who, among our rustic colonial population, number a fearful host of victims. I said this was the crowning abuse; but no,—this is the non-application, by a popularity-seeking or corrupt local executive, of such rules and ordinances as, from time to time, have been framed in the Colonies, with the view of ameliorating the state of medicine. The extent of this last abuse, to one not acquainted with the intrigues and corruption of the colonial offices, is incredible. If I now conclude abruptly, it is that I may spare individuals whom the force of circumstances may have connected with a foul and corrupt, though established, system. I claim from medical reformers, at home, an enquiry into the matters now treated on; and, above all, I recommend them to agitate for an improved plan of choosing the nominees to colonial medical appointments, which are now too often in the hands of horse doctors—raw Scots, picked up from whaling ships, and those enjoying backstairs influence in the colonial offices.

Parish of Nossa Senhora das Neves, Province of Rio de Janeiro, Oct. 1844.

PROPOSAL FOR MR. WAKLEY'S TRIAL BY A JURY OF GENTLEMEN.

(To the Editor of the Medical Times.)

SIR,—

SHOULD I even seem unnecessarily to obtrude on public attention a name which professional delicacy, or your own editorial tact, would veil in silence, I will yet appeal to your sense of right—even to an enemy—to favour me with the full insertion of my proposal. It aims, Sir, to free a worthy man from hideous accusations, or sever from a high-minded Profession a gangrenous member, perilous to its safety. The moral dandy, fastidious enough to veto to my just charity her only means of discharging her duty, will shew a very miserable estimate of the worth of character. In the hospital of diseased reputations there is such a thing as mistaken diagnosis; and that surgery—as Wakley will admit—is the truest cruelty which, to a man in his position, would deny, through an unmeaning delicacy, the most probing examination.

I know, Sir, of the common verdict of society, that the character which has not received Mr. Wakley's own care, is unworthy that of all others; and though I am singular enough to entertain a different opinion, it will not impair my argument to admit that his reputation has been so far trodden under foot, that while, on the one hand, it can be cleansed, if redeemable at all, only by a vigorous effort, his utility and comfort of conscience, on the other, are gone for ever if that effort be not made—and successfully. For, Sir, most unquestionably, as a great career was denied him by Nature, so a good one is cut from him by his character. Befoulment has so far eaten into his name, that had he the best of desires and greatest of energies, it would kill both. A moral leprosy encrusts it, each day spreading, which repels each good, and keeps aloof each prudent man. True, the taint may be only imaginary, but public opinion gives vigour to the hypothetical virus, and makes it as deadly to himself, and those around him, as though it were real. The fatality of public opinion—even, alas! if erroneous!—offers him, abroad, a social lazaret-house, alike infected, and infecting; touching once, and tainting for ever!

For the honour of the Profession, therefore, and for his own ease, I beseech you, Sir, not to interpose any personal hostility you may have between him and his full vindication. You are surely too powerful not to be able to afford your enemy an ample justice; and if charity have weight with you, a moment's retrospect will shew how much of mischief he has been forced to do, and of good to relinquish, solely through the detestation of his character.

The London College of Medicine was, in its origin, a glorious affair. It had every thing in its favour but one: the hostility of Wakley. He unfortunately gave it his support—and it perished! He lost his battle: his companions their honour. By blunder, or crime, or doom mysterious, each associate to this day has imputed to him imposture, or roguery. The accounts were not formally balanced: wherefore, honourable men were looked on as felons! A breath bears evidence of crime, when corroborated by acquaintanceship with Wakley!

The British Medical Association followed. The same history, the same end! If Wakley could not raise it, he generously lent it, when raised—his name. It glistened under the light of his countenance with a sickly radiance, thawing off like snow under a tropic sun! The treachery of the one Faculty "scheme," followed other schemes to ruin: bill, bill to ridicule; member, member to secession, till all that is now left of this once influential Society, is a hybrid M. D., and apothecary of Dulwich, prefigured and described by Pope

"Eternal smiles his emptiness betray,
As shallow streams run dimpling all the way;
Whether in florid impotence he speaks,
And as the prompter breathes, the puppet squeaks."

He is, of the British Medical Association, the mutilated tail still left to tell that once Kilkenny "cats"—and dogs—dwelt there!

Last came the Medical Protection Association. I saw with wonderment how suddenly, in power, and wealth, and wisdom, this young Society, obeying your call, sprung to being. It was born a man; it sprung, as from the brain of Jove, another Minerva, instinct with might and beauty. A multitudinous meeting, at three days' call, startled British Medicine from her seat, and the world asked what shall it be—this new-born giant? Surgeons and Physicians,—the proudest,—bent their steps towards the threshold; the new popular shrine offered more promise than the old corporate idols: funds flowed in: prosperity, for once, in medical agitation, seemed our captive; but Wakley crept into the paradise, and

"at the ear of Eve, familiar toad,
Half froth, half venom, spit himself abroad."

Bullying the equivocally placed, darting venom at the timid, feeding the indigent with dishonoured bread, the nobly-ambitious with frothy hopes: he estranged in disgust the respectable, and enchained the rest. Strange fate of a bad name! The more he paid, the less he purchased: the more he toiled, the less he did: he worked but to injure, to ruin: his breath was a killing pestilence: power, wealth, character, Association, all have gone! Surely, the name of infamy is as a greedy Maelstrom, insatiate, bottomless!

Three National Associations sunk helpless under his aid! Three hostile Colleges flourishing by his opposition! Himself contemned here, spurned there, suspected every where! Such is the terrible result of a whole life's ceaseless action: such the awful shipwreck of a fortune steered by the helm—infamy!—What a spell, mystic and divinely misguiding, in a ruined repute! Fate will not even have good by such an instrument!

With such a retrospect before my eye, I sincerely offer crestless and defeated Wakley (forlorn amid the ruins made by his own character) the tribute of a tender condolence. With all the callosity of the camel's knee, grief can yet reach his heart: he is the stoic philosopher of our century, if he can't describe a Promethean agony. Guilty or innocent, I pity either way. He has a place in society so very different from his deserts, if good—so well merited, if evil—that, for his breast to harbour an instant's joy, would be to shew the insensibility of a demon. Yes! even

goodness, like the affection of the son-less monarch of Norman England, must be a curse: he cannot know an honest smile. His heart, for twenty years, has never fathered one! What a reason for inquiry!

I know, Sir, your deplorably adverse opinions on Mr. Wakley's past utility. You have always described him as a medical nuisance, more mischievous to the well-being of the Profession than any of the grievances he has at times declaimed against; and have added your opinion, that among the public men of our time, infamy would be homeless if there had been no Wakley.* But, Sir, have you made full allowance, in judging his singular career, for the very singular circumstances under which he was placed? With such a drawback as his character on every effort, how could he have been honest, or honourable, or independent? He was to live on a public that despised or abhorred him: their contemned inferior in moral standing: how could he advise, or guide, or lead? His rôle was to please, not to improve; to pander, not to teach; to follow, not to lead; to halloo others' opinion, not give his own. His natural place—he knew it, Sir, well as you—was that of philosopher: his evil genius, his character, forced him—and he sees and regrets it—into that of buffoon. If he lauded the "One Faculty scheme," yesterday, as the only panacea, to please this Association, and, to pander to the liking of another, denounced it as treacherous, to-day: if, to suit a taste that asked such condiments, he abused, for years, in the fish-fag grossness of the day, the Apothecaries, as she-monsters of corporate imbecility: and, now, to suit a changed fancy, lauds them as the fittest of all parties to take their place at the head of a Reformed Medical Profession: if he gave up the British Medical Association for the Medical Protection Assembly—the latter, again, for the New National Association in Marylebone: if, in short, he has supported whatever has been supported, and opposed whatever has been opposed, like an aimless, houseless stroller, gibing at the unfortunate, jesting for the fortunate, as the price of a temporary lift from anything—buggy or dung-cart—going anywhere: still, Sir, the turpitude that can be logically deduced against him is a turpitude—it should be recollected—palliated by the greatest temptation. The unfortunate infamy of his repute left him without an opinion of his own. His low character made him low. The very bread of his public life essentially depeuded on his taking the clownship to any medical company that would engage him. A thorough serf—a serf in soul—he could hardly barter for the semblance of freedom.†

Now, Sir, while, on the part of Mr. Wakley, the necessity is thus extreme for a searching enquiry into these charges—so commonly made against him—it is fit that his friends remind him, that he is not in a position, just now, in which he can meet imputations—however atrocious they be—with disdain. He cannot, I deeply regret to admit, point to a spotless character, saying, "There is in it that which repels each slander!" There is unfortunately no one characteristic about him more impeached than his veracity. His word has served too many purposes to be accepted by any one who has heard the name of its utterer. Enquiry, rigid and searching, I fear, is after all his best interest. He generously offered to undergo it in the House, before Mr. Wodehouse; why not seek it before a tribunal of medical men? To do his enemies justice, I do not think they would be fastidious on the composition of the jury. I think I could prevail on them to empanel it of his own personal friends, provided they were of a few months' standing; nor do I think the public would receive with suspicion the verdict pro-

* This is a mistake of our correspondent. We never said so.—Ed.

† Our correspondent enforces his opinions by enumerating the accusations usually made against Mr. Wakley, giving a succinct analysis of the reasons usually alleged for them. It is obvious that this part of the subject is quite unfitted for our columns.—Ed.

nounced on him by a committee owning for its principal members even his own chums—Lawrence, Elliotson, McChristie, Lambert,* Costello, Hennis Green, Wardrop. It speaks well for Mr. Wakley's heart, not to have made, but so long to have kept, such friends. The profession would rely on their fiat implicitly. Again, then, I press on him a duty which may bring on us a triumphant issue! What a day of jubilee would it be that taught him he was felt to be no worse than other men! What a day of dignity for the Profession, that relieved it from a stigma so public, so humiliating, so damaging!

VINDICATOR.

[We would willingly have declined this clever letter, as—among other reasons—giving importance to a subject long without any; but the appeal to our sense of fairness was irresistible.—Ed.]

STATE OF PROFESSIONAL FEELING.

A meeting of Medical Practitioners, resident in the town of Ulverston, and its immediate neighbourhood, took place on the 15th inst., to take into consideration the Bill lately introduced into Parliament, by Sir James Graham, when various resolutions were passed condemnatory of many of its clauses, but especially that part which repeals the Apothecaries' Act of 1815, without substituting any penal enactment. The establishment of a Council of Health and Medical Education was considered to be desirable, provided the general practitioner was fairly represented, as was also a general registry, if it were made compulsory. A committee was formed, consisting of Messrs. Barton, Barnett, Dunn, Dickinson, Gibson, and Hall, for the purpose of carrying the object of the meeting into effect, and they were requested to put themselves into communication with the Society of Apothecaries, and Metropolitan Association, and to co-operate in the endeavour to procure a Charter of Incorporation for the General Practitioner in Medicines, Surgery, and Midwifery.

A petition was agreed upon, which will be sent to Lord Stanley, and the county members, for presentation to the two Houses of Parliament.

Great indignation was manifested at the Council of the College of Surgeons for the injustice they have committed against the great body of the Members in the affair of the recent Charter, and it is very probable that a protest will be adopted and made public.

A public meeting was also held at Whitehaven, about a week ago, at which a decided feeling was shewn against the conduct of the Surgical Council, and resolutions also passed against many parts of Sir J. Graham's Bill.

DEATH AND HYDROPATHY.

(To the Editor of the "Medical Times.")

SIR,—I think it due to the profession and to the public, to request the favour of your insertion of the following case. A single instance, well marked and authenticated, will often outweigh the best arguments, and a multitude of general statements.

A lady had for many years suffered severely from occasional attacks of catarrh, accompanied by asthma. After having tried, without permanent benefit, a variety of measures, under several physicians, she was advised to abandon all further systematic treatment, beyond the most ordinary medicines, during the paroxysms; and the greatest protective care between them, especially in the winter and spring. With these directions, she was passing an invalid life without materially losing ground.

It unfortunately happened, however, that about a month ago, she was prevailed on to set aside all the advice she had previously regarded, and yield

* Lambert is no more. He died in extreme poverty. He was the celebrated reporter of the case of Bransby Cooper.—Ed.

herself to the strong assurances of relief held out to her by a practitioner in hydropathy.

At first all the apprehensions of her friends were triumphed over by the apparent success of the new measures. Her chest was daily swathed in cold wet cloths, and even on Christmas Day she was exposed to the bracing influence of a piercing east wind in the damp costume of hydropathy. Nor did she seem to derive any immediate mischief from all this extraordinary indiscretion. The day of reckoning, however, at length arrived. On the 10th inst. she took a cold, and, still continuing the process, considered herself better on the next day. On the 12th, the mucous surface of the bronchial tubes betrayed their accustomed irritability, but, instead of being discouraged, the practitioner attempted the relief of the overwhelming dyspnoea by adding the influence of galvanism to that of cold water, and in forty-eight hours was surprised to find that his patient had expired.

I make no comment on this very lamentable illustration of the fashionable abuse of cold water in the treatment of disease. Some of your readers will find an alarming fact of no small use in their perplexing controversies with a capricious public.

MEDICUS.

Plymouth, Jan. 17, 1845.

LIST OF ALL ENGLISHMEN, WHO HAVE OBTAINED DEGREES AT THE UNIVERSITY OF BONN WITH THE DATES OF THEIR DIPLOMAS.*

Aug. 12, 1824.. Stephen Simpson.. London.
July 20, 1825.. Morriss .. London.
Aug. 2, 1837.. Nathan Rumsey.. No Address
Sept. 5, 1843.. John Bury .. No Address

These were Degrees by Examination.

Honorary degrees were granted on Oct. 18, 1843, to Dr. William Buckland and Charles Lyell, in the words of the Dean of the Faculty of Bonn—"pour nous honorer nous mêmes," but with this exception, no diploma, we are assured, is granted without a severe examination.

MEDICAL POOR LAW RELIEF.

PARLIAMENTARY REVELATIONS

(Continued from p. 314.)

Are you aware that the relieving officer's order to the medical officer is required, because the duties of the medical officer do not extend into inquiring into the question whether the party is in circumstances requiring medical relief?—I am aware that it is otherwise. The fact is, that at present a medical order is never refused. The case I have mentioned, and the evidence which has been given, prove that a medical order, which costs nothing, is never refused, and, therefore, it is an absurdity sending to the relieving officer, who makes no inquiry now into the circumstances or station of the person.

Are you aware of the views which have been expressed by the Poor Law Commissioners as to the duties of the relieving officer; namely, that the relieving officer, upon application to him for an order for medical relief, is not to take into consideration the nature of the case, but solely the station of the party?—Such is the case now; but it was not so when the order was given upon the system.

Is it not the duty of the relieving officer, upon application being made, to give an order without any investigation into the nature of the case, but simply to use his own judgment as to whether the party applying is in a situation to entitle him to relief at the expense of others and not at his own?—Which he ought not to be empowered to do, as he may err and be the cause of the death of the person.

Where the medical officers are paid by salary, and not by case, would it not be considered by those medical officers a great hardship if they were forced to give medical relief to parties who were not really entitled to relief; inasmuch as if they came under the denomination of poor, it would increase their labours and decrease their remuneration?—I believe the whole profession would be quite willing to give relief to everybody who asked it, upon the plan that I have proposed: all that they require is that they should have salaries remunerative for their labours.

But at present they complain of inadequate salaries?—Yes.

You have stated that it is the opinion generally of the medical officers that their salaries are inadequate; would it

* Communicated by the Editor of *The Medical Directory*, (advertised as to be published in the Strand,) who has obligingly authenticated his statement, by shewing to our Sub-Editor, the original letter by the Dean of the Faculty, Dr. Naumann.

The result is, that among males born from the middle of the 16th to the close of the 17th century,

the expectation of life has diminished from 67½ years to 62½ years—a decrease of nearly six years, and that among those born during the first half of the 18th century it has increased by nearly two years.

MEDICAL PROTECTION ASSEMBLY.—On Monday evening, this body met, under the auspices of Mr. McCann, who occupied the chair. The meeting was public, and was called by an open advertisement, headed “*Important*,” to consider whether it would be prudent to join in the agitation for a new corporation, or to second the efforts now made to make the College of Surgeons a College of Practitioners. The importance of the subject to be considered, and the wide dissemination of the advertisement through the *Lancet*, led to a full meeting of, at least, twenty-nine persons, whom we were able distinctly to number, the room being small, and being well lit by three candles. Mr. Hunter opened proceedings, by asking why he was suddenly called there on a Monday evening, instead of the Wednesday evening, previously fixed, the change being made utterly without his cognizance, as an independent member of the committee. A reason for the irregularity was given, not very satisfactory, and Mr. Hunter and Mr. Simpson, after the expression, mutually, of a little exacerbated feeling, sat down, much to the relief of the twenty-seven spectators.—Dr. Lynch opened the ball, and said the meeting was called merely for general deliberation, and to elicit a frank declaration of public opinion, in order to put an end to those endless bickerings and differences that had existed in the committee.—Mr. Wakley, not apparently relishing a meeting with such an object, wanted to know what resolution they were to consider, as otherwise there would be nothing but irregularity.—The Chairman, in reply, repeated Dr. Lynch’s explanation; and Wakley now entered into a long speech, recommending verbally a great deal of union, inveighing against the College of Surgeons, but admitted that while the Apothecaries Society ought to be placed at the head of the new corporation, they had declined to say whether they would concede or not the representative principle to their licentiates or future members.—After a few speakers had said a few words of no greater importance, Mr. Hillis, the former lecturer on anatomy and physiology, to Westminster Hospital, rose and opposed any joining with any association like that of the General Practitioners lately founded, unless they explicitly adopted the representative principle and defined clearly their objects.—Mr. Wakley expressed his deep regret to hear any such sentiments from Mr. Hillis.—Dr. Lynch now rose and made some strictures on Mr. Ancell, who, while a member of the Protection Assembly, had joined a new Association, a point of some soreness, it would appear, to the Associates he left behind him, and subsequently treated in a manner so contemptuous.—Mr. Bloxam explained that it was the differences of opinion constantly rising in the committee that forced Mr. Ancell to abandon them. He had himself, when asked by a member why he never came, given a similar reason for his absence. The ridicule of such a meeting conducting proceedings in any formal manner, being now fully felt, the gentlemen relapsed into an easy conversation—the opinions most prevalent being that the College of Surgeons, if actually carrying out the improvements announced last week in the *Medical Times*, ought to be supported. Mr. Wakley of course opposed this view, and affirmed that their improvements would end, like his own great labours in the House of Commons—“in smoke.”

GOSSIP AND NEWS OF THE WEEK.

The affair of Dr. Cardew’s offer, of a hundred pounds, for a well illustrated case of clairvoyance, seems to have gone off. The parties we see, from the *Bath Gazette*, could not agree on conditions, Messrs. Vernon and Storer asking terms which, in Dr. Cardew’s opinion, made imposture possible, and Dr. Cardew asking terms which were likely to interfere with mesmeric manifestations, in the opinion of these gentlemen. We advise Dr. Cardew to await the arrival of Alexis,

who is, we are informed, to revisit us this spring. When in London, he seemed ready to swallow any condition. He is the only *clairvoyant*—of several we have seen—who has thrown us into a moment’s doubt about the existence of more or less imposture. If Alexis be a *fripou*, there are at least a dozen Herr Doblens in him.

We see from a letter in the *Bath Herald*, that Mr. Barrett, Surgeon, with the aid of Drs. Cardew, Fergusson, and Tunstall, detected a very clumsy attempt to cheat, under the name of clairvoyance. A book, very flexible, was firmly bound with a string, traversing it once longitudinally, and three times across. A leaf of print was placed within. The *clairvoyante*—a girl travelling about with Dr. Owens—retired by herself into a lighter room, and returned, of course, decyphering a corner of the page. On Mr. Barrett bending the book, however, the string easily slipped off that corner which revealed what the *clairvoyante* saw; and was as easily replaced, and explains of course the natural anxiety of the girl to be alone in another room. It is easy to see that the clairvoyance, which depends for existence on conditions by which any rogue can see with one natural eye, is more a moral, than physical, aberration; and the best thing that can be done with the girl, is to give her a month or two of solitary confinement. At the end of that time, we pledge ourselves that such a *clairvoyante*, as Dr. Owen’s, will see no better than other people. If Dr. Owen repeats his attempts with the same girl, and happens to be again detected, he should be handed to the care of a constable. Such infamous attempts to turn the curiosity that now exists about Mesmerism, into a fraudulent mode of living an easy life at the public’s expense, must be put a stop to.

ROYAL COLLEGE OF SURGEONS.—Notice to Students.—The registration at the College will be open from Wednesday the 22nd to Friday the 31st of this month; and from Saturday the 22nd to Monday the 31st of March next; between the hours of ten and four, for the registration of students attending hospital practice, and lectures, in London, during the present session.—N. B. Students are required to produce the cards of admission to such lectures and hospital practice.

A new Journal has this week been started, called the *Medical Argus*. It appears to be conducted in the proper spirit. It opposes with force any formation of a third College unless necessity enforces the step. We give the new labourer a cordial greeting.

SCIRRHOUS PYLORUS.—At a meeting of the Birmingham Pathological Society, Dr. Fletcher exhibited a specimen of scirrhus contraction of the pylorus, to such an extent as only to admit a swan’s quill to be passed through it. During the lifetime of the patient, all the symptoms of obstruction at the pyloric orifice existed, with great distention of the abdomen, particularly below the left hypochondrium, where the great curve of the stomach could be distinctly recognised by its distended figure through the emaciated parietes.

TANNIN IN TOOTHACHE.—Mr. Druitt, in the *Provincial Medical Journal*, recommends tannin as a local application in toothache. He says, it will often be found, that the gum around a carious tooth is in a spongy, flabby condition; a little piece of it, perhaps, growing into the cavity. The ache too is often quite as much in the gum as in the tooth itself. But, be this as it may, when the tooth aches, let the patient wash out the mouth thoroughly with a solution of carbonate of soda in warm water; let the gum around the tooth, or between it and its neighbours, be scarified with a *fine* lancet; then let a little bit of cotton wool, imbued with a solution of a scruple of tannin, and five grains of mastic, in two drachms of æther, be put into the cavity, and if the ache is to be cured at all, this plan will put an end to it in nine cases out of ten. He is convinced that in most cases toothache is as curable as eczema or as pleurisy; the chief points being to open the bowels, put the secretions of the mouth in a healthy state, and apply some gentle astringent and defensive to the diseased tooth, till it is capable of being stopped by some metallic substance. The coarse, round, blunted tools that are generally sold under the name of gum-lancets,

only bruise the gum, and cause horrible pain. The lancet which he uses is sickle-shaped, cutting on both edges and finely ground; and if guarded with the middle finger of the right hand, may be used in the case of the most unruly children without any possible ill result.

CHRONIC HYDROCEPHALUS.—The case of a child, 17 months old, operated on by Sir John Fife, for chronic hydrocephalus, is reported in the *Provincial Medical Journal*. When three months old, it appears to have had acute hydrocephalus; it, however, recovered, and since that, to all appearance, has enjoyed good health, except that the head has continued to increase in size. It has got four teeth; can see well; and hear, perhaps, too acutely: the head is immensely large, twenty-six inches in circumference: ten from ear to ear over the occiput, thirteen from ear to ear over the vertex, fifteen from ear to ear over the forehead; the skull appears to be dilated pretty equally; the eyes slightly project; the upper part of the face at the orbits is broadened; at the base of the nose it is completely blue from the collection of veins which are placed there, and issue out over the forehead; the other parts of the skull are also traversed by numerous tortuous and enlarged veins. The child seems as intelligent as others at the same age. The operation was performed on the 22d of last October in the following manner:—Sir John Fife placed the child on the knee of a nurse, its head in a line with the spine, which was half recumbent; he then with a small trochar penetrated the membrane in the coronal suture and the temporal bone. After passing the trochar somewhat less than two inches, the stylette was withdrawn, followed by fourteen ounces of fluid, the first twelve of which were perfectly limpid, the last two bloody. Compression by the hands of assistants was carefully made on the head, and maintained afterwards by adhesive straps, and a long bandage, a little dry lint being applied to the wound. In an hour after the operation, the child looked rather pale, but otherwise appeared the same, and was sucking vigorously its mother’s breast. The report a fortnight after the operation was to the effect that the child was doing well, no bad symptoms having shewn themselves in the interim.

CASES IN MIDWIFERY.—Mr. Watson mentions, in the *Provincial Medical Journal*, a case where an artery in the labium was ruptured during labour. She was attended by a midwife. Two hours after delivery, the patient complained of pain and swelling of the right labium, bearing down, and discharge of blood from the rectum. She died on the third day. Upon examination, thirty hours after death, the perineum and surrounding parts were found injected with blood; the integuments of the abdomen emphysematous, a cavity in the labium lined with coagulated blood, and communicating with the rectum, through a laceration about half an inch in extent.

Metropolitan Mortality for the Week ending Saturday, January 18th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1010	1039	963
Zymotic, or Epidemic, Endemic, and Contagious Diseases	229	172	134
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	88	114	106
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	143	167	159
Diseases of the Lungs, and of the other Organs of Respiration	325	317	292
Diseases of the Heart, and Blood-vessels	37	25	24
Diseases of the Stomach, Liver, and other Organs of Digestion	63	64	1
Diseases of the Kidneys, &c.	8	6	6
Childbirth, Diseases of the Uterus, &c.	10	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	5	6	
Diseases of the Skin, Cellular Tissues, &c.	1	2	1
Old Age	88	89	70
Violence, Privation, Cold, and Intemperance	10	27	26

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SUMMARY.

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

Diseases of the Urinary Organs; continued.—We were yesterday considering the state of the urine connected with structural change in the kidney, and at the close of the lecture, we were noticing chronic albuminuria. This sometimes begins in a gradual manner, instead of commencing with acute symptoms; at other times, it is so formidable as to prove fatal in the incipient stage. Generally speaking, where the disease begins in a gradual form, the morbid symptoms are but little prominent at first, so that it is exceedingly apt to escape observation; and what is very probably the case, it affects but a portion of the texture of the organ only, so that the function is not so much interfered with, as seriously to endanger life. It is in this way that chronic change, leading to granular degeneration of the kidney, commonly begins, without any obvious or well-marked acute stage preceding it. Where, however, the acute stage is observed, the symptoms usually present are those of constitutional debility and weakness of the whole frame; the patient knows not from what cause, but he suffers increasing debility and loss of flesh; the skin exhibits a remarkable pallidity, not mere paleness, but a sallowness with it; various feelings of discomfort,—frequently rheumatic pains, flying about or uncertain, and affecting the joints, and sometimes the loins. There may be loss of appetite, and indigestion; and to these dyspeptic symptoms, the other feelings are very often referred. There are frequently symptoms affecting the head, giddiness, drowsiness, and sometimes a degree of palpitation of the heart; the breath is shorter than usual; the various other functions are imperfectly carried on; and, in fact, a low condition of the whole system is engendered. With regard to the urinary organs themselves, there is but little to attract attention; but sometimes it is observed, that the patient has to rise several times in the night to make water, unaccompanied with pain, but only a frequent desire, without the quantity being increased. The urine is rather scanty than otherwise, in the early stage, and of a somewhat deep colour: at times slightly turbid, but commonly there is no sediment. I have, however, known cases, in which there was considerable sediment thrown down. The colour of the urine, in the early stage, is commonly darker than usual though not always so; sometimes it is light and quite clear. The character distinguishing it, is, that it contains albumen in various quantities (less in the chronic than in the acute form), and (this is coagulable by heat, and nitric acid. The specific gravity of the urine is usually increased: it is about 10.15. There is generally a state of derangement of health, but this condition of the urine may go on for some time without attracting attention, until, from the general effect on the constitution, the various functions are interrupted, and some serious evil results. I may just observe, with regard to this disease, what I

stated in reference to many other structural changes, viz: how great an amount of disease may be produced gradually, and how much the functions of organs may be interfered with and superseded, in some cases, without attracting attention; we find the structure of the kidneys, the lungs, the heart, the intestines, or the liver, changed to a marvellous extent, and yet something like an appearance of health is sustained; but, by-and-bye, some mischief ensues, and then the system sinks under the shock.

Now, persons in this condition may be carried off by apparently trivial causes: any of the different circumstances I have mentioned, will excite an acute attack of albuminuria or nephritis; any of these circumstances, affecting persons already labouring under some chronic degeneration of the kidney, give rise in them to the most serious and alarming symptoms. The remaining healthy portion of the kidney, the little part that is still doing its function, being attacked with disease, the sole medium by which the excretion of the urine took place, is suddenly incapacitated. There may be suppression of urine, which is one way in which the disease proves fatal. Another effect is, that persons, labouring under this diseased state of the urinary organs, are more liable to be attacked by infectious diseases—diseases arising from malaria, or specific poisons—than are other persons, and when affected, they are more apt to be destroyed. Such persons, also, are more liable to suffer from erysipelas and low fevers, than others. The explanation is obvious. The kidneys are the excretory organs of the system; they are destined to separate the various noxious matters from the blood,—not only such as are formed within the system, as urea, but also poisons which may be accidentally introduced; and, accordingly, we find it stated by Orfila, that small doses of arsenic, given to various animals, produced no poisonous effect, so long as the action of the kidneys remained free. No doubt, in cases of disease arising from poisons, it is the office of the kidneys to separate the noxious matters. When, then, these excretory organs are impaired by structural disease, they are unable to do this work, and, therefore, it is, that persons suffering from chronic disease of the kidney, are apt to die from infectious diseases. They are more subject to inflammatory affections, and fevers of all kinds. To understand this, we must bear in mind the important function the kidney sometimes has to perform, in the course of fevers. In any febrile disease, when it has reached its height, and when the symptoms begin to turn, there is always an increased deposit in the urine; whether this is the cause or the effect of the subsidence, of the former we cannot stop now to enquire; but the fact is certain; and this implies an amount of increased action on the part of the kidney.

I have mentioned that cold and other causes may develop the acute disease, and tender these circumstances, there may be dropsy, or some of those affections of the mucous membranes, which I have already described; or else, supposing all these things not to happen, slower and insidious changes will occur. The prevention of the proper excretory function, of the kidney or interference with it will greatly impair the condition of the blood. This

in the acute disease, is produced in a striking manner; the quantity of albumen in the blood is singularly reduced, and the quantity of colouring matter, too, and the chronic disease produces the same effects; but more gradually; and this is the great cause of the cachectic sallow appearance of persons affected with this granular degeneration. This absence or deficiency, of albumen in the blood is shown by a disposition to effusion in various parts—fluxes and dropsies of all kinds. Thus, therefore, as the disease goes on, dropsy may supervene, not suddenly as in the acute disease, but gradually. The dropsy may affect the lower extremities first, and by and by, it will extend, and anasarca take place. Sometimes there are other affections induced: nutrition is impaired;—that function, by which the growth of the textures is supplied, becomes degraded: and no wonder, from the state of the blood, and the absence of material from which these textures are formed. Again, there seems to be a sort of relation between the state of the constitution, and the degree of colouring matter in the blood; where the colouring matter is abundant, there nutrition is usually active and good; but if the colouring matter be reduced in amount, the plastic process is also reduced in character, though not always in degree; the nutritive process may be active, as we see in tuberculous diseases, where there is no diminution of plastic deposition, as far as quantity is concerned, but it is reduced in standard. The nutritive material is of a low or degraded character, and any new deposit that takes place, presents a less organised property, than in the natural condition. This is what we call, the caco-plastic exudation. The effects of this are shown in various parts of the system. For example, in connexion with granular degeneration of the kidneys, we frequently find the lungs exhibiting signs of tubercle. The liver, too, is affected, and becomes seriously deranged. Even the coats of the blood-vessels are more or less changed in appearance. Opaque spots, which are so frequently met with in old persons, are found here and there. They may be seen, not only in the great vessels in the vicinity of the head, but also in the distant arteries, and the vessels of the brain; and in consequence of this, there is a disposition in the arteries to become brittle, and they are more liable to rupture; or at any rate, this modifies the circulation of the blood to a considerable extent, and, therefore, this disease is apt to terminate suddenly by sanguineous apoplexy. Hypertrophy and dilatation of the heart are additional elements in this diseased state of the whole system, occasioned by the imperfect constitution of the blood. Other changes, too, are apt to occur; chronic diarrhoea, terminating in ulceration of the intestines; chronic dyspepsia leading to ulceration of the stomach; such are the effects which are observed to occur in long standing cases of granular degeneration of the kidney. I might go through all the chronic diseases of the system, were I to enumerate the symptoms which have been found in connexion with this form of the malady; but remember, they are merely a part of the degradation of the whole system, and depend on the primary diseased state of the kidney. The result most commonly noticed, as a sign and symptom of granular degeneration of the kidney,

is dropsy, gradually supervening in the form of anasarca, and which may appear and disappear again and again; and if this occurs repeatedly, without serious disease of the heart, you may be pretty sure that there is some degeneration of the kidneys. But, besides anasarca, there may be effusions into the serous cavities, as—pleurisy accompanied with effusion or ascites, this latter disease being attended by a low kind of fever. These are inflammations excited by the excrementitious matters, retained in the system, and causing irritation. Now, this may occur in what is called the early stage of granular degeneration, in which the granules are conspicuous, and the kidneys are somewhat enlarged. If the disease goes on, it may reach the second degree of the chronic disease,—the transition from one to the other being quite gradual, and this is the stage in which the organ is contracted and atrophied, and there is a wasting of the texture; what we find to occur in similar stages of cirrhosis of the liver. The granular matter is deposited around the vessels, and compresses their structure, and, inasmuch as the vessels are pressed upon, the blood is incapacitated from passing through them; the nutritive source is thus destroyed, and there is a wasting away of the tissue; hence the general bulk of the organ, is reduced in proportion as the disease advances. Now, besides the symptoms, indicative of the progressive increase of the affections I have mentioned, there is usually a change in the condition of the urine, that it is important to notice. As the disease advances, the urine sometimes becomes, less albuminous and more watery, and contains less urea than before. The quantity of fluid excreted may be increased—it may be considerable—but it is mere water. The traces of albumen are very slight, and why? You see the congested state of the organ in granular degeneration and in consequence of this congested state, the function of the part is altogether superseded; there is no room for the solid parts of the blood to pass through, and the watery portion alone is excreted. There are often found, after death, on the surface and in the substance of the cortical part of the kidney, serous cysts, which are not at all uncommon in connexion with granular degeneration. There likewise appears to be obstruction of the tubular structure or uriniferous ducts.

In this condition of the kidney, we often find the biliary ducts loaded with serum instead of bile. Their structure seems to be modified, secreting serum and some gelatinous matters, instead of natural bile. Persons in this extreme stage, when the kidneys have become wasted to such a remarkable extent, may become suddenly dropsical, and die comatose. They are said to die of serous apoplexy; but it is really the result of a general change taking place—the whole system is poisoned—poisoned by its own secretion. It is a matter of wonder, that they can live so long, under these conditions; but I think there is no doubt, that, under such circumstances, some other organs take on the action that is wanting in the kidneys. This idea has not, however, been proved yet. Probably the intestinal canal assists in getting rid of the urea, which cannot be eliminated by the kidneys. This is matter for further inquiry.

Now, the causes of this affection are, among others, attacks of scarlatina, particularly when the treatment for congestion of the kidney, after this fever, has been neglected, as it very commonly is. It rarely attracts attention, until dropsy comes on. The disease, supervening on scarlatina, may be generally but not always overcome, by blood-letting. Scrofula may be considered as one of the causes of granular degeneration, inasmuch as it leads to a degradation of the textures of the whole system. By scrofula, I mean tuberculous disease, and accordingly whenever you find phthisis present in the chronic form, the kidneys are generally more or less affected. Intemperance in drinking is, perhaps, one of the commonest causes of chronic granular degeneration of the kidneys. It is with habitual drunkards—those who indulge to excess in spirituous liquors, that we chiefly find this disease. Sometimes, the liver suffers most, in these cases, but at other times, the kidneys may be affected. In practice you will often find a continuance of bad diet and low living,

an existing cause of this disease, particularly in cases where persons have formerly been in the habit of living better. Under these circumstances, disease will be developed in a wonderfully short time. It has fallen to my lot to see many such cases. This is obviously from the effect of poor living, on a deteriorated condition of constitution. Rheumatism and gout have also been supposed as causes. In fact, we know that both these diseases are connected with imperfect action of the kidneys, and that they may predispose to affections of these organs. Chronic diseases of the heart are, likewise, frequently connected with this affection, more particularly such as are of a congestive character. These cases, if unchecked, soon run on to structural disease. The tissue of the heart is not altered, so long as there are powers in the system to throw off the superfluous or morbid matter. The excreting organs will continue to act for a time under the presence of acute attacks, but, by-and-bye, the continued congestion of the organs produces structural disease, and then the function of circulation and assimilation is no longer carried on with regularity; the patient becomes dropsical, with weakness and loss of strength; palpitations take place, and general anasarca supervenes. I need not dwell long upon the nature of this disease. I think from what I have said, you are pretty well prepared to see its true nature. It may be regarded as one of the curious effects of a degraded nutrition, developed in an organ under a state of congestion, or rather of increased action, bordering on inflammation. Sometimes, there may be actual inflammation present. The deposit which takes place in connection with this congested state, is of a low character, which, instead of tending to the nutrition of the texture, supersedes its action altogether. On examining kidneys in this condition, you find the cortical substance greatly reduced, perhaps being only one or two lines in diameter, and the tubular structure may also be shrunk. Another fact I have to draw your attention to, is that in the lower portions of the kidney, this disorganization is perceived more than in the upper parts; so also, in regard to disease of the liver—the nutmeg liver, or cirrhosis of this organ—the lower, or most dependent parts, are usually those most affected.

Now, the treatment of this affection will be the same as for acute nephritis, but pursued on a much more moderate plan. The patient, in fact, may not have strength enough left to bear an energetic treatment. Cupping at the loins may be serviceable; hydragogue purgatives, given again and again, for some days together, are also highly useful, in freeing the system of the excrementitious matter which the kidneys have failed to evacuate. These are the best means of getting rid of dropsy, when dependant on chronic albuminuria. The hydragogue purgatives and derivants may be continued for some time, along with external counter-irritants, with warm and vapour baths, keeping warm clothing on the skin. The counter-irritation may be applied to the loins, either by a repetition of blisters or rubefacients, croton oil, tartar emetic ointment, or setons, and so forth. In giving remedies to excite the action of the kidneys, you must proceed with discretion, lest you set up too much irritation in these organs; tincture of cantharides, digitalis, cream of tartar, and iodide of potassium, are the diuretics that we find most useful in these cases. Sometimes purgatives are useful in relieving the inflammatory symptoms; colchicum, also, has a similar effect; this latter may be usefully combined with a narcotic,—tincture of henbane, or opium. A great deal of the treatment will consist in palliation. It is of great consequence to avoid any aggravating causes, such as exposure to cold, considerable exertion, irregularities of diet, or any thing likely to excite the action of the kidneys; or suddenly any circumstances calculated to produce febrile disease. In the intervals between the use of hydragogue purgatives and the diuretics, which I have been mentioning. Tonics are found useful. This latter class of remedies in combination with the former, is often found very advantageous. But, with regard to the use of tonics you must feel your way. The best are: quinine-

nitric acid, combined with cascarilla, iodide of potassium, sarsaparilla, &c. In those cases, where the anæmia is the great indication to combat, iron may be used with advantage. Avoid all irritating sources, or exposure to cold; and, at the same time keep the bowels free. The bowels seem to act vicariously on the kidney. We shall, in the next lecture, have to notice suppression of the urine.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c., &c.

(Continued from page 359.)

TUBERCLE.

THE term TUBERCLE (dim. of *tuber*, *e tumere*, to swell) properly signifies any excrescence or protuberance of an animal body,—either a morbid addition to such body, or an unnatural growth of any circumscribed portion of its integrant parts. It was employed by Hippocrates to designate all kinds of tumours and swellings, though he emphatically applied it to diseased conditions of the lungs—*schirrous steatomatous, cold, indolent, inflamed and suppurating*. (1) Galen, Alexander Trallian, Senertus, and other more modern writers, have used this word with a like signification; but by the pathologists of the present day it is conventionally restricted to a specific kind of morbid deposit of variable appearance, yet constant in its varieties to which either sex, and every age, and all living tissues, are liable. Certain periods of life, however, and certain organs, are more favourable than others to the deposition of this tubercular matter.

To give an account of the different theories which at different times have been advanced in explanation of the nature and origin of tubercle would be foreign to the character and purpose of these pages; and to furnish faithfully, and in due order, such a history, would be almost a labour of a life-time, so many and so various must be the subjects comprising it. Nevertheless, among the endless authorities upon the pathology of tubercular disease, a few are deserving to be noticed in our glance—some, from the respect which is due to distinguished names, and other from any marked peculiarity or propriety in the individual opinions.

Hippocrates attributed the formation of tubercles in the lungs to a putrefaction of phlegm (bile). (2)

Wepfer, in speaking of tubercles, which he called *grandines*, expresses a belief that they are lymphatic glands, distended with juices that are nutritious. They finally, he says, inflame and suppurate. (3)

Boerhave imagined that consumption arises from the conversion of all the blood and chyle into pus.

Bonnet and De Haen classed tubercles among many other formations having a cystic origin.

Sauvages considers tubercles to be lymphatic glands, crested in the bronchial glands;—"lymphatic glands, crested in glandulis bronchialibus." (4)

Tralles supposed tubercles to be either diseased bronchial glands, or vesicles distended by viscid humors. (5)

Zamponius affirms that they are only an aggregation and inspissation of the natural mucus of the air passages. He says, if they continue without exciting irritation or inflammation, they cause asthma; if they irritate and inflame, phthisis is the result. (6)

(1.) Aristotle mentions tubercles (*grandines*) in pigs, and says, that their flesh is sweeter (*caulicior est*) when these tubercles are present in small number.—Histor. Animal, lib. viii.

(2.) On Internal Affections.

(3.) Miscellanea Curiosa, vol. 19.

(4.) Nosol. Method., ed. Amst. 1768, vol. p. 453.

(5.) Usus Opii Salubris et Noxius, Breslau 1757-62.

(6.) Comment. de Rebus in Scient., Naturali, Medicina Gestis., Lips. 1760, vol. 9, p. 323.

Reid says that tubercles arise from an obstruction of the exhalent vessels, caused by the viscosity of their contents.(7.)

Raulin thinks that they are chiefly formed from animalised chyle stagnating in the lungs.(8.)

Rush says they are a collection of an inorganic mucous substance.(9)

Laennec, without commenting upon their specific nature, classed them amongst cancerous, melanotic, and encephaloid structures.

Baron and Dupuy believe them to be transformed hydatids.

Broussais imagined them to be of an inflammatory origin, and for the most part to resemble inflammatory products.

Magendie thinks that they are originally pus, which becomes hard by the absorption of its watery part. Cruveilhier and Lallemand have adopted his notion, believing that the concretion occurs in the venous capillaries.

Hodgkin also considers tubercle to be "most closely related to pus and puriform secretions." (10)

Gendrin says that this matter is derived from small clots of effused blood.

Armstrong simply observes that it is a secretion from the ultimate ramifications of arteries (11)

Dzondi, Ritter, and Lohrinsler, are of opinion that it is the matter of exhalation accidentally agnate. *Preuss Tuberculum Pulmonis Crurum Analysis Chemica.* Berol, 1835, p. 14.

Thackrah calls tubercles "cartilaginous bodies." in the *Effects of Arts, Trades, &c. on Health.* 2d edition, p. 93.

Andral says "tubercle is produced by the perspiratory secretion, of which it appears to be a morbid alteration," and that "it must be considered as the result of a modification or perversion of secretion, which is often attended or preceded by an active sanguineous congestion." (12)

Carswell says nothing positive concerning the nature of tuberculous matter, but seems to consider it a consequence of morbid nutritive function, and somewhat analogous to coagulable lymph. (13)

Gilbert, in his *Pathology of Phthisis*, has attempted to establish the fact that the disease consists primarily in a want of discriminating power in the mouths of the lacteal vessels, whereby they are so far changed from their natural state, to admit those inorganizable parts, the residue of the materials of nutrition, which in their normal and healthy state they instinctively reject." (14)

Lugol, in his *Observations on Tubercles*, considers "their formation to be an *epigenesis*—organized matter capable of nutrition, similar to parasitical growths in other parts, such as in the case of hydatids, intestinal worms, and pediculi." (15)

Dr. Williams is of opinion that tubercle is simply inorganizable albumen, a product of low and morbid vital action. (16)

Dr. Watts, of Dublin, believes it to hold an intermediate place between pus and coagulable lymph. (17)

Carpenter says it is an inorganizable albumen, deposited by a perversion of the ordinary process of nutrition," which "in persons of a sound constitution, would have had the form of organized lymph." (18.)

Gerber speaks confusedly of a great variety of

tubercles, but the scrofulous tubercle he believes to be formed by "local stasis in the blood vessels" (owing to their minuteness, (19) or to any injury, they may have sustained) of the "concrescible and more or less organizable elements of the general circulating fluids." (20)

Mr. Addison, of Malvern, who has lately paid much attention to the subject of tubercular formations, and has experimented with much ingenuity, affirms that "tubercles are composed of abnormal epithelial cells." (21) "Tubercles of the lungs," he says, "are composed of objects originating from blood corpuscles, which have been arrested in their circulation through the minute vessels of the structure of the air cells. So long as this retardation is confined to the colourless corpuscles, the morbid actions which ensue are strictly those of an abnormal nutrition, and various forms of imperfect and degenerated epithelium are the results, &c." (22)

The foregoing references sufficiently attest the uncertainty of our knowledge of the pathology of tubercle, despite the many and the accurate observers who have been engaged in its elucidation. It will readily be seen that nearly every experimental inquirer before Addison, was satisfied with the appearances which a post-mortem of phthisis presented to the naked eye, and his description of tubercle was consequently vague and most uncertain. (23) It was said to be at one time in little masses, like millet seed,—solitary or aggregated transparent or opaque; and at another, (its advanced stage) to be friable, cheesy-looking, and prone to decomposition. And this was the extent to which analytical definition was carried upon the subject of this most important pathological deposit. Conjecture went a little further, and suggested that it might be pus, or mucus, or albumen, or fibrine, or fat, or an heterologue mass, "like dirt or clay," thrown off from the blood in this place or in that, as accident or some specific cause might determine.

It must be obvious that conjectures and descriptions like these, were not calculated to advance us one single step in a knowledge of the intimate pathology of tubercle. Nor did they advance us. They neither inform us of the nature nor of the origin of tubercle, and they left us utterly ignorant of the circumstances which might occasion its local or constitutional formation.

The great desiderata in the investigation of this subject, have been, until lately, analytical chemistry and the microscope. The one, to inform us of the composition of tuberculous matter in its different states; the other, to explain to us the successive stages of its development and decay. For it is a self-evident truth, that if the composition of tubercle varies with its age, &c., such variation must be dependent upon chemical or vital laws. This question is important in the pathology of tubercle, and chemistry aided by physiology, is alone competent to answer it. It must also be equally apparent that the only mode in which we can attain to any accurate knowledge of the origin of tubercle, and the causes determining it, is by carefully examining it in all the phases of its progress, and tracing its growth (in comparative examples) from its earliest formation, up to the condition which we believe to constitute its complete development. To this end, the services of the microscope are indispensable.

These only are the means by which we can hope to arrive at any safe or satisfactory conclusions.

(19.) As Campbell (*Observations*) has lately asserted, after some French Physiologists, of the pulmonary capillaries of strumous subjects.

(20.) *General Anatomy*, Translated by Gulliver, pp. 303-4.

(21.) *Transactions of the Provincial Medical and Surgical Association*, vol. 11, p. 287.

(22.) *Op. Cit.*, pp. 297-8

(23.) Gulliver, Lebert, and others, it is true, have employed microscopical investigation extensively upon the subject of tubercle, but they have almost exclusively confined their observations to tubercle in its crude or softened stage, instead of tracing its various phases from elemental to perfect formation.

The appearance of tubercle varies with its age its degree of maturation, and its locality.

In prosecuting this subject, I find it most convenient to treat of tubercle according to what may be termed the natural history of its formation. This embraces two particular and definite stages;—viz.: its primitive, or developmental, stage, and its matured, or complete stage; to which, however, may be added a third, not connected with the formative process of tubercle,—viz.: its softened or decomposing stage.

By the term primitive stage, I mean that which is antecedent to the conversion of any or all of the tubercle into a yellowish, cheesy-looking, friable mass; the matured state, which I believe to be the result, for the most part, of an imperfect and depraved organic action in the tubercular body itself, is indicated by the total conversion of this body into the mass whose appearance I have just described; the softened stage is consequent upon a play of chemical affinities amongst the ultimate constituents of the tubercular matter, and represents various degrees of structural disintegration, fluidity, and rottenness.

I have said that the appearance of tubercular matter varies with its age. By this, I wish to be understood to signify that in the first stage of tubercular deposit, (no approach having been made to the second), and in the second, (no approach having been made to the third) there may be much variety in consistence and aspect, the consequence, simply, of the length of time the tubercle has been deposited, and the amount of accidental physical change it may have undergone.

Tubercular matter may be formed either in the blood-vessels, or externally to them. But wherever tubercle is produced, the blood itself is essentially the source of it.

In the cells of the spleen, tubercle is more frequently found than in proper blood-vessels. In that organ "we can perceive the blood coagulated in one cell, coagulated and deprived of its red colouring matter in another, and in a third, converted into a mass of solid fibrine containing in its centre a small nodule of tuberculous matter." (24) Indeed, it is asserted that "tuberculous matter can be seen forming (in the blood of the spleen) at some distance from the walls of the cells in which it is contained." (25) Dr. Reynaud, of Paris, who has devoted much time and attention to the tubercular disease of monkeys, has repeatedly found tubercular deposits of various magnitude in the centre of clots of blood in the spleen cells. These deposits were sometimes of considerable size, and softened in the centre, though completely enveloped by clots of blood. (26) Gendrin so frequently found local effusions of blood nucleated by tubercular matter, that he believed them to be the invariable source of this morbid product.

In those cases, numerous enough, in which tubercle is discharged abundantly, and in a state of complete maturation, from the mucous membrane of the tracheæ, or bronchiæ, or bowels, without any lesion of these parts, such matter must have been formed and matured in the circulating system, whence it was eliminated as a foreign body, by the most eligible outlet.

In the products of inflammation, also, both solid and fluid, tubercular substance has repeatedly been found. It has been seen floating in the liquid of pleurisy, peritonitis, hydrocephalus, and hydrocele; and as frequently scattered or centred amid the lymph effusions of serous cavities. In a case of fatal pericarditis, which ran its course within thirty-four hours, I observed in the adventitious deposit on the surface of the heart and the interior of the pericardium, numerous tubercles, primitive and perfect—some fluid and transparent, some semi-solid and opaque, and others friable, granular, and well matured. In the plastic lymph effused into each cavity of the chest, in a case of fatal pleuritis which terminated in sixty-four hours from the commencement of the attack, I

(24.) Carswell, *Cyclop. of Practical Medicine*, vol. 4, p. 254.

(25.) Carswell, *loc. cit.*

(26.) *Archives de Medicine*, T. 25.

7.) *Essay on the Nature and Cure of Phthisis pulmonalis*, Lond. 1782.

8.) *Traite de la Phthisie Pulmonaire*, 1784.

9.) *Medical Inquiries*, Philadelphia, 1793.

10.) *Lectures on Mucous Membranes*. Lec. 16.

11.) *Morbid Anatomy of the Bowels*. Lond., 18.

12.) *Pathological Anatomy*, Translated by Townsend and West, vol. 1, pp. 518 and 540.

13.) *Illustrations of Elementary Forms of Disease*. Art. Tubercle.

14.) *Pulmonary Consumption; its Prevention and Cure Established on New Views of the Pathology of the Disease*. Lond. 1842.

15.) See *Transactions of Provincial Medical and Surgical Association*, vol. 11, p. 83.

16.) *On Diseases of the Chest*, 4th edit. p. 165.

17.) *Dublin Journal of Medical Science*, March, 1842.

18.) *Physiology*, p. 497.

discovered tubercular matter in its various stages, from primitive formation to softening, though not a single trace of tubercle could be met with in the lungs. (27)

If we examine, with a good microscope, the slices of the less diseased portions of the lung of a person who has died of phthisis, we usually recognise a great variety of elemental tubercular matter. The following are the chief of its appearances. Granules (resembling in aspect those of germinal cells and of pus globules) varying from 1-800th to 1-1600th of a line in diameter; aggregated granules, easily detachable from each other, forming an opaque mulberry-shaped mass of variable size; cells, or vesicles, from 1-2500th to 1-1160th of an inch in diameter, of different degrees of transparency, density, and development, the complete ones consisting of an envelope and a contained albuminous fluid, (28) with or without central or peripheral granules; and flakes or filaments of all shapes, apparently derived from ruptured vesicles. The cells or vesicles are often of larger size

(27.) In healthy subjects, on the contrary, the fibrine which is effused in inflammation, the plastic exudations on a cut surface, and even the coagula which form in the blood-vessels after death, display evidence of incipient organization. Granules may be seen in the mass, many of them assuming the appearance of commencing cell development. Sometimes, indeed, complete cells are met with. So much for the different states which the organizable principles of the body are capable of taking.

(28.) Some authors, whose observations would appear to have been rather carelessly and hastily made, have denied that primitive tubercular vesicles (miliary tubercles of Laennec) ever contain a fluid matter. It is true that they are commonly found in a solid or semi-solid form, because it seldom occurs to us to examine any organ containing them until some time after their deposition, and they have had an opportunity of hardening through an absorption of the watery part of their contents. But I believe that their albumen is always originally in a liquid state. Besides that the analogy of healthy function and formation entirely supports this idea, it has often occurred to me in dissection, to find tubercles in a fluid vesicular form, which I am satisfied is one of the earliest definite stages of their growth. Hodgkin says of this deposit: "it is often found including the tuberculous matter, though it may be also seen by itself. Its degree of consistence admits of much variety; sometimes it is almost fluid, or admits of a colourless watery part escaping from it under pressure, &c." (Lectures, vol. 2, p. 137.)—Andral remarks: "I think it probable enough that tubercle is in the fluid state at the moment of its deposition." (Path. Anat. Trans. by Townsend and West, vol. 1, p. 512.)—Schröder van der Kolk has observed in the lungs of subjects who have died of phthisis and of other diseases, vesicular tubercles that have coagulated by contact with alcohol. (Obs. Anat.—Pathol. et Pract. Argument. Amstel., 1826. Fasc. 1.)—Preuss has made the same observation, and he concludes: "satis probatum esse videtur, tubercula primo ortu esse fluida." (Tuberculorum Pulmonis Crudorum Analysis Chemica, Berol., 1845, p. 11.)—Dr. Kingston has observed them in a liquid state. (Med. Chir. Trans. xx, p. 310. We know that secretions are all of them originally fluid; we know the common facts of observation and the laws of analogy, liken tubercle, both in its character and mode of formation, to a genuine secretion; we know that it is often met with in a fluid form, and having all the evidence of being a stage precedent of that of opacity and hardness;—is it not, therefore, justly to be inferred that tubercle, in its earliest development from its elements, (granules) is always in a state of fluidity? We can readily understand how a transparent secretion may acquire hardness or opacity, but we cannot understand the reverse of this in the animal economy. Yet, either this reverse must occasionally happen, or crude tubercle must be produced in a variety of ways and from a variety of materials, or its earliest developed state must be, as I have said, a state of liquidity.

than those just mentioned, especially in the lungs, liver, and mesentery of tame rabbits, (giving rise to the fanciful notion that they are hydatids) and in the scrofulous peritoneal deposits of pigs, but in the human subject they are more rarely found of any magnitude. If the point of a very delicate needle, sufficiently heated, be passed into the interior of one of these transparent vesicular tubercles, it instantly becomes opaque throughout, from a coagulation of its albumen. This change also takes place spontaneously, at indefinite periods after the development of the vesicular tubercle, commencing either at their circumference or their centre, and is generally the precedent of the phenomena of maturation. This opacity not unfrequently occurs, and is not succeeded by any further change in the substance of the tubercular matter. Often, the vesicular tubercle enlarges so as to be readily visible by the naked eye, before becoming opaque, and, as often this opacity occurs, the tubercle remaining microscopically small. Under other circumstances, the vesicular tubercle will gradually increase in solidity, and finally become firm and hard, whilst retaining almost unimpaired, its original transparency. In this state it looks like a rounded particle of very delicate horn.

Vesicular tubercles are differently shaped; they vary with their locality; some are globular,—some disc-like—some oval—and others irregularly angular.

Occasionally, when the vesicular tubercle has not proceeded to the stage of maturation, but has had the watery parts of its contents absorbed, the envelope shrinks, and consequently may become crenated, wrinkled, ragged, and variously misshapen.

As to the process of tubercular deposition in the lungs is generally to a certain extent in conformity with the laws which determine the formation and regeneration of normal tissues, it not uncommonly happens that the tubercle attaches itself closely, and somewhat complicatedly to the parenchymatous structure, and can only be separated from the latter by force, when it generally brings away with it a quantity of minute fibrous or mucous material, which gives to the circumference of the tubercle, when placed in water, a tomentose-appearance. This external covering was first described by Rochoux, who, however, erred in considering it an invariable occurrence, and an appendage peculiar to tubercle, instead of what it really is, an adventitious and only occasional attachment.

Other appearances than those which I have described as belonging to tubercle, appertain to its advanced stages, and are generally recognizable by the naked eye.

(To be continued.)

REPORTS ON DISEASES OF FEMALES

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 339.)

S. V., æt. 34, mother of six children, has also had two miscarriages.

Sept. 28, 1844. Complains of constant severe pain in the left hypogastrium and groin, increased by the erect position, by the passage of solid fæces, and by a distended bladder; but most of all at the menstrual periods, beginning to increase in severity for a week before the discharge appears, and continuing during the whole time.

Examinatio per Vaginem.—Nothing unnatural to be felt except tenderness on the left side of the vagina, at its upper part, in the direction of the left ovary.

Examinatio per Rectum.—The left ovary is just capable of being reached by the finger, it is very tender to the touch.

R. Pil. hydrarg. extracti hyoscyami aa. gr. v. o. n. Hirudines viii. ano.

October 5. Leeches bled much with relief. Fæces pass with greater ease. Bowels open only every other day, dark and slimy. Pain in left hypochondrium diminished.

R. Pil. hydrarg. extracti colocynth. co. aa. gr. v. o. n.

R. Aquæ meathæ viridis, aquæ distillatæ aa. 3vss., acidi sulph. dil. mx., syrupi rhæados 3ss., magnes. sulph. 3j. M. Ft. haustus om. mane sumend. hirudines vj. ano.

12. Evacuations more natural, pain of groin still further diminished, although she complains of a feeling of soreness about the part, less irritability of bladder, expects the catamenia in a week.

Pergat, hirudines vj. ano.

The symptoms enumerated in this case are those of well-marked inflammation of the left ovary, with evidences that the organ is generally swollen, as shown by the circumstance of the pain being increased by the erect posture, by a distended bladder, and particularly by the passage of solid fæces, and still further confirmed by the ovary being distinguishable by the finger *per rectum* and extremely tender.

The exciting cause of her disease may be referred with some probability to the two miscarriages which she had, and which are known to be frequently attended with much ovarian irritation. The state of general congestion of the ovary did not indicate the tartar emetic ointment in the first instance, but rather that of leeches, and the application of them by means of a tube passed up the rectum was followed by marked relief; they were repeated with still further amendment, and having thus relieved the more immediate symptoms, I should probably have applied the ointment to the left hypogastrium, on account of the irritability of the bladder which still remained, and which I considered as an indication that the anterior portion of the ovary was not entirely free from inflammatory action, but having experienced considerable amelioration in her symptoms she ceased to attend.

E. G., æt. 32, mother of three children, eleven years between her two last pregnancies, the youngest child is thirteen months old; melancholic temperament.

June 30th, 1842.—Complains of pain in the left ovarian region which is of nearly two years standing, with intense pain in the direction of the uterus on sexual intercourse, it is also produced by the passage of solid fæces, and by setting down suddenly on a hard seat; has a thick yellow discharge; slight gastric derangement; fulness and throbbing about the anus, but no lancinating pains; catamenia have been regular until the two last times.

Hirudines vi ano. R. Pil. hydrarg. extr. coloc. ext. hyoscyami aa. ʒj. M. Ft. pilulæ xij. sumat ij. h. s.

R. Acidi hydrochlor. dil. acidi nitrici dil. aa. ʒij., syrupi aurantii ʒj., aquæ cinnam. ʒiss. M. Ft. mist. cujus sumat cochl. min. j., ter die ex aqua lotio plumbi in vaginam m. n. injiciende.

July 11th.—Leeches did not bleed much, but relieved the pain. Evacuations dark and offensive; tongue foul, with an unpleasant taste in the mouth; catamenia have appeared slightly since her last visit, and without pain. Much pain in the direction of the left ovary increased by standing erect.

R. Hydrarg. chloridi, extracti hyoscyami aa. gr. v., M. ft. pil. ij. hac nocte sumendæ.

Sumat magnesie carb. cochl. min. j. et sulphuris precipitati cochl. min. ʒ om. mane ex aqua.

R. Hydrarg. c. creta, pulv. ipecac. co. aa. gr. v. mist. acaciæ q. s. ut ft. pil. ij. o. n. s.

15th.—Still in much and constant pain of left hypogastrium; motions dark and offensive pergat.

27th.—Bowels regular; evacuations healthy; tongue clear but pale; no leucorrhœa. The pain in the left hypogastrium is as bad as ever, with much pain on sitting down, or on the passage of fæces.

Examinatio per vaginam.—Os and cervix uteri hard and swollen, situated in the centre of the pelvic cavity, cervix is intensely tender on its anterior surface, pressure here brings on pain in the left hypogastrium.

R. Ferri sulph. gr. ij., extracti lupuli gr. v. M. Ft. pil. ij. o. n. s.

Rep. Mistura nitro-muriatica ter die et magnes. carb. c. sulphure o. n. hirudines vj. ori uteri.

August 5th.—Leeches bled profusely; still complains of pain in the direction of the left ovary; has also pain towards the left hypochondrium; no leucorrhœa; pergat medicamentis.

11th.—General health improved; no leucorrhœa; says that the pain in left hypogastrium is increased, pergat.

R. Unguent. antimonii potassio tart. hypogast. sinistro m. et n.

August 20.—The ointment has brought out only a moderate quantity of eruption, but the ovarian pain is better; complains of much pain through the pelvis, and that there is prolapsus ani when the bowels are moved; considers herself better in her general health; omitt. pilulæ et mistura.

R. Extracti taraxaci cochl. min. $\frac{1}{2}$ omni nocte ex lacte.

Rep. magnes. c. sulphure o. m.—Ha beat enema aquæ tepidæ o. m.

26th.—Is better in general health; no leucorrhœa; feels stronger; has still much pain in left hypogastrium, and lower part of abdomen, on slight exertion; complains of rheumatic pains in her limbs; the urine is natural.

R. Pulv. guaiaci. magnes. carb. o. m.: rep. taraxacum et enemata.

Sept. 2nd.—Still much pain in the left groin; much bearing down.

Examinatio per vaginam.—Vagina very loose and prolapsed; os uteri low in the pelvis; cervix long and hard, not very painful; beyond the cervix the uterus feels soft. She says, I did not reach the seat of pain towards the left side, which was very much increased by the menstrual period last week.

Rep. magnesiae carb. c. sulphure om. mane.—Omitt. alia.

Rep. ung. antimonii hypogastrio sinistro.

12th.—Although the ointment has at last produced a very copious eruption; she does not feel herself much relieved, but seems to refer the pain more to the region of the left uterus; there is no leucorrhœa, and her general health is good; the pain is always easier after resting, and increased by moving about.

Rep. taraxacum.—Omitt. alia. Emplast. opii lumbis.

23rd.—Much out of health; constant suffering. Bowels confined; urine turbid; aching limbs; general lassitude; is losing flesh. I prescribed an artificial mineral water, in the hopes of it acting as a general alterative, but it seemed to do her no good, and she ceased to call upon me until

Aug. 27th, 1844.—No improvement whatever, there is the same pain in the left ovarian region, increased at the catamenial periods: it comes on a week before the discharge, and continues for a week afterwards. The discharge is dark, very sparing, without clots or exsudations, never lasting beyond a day, and sometimes only for an hour or two. She has also a severe pain at the lower edge of the left hypochondrium (see Aug. 5th, 1842), darting back to the left kidney, increased by holding her water for some time, or by taking such food as renders it high-coloured and turbid. This pain is quite distinct from the ovarian pain. On passing water, she always experiences a sharp, cutting feel at the orificium urethræ. Severe pain during sexual intercourse; complains of the same rheumatic pains she had two years ago; and, for the last three months, has distinctly noticed the escape of flatus from the vagina.

Examinatio per vaginam.—Os and cervix uteri rather low and firm, but, in other respects, natural; pain is produced by pressing the finger in the direction of the left ovary. Uterine sound passes easily to the distance of one inch and a half.

Examinatio per rectum.—Uterus appears natural. Left ovary almost in contact with the left sacro-iliac synchondrosis, and intensely painful to the touch.

30th.—I applied the leeches *per rectum* very effectually, and threw up some water afterwards, as warm as she could bear it. On rising from the sofa, after the application of the leeches, she remarked that the pain, which had never left her for the last two years, had *entirely* ceased.

Sept. 13th.—On returning (Aug. 30), the catamenia appeared the same afternoon, which was two days before she expected them. The dis-

charge came on suddenly, after a sharp pain which transfixed the pelvis from before backwards, and lasted only an hour, which of late has been the ordinary duration; it was thick, and darker than usual. The pain of the side returned; but has not been giving herself a fair chance, having been in considerable anxiety about her husband, who is ill, and sitting up for several nights to nurse him. She is obliged to sit with the left leg crossed over the right knee, to relax the left groin as much as possible; and tells me that, at home, she is obliged to stand for hours with her left foot on a chair, so as to gain a little ease. The pain is greatly increased if she assumes the erect posture: says that the groin feels very full and swollen, but no swelling externally is to be perceived. When she stands erect, or presses the left groin, something painful seems to press upon the rectum, at the part where I applied the leeches. Her general health is good: is now at the half-way time.

R. Ung. antimonii potass. tart. hypogast. sinistro.

Sept. 20th.—Eruption came out freely on the 15th, and the pain in the left groin diminished immediately; she was enabled to put the left leg down and stand erect with perfect ease, and the frequent urging to empty the bladder, and sense of strangury, when doing so, diminished, but the pain and straining when evacuating the rectum, to which she has before referred occasionally, continues unabated: expects the catamenia in a week.

I applied ten leeches most of which took. The ovary was not large but intensely painful to the touch: the passage of the tube produced very severe but dull pain, which gradually abated, leaving the part much less tender, and producing the same sense of complete relief which she experienced on the former occasion of applying the leeches.

Feeling that it was highly undesirable that she should come so far to visit me, and, on the contrary, that it was very important for her to spend some time in the horizontal posture, I offered to procure her an admission into the hospital for the Diseases of Women, so as to be entirely under my care. This was done on November 21, 1844. She was again leeches *per rectum* with much relief. She divides her symptoms with much distinctness under three heads, first, the sense of bearing-down, forcing and pressure about the lower part of rectum. Secondly, the old ovarian pain which is now almost entirely removed, and thirdly, the deep seated pain on the left side of the abdomen, nearly level with the umbilicus (see August 27, 1844) which she says is constant, and has not yielded to the treatment hitherto adopted. On careful examination of this part, a deep-seated pulsation is both felt and heard, producing a distinct bruit.

Examination per vaginam.—A hard, globular tumour is felt close behind, and somewhat below, the cervix uteri; it is evidently behind the vagina, but in front of the rectum. I endeavoured to pass Dr. J. Y. Simpson's uterine sound into the cavity of the uterus, and thus ascertain how far it was connected with that organ, as it was evidently somewhat moveable; but I was unable to introduce it beyond the os uteri internum. I passed Weiss's 3-branch dilator, and gradually dilated the passage until the sound could enter. Instead of taking the usual direction, upwards and forwards, its point descended downwards and backwards into the above-mentioned tumour, thus she wing that it was the fundus of the uterus that which retroverted, or rather, to speak more correctly, retroflexed. I now gently altered the direction of the instrument, raising the fundus from its position at the lower part of the hollow of the sacrum, and carrying it upon the blunt end of the sound upwards and slightly forwards into its natural situation. Although this was attended with some degree of pain at the moment, it was followed afterwards by complete relief to the sense of bearing down and pressure, from which she had before suffered; and the tumour, which I had felt behind the cervix, had now disappeared. I introduced Dr. J. Y. Simpson's instrument for keeping the uterus *in situ*. She wore it without pain for 24 hours, but it was dislodged when the bowels were moved. I again replaced the uterus upon it and it was again dis-

lodged after another interval of 24 hours, when the bowels acted. She complained much of the pain at the left hypochondrium, where a deep-seated pulsation was to be felt, as before-mentioned, and bearing in mind the effects which I had produced in Mrs. P.'s case by a large enema, I had her placed in the supine posture, with the pelvis raised, and the shoulders depressed, and four pints of warm water thrown into the rectum, when in this position. She felt the injection distinctly reach the transverse arch of the colon: it brought away some hard knotty lumps, like those in Mrs. P.'s case, and she felt great relief. This took place on January 1st, since which the enemata have been repeated frequently: the second was followed by the same appearance of knotty masses, enveloped in much slime, and portions of which appeared to be fatty matter. The third injection brought away a still larger quantity of fatty matter, and a little more of it appeared with the fourth; since which the evacuations have gradually become quite healthy, and the pulsation in the left hypochondrium has entirely disappeared.

January 17th, 1845.—I have desisted from replacing the uterus in its natural position, during the use of these large enemata.

Examinatio per vaginam.—Os uteri slightly forwards; high up behind the cervix uteri. I can feel the retroverted fundus, into which I easily passed the uterine sound.

Examinatio per rectum.—No trace of an ovary to be felt; nor is there any pain, on pressure, in the posterior and left portion of the pelvis, where, previous to leeching, it had been so acutely tender; in the lower part of the hollow of the sacrum, in front of the rectum, I can feel the fundus uteri, with the sound in it, and, gently turning the point of the instrument upwards and forwards, I carried up the fundus in this direction, and again placed the uterus on Dr. J. Y. Simpson's supporter.

22nd.—The uterus has twice been displaced from the supporter during the act of emptying the bowels; and considering that it was held too perpendicularly, and not inclined sufficiently forwards, I gave it a greater curve in that direction.

26th.—The instrument retains the uterus *in situ* without slipping; complains of occasional pain in the left hypogastrium, which, she remarks, had left her entirely for some time; pain in left hypochondrium continues; general health good.

The details of this interesting case are spread over a considerable period of time, which is in great measure owing to her living at some distance from town, and my, therefore, seeing her only at intervals.

The second report (July 11th) is interesting, from shewing a fact to which I have before alluded—viz.: that in cases of apparently slight gastric derangement, a state of functional disorder of the primæ viæ is often exhibited under the action of alterative and laxative medicines, to a much greater extent than might have been expected. The symptoms of this condition, after a little medicine, became much more distinct, and fully sanctioned a brisk dose of calomel, followed by a mercurial and purgative treatment. The evacuations did not return to a natural condition until the system had freed itself from a large quantity of unhealthy excretions, for a period of more than a fortnight. Nearly a month was thus consumed in bringing the stomach and bowels to a tolerably healthy state of function, nor did I, in the absence of any urgent local symptom, deem it expedient to turn my attention to the topical affection, until that source of irritation had been, as far as possible, removed. By doing so, the ground is thus cleared for further operations, and the real features of the disease come out more distinctly. The only topical remedies that I used at first were leeches to the anus, to relieve the hæmorrhoidal congestion and general pelvic suffering, and an injection of lotio plumbi, as I considered that there were symptoms indicating the presence of the cervix uteri, as well as of the left ovary. It was on account of the continuance of these, that I had leeches applied to the os and cervix uteri, and thus succeeded in disentangling, as it were, the confused mass of symptoms as they had presented themselves in the first instance. Although the uterine affection was pretty completely

lieved, and the health manifestly improved, the pain in the left ovary continued unabated, and now I determined to commence my attack upon this organ in good earnest. The symptoms of oophoritis were sufficiently marked to justify the application of the antimonial ointment to the left hypogastrium, without making an examination *per rectum*. The pain in this part, precisely in the direction of the ovary, increased by the erect posture, and by pressing the uterus to the same side with the finger, *per vaginam*, were, I think, sufficient evidences that inflammation of the left ovary existed. These symptoms were relieved for a time, and nothing further seemed to exist beyond a slight degree of hæmorrhoidal congestion, for which I directed her to use an enema every morning, and to continue the magnesia and sulphur as a mild aperient, and to commence the taraxacum as a gentle alterative. Her health continued to improve, but the effects of the antimonial treatment soon wore off, and although it was renewed very effectually, I was much disappointed in finding it entirely fail in relieving the hypogastric pain. The conviction was thus forced upon me that I had not fairly made out the cause of the affection. It is true, that I had not applied leeches *per rectum*; but the distance at which she lived was an obstacle to my doing it; and being an out-of-the-way sort of operation, and requiring a tube on purpose for it, I could scarcely expect her medical man would attempt it.

In consequence of her suffering from general rheumatic symptoms, and other signs of deranged assimilation, which I attribute to her living in the immediate neighbourhood of some very extensive marshes, I advised her to try the artificial mineral water* which had served me so well in other cases, but without success, and I ceased to see her for nearly two years, when she returned with more aggravated symptoms of oophoritis than ever. On examining *per rectum*, the ovary was found considerably swollen, and internally painful to the touch; and on applying leeches, by means of the tube, as before described, a marked and striking relief followed. On endeavouring to introduce the uterine sound, I found it would not pass fairly into the cavity of the uterus, for it seemed to meet with an obstruction at the os uteri internum, which I could not overcome. I desisted, however, from further investigation of this point, at the time, from the severity of the ovarian symptoms requiring my more immediate attention.

The report of Sept. 13th, 1844, enumerates the symptoms of oophoritis which are to be detected externally, in an unusually distinct manner; indeed, from the description of these symptoms, which I gave in my introductory remarks upon this affection, I need scarcely say that they were exaggerated, in the present case, to an extent not commonly observed. I again brought out a copious eruption in the left hypogastrium, by the antimonial ointment, with much relief; she could sit without crossing the left knee over the right; she could stand erect without pain; and the irritability of the bladder was diminished.

On applying some more leeches (Sept. 20th), I found the ovary considerably diminished in size, although still intensely tender; and she now called my attention to a dull, aching pain at the lower part of the rectum, when the tube was introduced, which she had not observed before, and apparently connected with the pain and straining which she had lately begun to experience on evacuating the rectum. I then attributed it merely to congestion and irritation about the rectum, to which she had been more or less subject ever since I first saw her, and gave it no further attention; but from what has since occurred, it is more than probable that the uterus was beginning to assume the retroflexed condition, which was not clearly made out until her admission into the Hospital for the Diseases of Women, in November. It is a question, not very easy of solution, how far the state of the uterus was connected with the ovarian affection which had evidently existed for some considerable time previously? nor can the symptoms of the one be at all confounded with those of

the other. The painful spot, and rounded body, corresponding to the ovary, were much higher up in the pelvis, than that produced by the uterus doubled upon itself; they were also to one side, in the immediate vicinity of the left sacro-iliac synchondrosis; whereas the fundus uteri was to be felt close behind the cervix, sometimes lower, sometimes on a level, and sometimes a little higher than the os uteri. The pain produced by the pressure of the finger, *per rectum*, was also very different; in the former (ovary), it was intensely acute; in the latter, dull and aching. The external symptoms of the ovarian affection, as before observed, were also remarkably distinct.

With regard to the pain in the left hypochondrium, in which a deep-seated pulsation could be felt, this continues at present unrelieved. Although, from the effects of the large enemata which I ordered to be thrown up, we may presume that a fecal accumulation of long-standing, in the upper part of the descending colon, had been removed.

I abstain from any further remark on this singular condition of the uterus, where it becomes either retroverted, or doubled back upon itself. We are indebted to Dr. J. Y. Simpson, of Edinburgh, for much valuable and original information upon this affection; and I can fully bear witness to the correctness of his opinion respecting its frequent occurrence, having, at this moment, four cases of it under my care, and one where it is turned forwards. On a future occasion, I shall have the pleasure of laying some observations upon this subject before you.

Before closing the remarks on this case, I must advert to the fact of oophoritis existing here to a considerable extent, without the catamenia being attended with exsudations: I mention this, not so much as an exception to the rule which I have endeavoured to establish regarding the connection between oophoritis and dysmenorrhœa with exsudations, but for the purpose of pointing out a fact which I have noticed hitherto with considerable uniformity, viz.: that where oophoritis is the original or primary affection, we usually see the catamenia attended with exsudations; where it is a secondary affection, the result of irritation, &c., arising from some diseased part or organ in the neighbourhood of the ovary, we do not see this condition of the catamenia. In the present instance, I consider it to be an additional proof that I have not yet fairly made out the primary cause of her complaints: whether it is connected with the pain in the left hypochondrium, which still continues unrelieved, and respecting the precise nature of which I am still in uncertainty, time and further careful investigation alone will shew.

ON THE TREATMENT OF HYPOCHONDRIASIS, &c.,

By F. MICHEA, M.D., Laureat of the Academy of Medicine, &c. &c.

(Continued from page 359.)

II. SPECIAL AGENTS.

In order to succeed in the employment of moral therapeutical means, one fixed rule must be observed, and if ever it may be dispensed with, it is less frequently in hypochondriasis than in other species of hypomania. This rule, without which nothing can be done, consists in obtaining the confidence of the patient; and if this preliminary condition is not observed, the practitioner runs the risk of seeing all his means fail. To obtain this, when called for the first time to a person suffering from this disease, the physician must assume a countenance, of which benevolence is the chief characteristic. Instead of being cool and indifferent, he must appear to take interest in the sufferings of the patient; to pity the position he is in, and to feel for his pain; because, admitting that his disease is entirely fancied, he still suffers, and, therefore, is deserving of our respect. Above all things, let him talk, and listen with attention to the long details of his pain; to the enumeration, however fatiguing it may be, of all the symptoms he says he experiences; for, in so doing,

he will feel gratified and thank you for the kindness and patience you have shewn; the more so as he is prepossessed against most persons, because they consider his sufferings are fanciful. When he has ceased speaking, examine with the utmost care and attention the various organs, and especially those which are the seat of pain; make use of percussion and auscultation, for the purpose of impressing on his mind how much you wish to learn the nature of his affection, which he considers it so difficult to discover, as well as to cure. Thus you will be, in his eyes, attentive and methodical; your zeal and care will gain his esteem, and your advice appear worthy of being rigorously followed. Not only must the words—*imaginary disease, affection of the brain, deranged mind, monomania*, and such like, never be pronounced; but, likewise, all circumlocutions,—each expression, capable of recalling the ideas attached to these words, must carefully be avoided. Endeavour to convince him, by specious reasoning, that his disease is a *neurosis*. This word is by some considered as too vague, and not satisfactory; the patient wishes the physician to be of his opinion, and to discover the lesion with which he supposes himself to be affected; in such cases, yield to his caprice, but tell him that his malady is not serious, and promise him positively to cure him; repeat over and over again, that to accomplish this, you possess wonderful and infallible remedies; and if perchance he has already consulted other practitioners, say without the slightest hesitation, that you possess secrets unknown to your colleagues, and that you are ready to employ them, provided he is docile in following your advice.

This kind of preamble terminated; the next thing to be done is to adopt the most appropriate *special treatment*. This is of two kinds: the one, in which the practitioner opposes the ideas of the patient, and the other, in which he appears to adopt them. By the first, which may be called *treatment by resistance*, the mania is combated by means of irony, sarcasm, &c. The physician states firmly and positively, that the disease does not exist; his words are severe and cutting; he endeavours to prove how cowardly it is to give way to the idea of physical pain or death; finally, as a last resource, he employs intimidation to make the patient confess that he has not the disease with which he considers himself to be affected, or at least to prevent his yielding to his fixed idea. This mode of treatment is for many reasons, injurious; moreover, it is contrary to all experience. The lady whose case is related in this work (case 30th), and on whom it was tried by the advice of Dr. Chrestein, of Montpellier, reaped no benefit whatever from its employment.

The second, which may be denominated the *method by concession*, is far more rational. Thus, in the first place, you must impress on the minds of hypochondriacs, that, for their own good, they must not plague the persons around them with the recital of their sufferings; because, naturally, the heart of man is fickle, his pity inconstant, and when individuals are always making complaints, they cease after a certain time to inspire the same interest. Secondly, you must endeavour to make them consider pain in the light which all mortals ought to do, if they wish to be happy; that is, to view it in the light of a philosopher. To a certain extent, Possidonius was right in asserting that grief was not an evil, since it is by it that we are enabled to appreciate our joys, by the contrast which is excited between the two. When Socrates had his irons removed, the pressure which they caused on the part, was succeeded by a delicious itching. The period which follows an accouchement or a serious surgical operation, is accompanied by an inexpressible sense of bliss. Who has not felt the comfort experienced during convalescence from a long and dangerous disease? Finally, you must have the talent of persuading the patient, that the most painful diseases are not the most to be feared, and that very often the presence of a chronic nervous affection prevents the development of an acute phlegmasia.

Marc-Antoine Petit recommends questioning the patients on subjects widely different from that which is their solicitude, so as to appear to perceive some danger of a different kind to that

* On Dysmenorrhœa, and other uterine affections. p. 109

which occupies the imagination.* Doubtless, a hypochondriac may feel more tranquil, when he perceives that the attention of his medical attendant is directed towards an organ which he considered quite sound, instead of that which he supposed to be the seat of his disease. But, is not this a mode of causing the patients, while avoiding Scylla, to fall into Charybdis? Is it not curing them of an imaginary evil, and at the same time creating another of a similar species; for it is well known, how prompt they are to suppose themselves affected with every disease they hear talked of. This means, therefore, is inapplicable, since it draws the attention of the sufferer to objects within the circle of his mania.

Analogy demonstrates that other stratagems may be had recourse to, and with complete success. I mean such means as create instinctively, like the preceding, the desire of self-preservation, and the love of life; and though they may perhaps be considered by some as rather violent, still they are far more rational, inasmuch as they produce a sense of terror for some danger the action of which is foreign to the organism, and awaken the fear of death, without recalling that caused by an ordinary disease, or which occurs in the natural course of our life. Marc-Antoine Petit relates the case of a young woman, who, consecutively to chlorosis, became affected with palpitations of the heart, coming on at the slightest movement, and accompanied by frequent syncope. After being treated unsuccessfully by all the remedies recommended in such cases, she was considered by all the practitioners consulted, as the subject of organic disease of the heart, and beyond the reach of human aid. On the 29th May, 1793, passing through Lyons, she was exposed for an hour, on the *quai du Rhône*, to the fire of the partisans of the civil war, then raging in France, and the anxiety of mind she experienced produced a burning heat in the thorax, followed by copious vomiting of a ropy liquid. When at length carried home, fever declared itself, succeeded by abundant perspiration, since which period she has suffered no inconvenience from her palpitations and syncope.† The author quotes also the following case. M. de Sury, a gentleman from Lyons, ætat 75, suffered from frequent dyspnoea and cough, which was attended with a swelling of the lower limbs. Being marked out as one of the victims to be immolated during the revolution, he was sent to Paris and thrown into prison, which he expected to quit only when about to be led to the scaffold. Now, from the instant he entered the prison, until the 27th July (9th Thermidor), the day on which he was restored to his family and friends, the cough, the dyspnoea, and anasarca, in fine all his sufferings, disappeared as if by enchantment.

From these facts may we not consider it justifiable, for a physician to employ, in a case of need, a method analogous to that which the jester Gonnelle made use of, to cure his master the Duke of Ferrara, of a stubborn quartan ague? That is to say, to induce him to enter a boat, and, at a given signal, to make expert swimmers throw him into the water.

But if the practitioner have recourse merely to the means hitherto mentioned, he will run the risk of occasionally failing, because hypochondriacs have no confidence in the efficacy of means furnished by hygiene or philosophy; they have a sovereign contempt for the reasoning which constitutes the basis of moral therapeutics. That on which they place an exclusive and unbounded confidence, is the influence of pharmaceutical means. A lady wrote, as follows, to Double: "I have not taken any exercise on horseback or in a carriage, convinced as I am that they were recommended simply as an amusement." (Case 14.) Consequently, pharmaceutical means must be employed; for in refusing to yield, in this respect, to the wishes and requests of the patient, he will be led to conclude that, as you prescribe nothing,

you are totally or but little acquainted with the nature of his disease. From that instant, you lose all his confidence, and perhaps drive him to consult quacks, who, from ignorance or cupidity, will not fail to administer their own remedies, and eventually aggravate the disorder. But the physician, while borrowing from the materia medica, (so as to act on the imagination of his patients,) must prescribe inert substances, or at least such as are incapable of producing any violent action on the organisation. Moreover, as hypochondriacs soon get tired of one remedy, or even different substances administered in the same mode, they must appear to be changed; the *modus administrandi* especially must be varied, and several other agents added as accessories. It is thus, that, under a pompous and unknown denomination, bread pills may be given, sometimes rolled in powdered liquorice, at other times enveloped in gelatine, or in gold or silver leaf. Infusions, decoctions, or enemata of emollient, and narcotic plants, may be given, taking care to tinge them, by means of chemical agents, of a red, green, or yellow &c., colour. Yet, however useful these means may be, still too great a quantity of tepid water must not be permitted to be taken, as such a proceeding would debilitate the stomach, and dispose it to be affected with neurosis. When a patient has been cured by one of these frauds, you must never tell him of the illusion which you have practised upon him, for by so doing, you will annihilate, in all probability, all the advantages you have obtained. "An Englishman" says Professor Piorry "consulted Dr. Dumoulin, who seemed to prescribe numerous active remedies, but who gave in reality but bread pills, and advised a trip to Italy. Six months after, he came back to Paris, quite well. Calling on Dr. Dumoulin, to thank him, this practitioner incautiously confessed the stratagem he had employed. From that instant, the patient considered himself as not cured; the hypochondriasis relapsed, and a year after, the patient was dead.‡

If the hypochondriac fancies, as cases recorded prove possible, that he has a snake in the intestinal canal, considering it as the cause of all his sufferings, other stratagems may be employed in order to combat this opinion. A young countryman, in one of the wards of the Hospital St. Louis, was affected with an idea of this kind, and begged and prayed of the surgeon to open his abdomen, in order to deliver him of the reptile, which was the cause of his sufferings and pain. Dr. Maury, in order to quiet the mind of the patient, took a small snake, and after making an incision on the abdominal parietes, made him believe that he had extracted it through the opening. The stratagem was perfectly successful; on seeing the reptile the hypochondriac was completely delivered of his imaginary sufferings, his only fear being that, perhaps, some young ones remained in his body. (Case 54.) In a case somewhat analogous, M. Petit employed, at the *Hôtel-Dieu*, a similar operation—(Case 55); unfortunately he did not succeed, for reasons which shall be explained hereafter.

Having thus given the details of the most appropriate treatment of the first form of hypochondriasis, in the *essentially idiopathic* form, it is necessary to pass in review the special modifications, needed in the three phases or periods which it presents.

1st Period.—In this stage, the disease being limited to the brain, and constituted by a *pure and simple monomania*, the psychological remedies just described suffice.

2nd Period.—The disorder being now corporeal, as well as mental, is propagated from the brain to other parts of the body; thus, to lesions of the intellectual powers, are added functional disturbances in the abdomen, thorax, &c.; consequently, the physical must be combined with the moral treatment. Narcotics have been found useful in many cases, whether they act by blunting the sensibility, destroying the pain, or diminishing their intensity. Of this class of remedies, opiates succeed the best, as may be seen in cases 18th, 29th, 42nd, and 43rd; but they must be given

with moderation, as they cause a flow of blood to the brain, and may determine congestions or hemorrhages of that viscus. When nervous contractions, disturbances of the motor power, or convulsions exist, antispasmodics sometimes cause the cessation of the paroxysms—(Case 33rd).

3rd Period.—In this stage, characterised by the metamorphosis of the dynamic into organic lesions, other means are requisite; unfortunately, with the exception of hyperæmic or inflammatory symptoms, which demand antiphlogistic remedies, all those employed to combat these lesions, especially of an organic character, are generally, if not always, useless.

Be this as it may, there is an important precept which must never be forgotten, in the second or third stage of *essential idiopathic* hypochondriasis, viz.: the union of the moral with the physical treatment, and the preponderance which the one must have over the other. If this rule is not rigorously followed, the secondary or accessory phenomena may often be overcome, but not the primitive or fundamental symptoms, as the following fact is a proof. A lady was convinced that she should die from apoplexy, because her husband had quite suddenly, while near her, fallen a victim to this disease. Overwhelmed by this idea, her hypochondriasis soon attained the second stage, and that the more promptly because, for four years, she submitted to a severe regimen and frequent venesections; the result was: palpitations, cerebral congestions, syncope, &c., caused evidently by the state of anæmia to which she was reduced. Tonics and nourishing food diminished considerably the intensity of her bodily sufferings, but had no advantageous effect on the imagination, because a moral treatment was not employed—(Case 40th).

Another precept, equally important, consists in removing the determining causes of this species of hypochondriasis; that is to say, the perusal of medical works, conversations on that science, the spectacle of the death of a fellow-creature, &c.; for, if these causes continue to act on the individual, almost always, and that in spite of the most efficacious remedies, a cure is impossible, and, if obtained, the disorder will soon relapse.

(To be continued.)

SPINA BIFIDA.—At a meeting of the Sheffield Medical Society Mr. Porter detailed a case of spina bifida, and showed the preparation. The child was about six months old. The swelling existed on the upper part of the sacrum. On examination the spinous process of the last lumbar vertebra was absent. A compress was applied. At five months old the tumour was found to have gradually increased and to be as large as a cricket ball, the parietes thin and transparent, except at the base, where the integument was healthy. The child had perfect use of his limbs, and was in good health, but rather thinner; the excretions were natural. A very fine trochar was introduced and six ounces of colourless fluid evacuated very slowly; compression was made at the same time, and the child did not appear to suffer. In six days the tumour had filled to nearly the same size. The sac before like a bladder, appeared to be thicker, but there was no paralysis nor convulsion. The sac was again punctured and six ounces of fluid of the same character evacuated. The child afterwards became very irritable and convulsed and died. On examination two days after death, the parietes of the tumour were relaxed and of a purple hue, except in the centre, where a dark slough was seen. On laying open the sac, the chord was seen escaping from the canal, below the fourth lumbar vertebra. The spinous processes of last lumbar vertebra, and the sacrum were wanting leaving a furrow only. On emerging from the canal the chord divided into fasciculi, to form the plexus, and others intersected the sac, and were firmly connected with the posterior wall, where they appeared to expand on the living membrane. There was no appearance of inflammation in the sac or membrane of the cord. The sciatic nerve was of the usual size. This case adds another to those already recorded which show the impropriety of surgical interference in such a case.

* *Essai sur la Medec. du Cœur*, Note 4, epith. IV. p. 69.

† *Disc. sur l'Influence de la Revol. Franc., sur la Sante Publique*, p. 126.

‡ *These Inaugur.*, p. 30.

HOSPITAL REPORTS.

SURREY DISPENSARY.

Cases of Erysipelas.—Case I.—John W., æt. 44, waiter, residing in Pleasant-place, Lambeth, was admitted a patient of the Surrey Dispensary, under the care of Dr. Aldis, on Dec. 31st, 1844. Erysipelas faciei; both eyelids are closed from swelling, produced by inflammation. The nose is greatly tumefied; the redness of the inflammation is uniform, and of a brightish tint. The wife states that he is occasionally delirious. There is purulent discharge from the left ear; tongue white; skin hot; pulse quick; bowels not open to-day.

Felt ill on Monday week, when he was attacked with shivering, and dreadful pain in the head, followed by redness, and swelling on Saturday last. The redness commenced on the left ear, which became swelled, and the inflammation extended over the left cheek and eyelids.

Applic.—Lotio spirituosus tepida faciei.

R Calom. cum rheo gr. xv. statim sumend.

R Haust. antim. potass. tartrat. ʒj.

Spirit. æth. nitric. m. xv. sextis boris.

Jan. 2nd.—Erysipelas spreading towards the right ear; feels better; vesications have formed on the nose. The erysipelas has nearly disappeared from the left side of the face and nose, and is of a much paler colour on the right side. Pulse slower, 90, soft; tongue foul; bowels have been freely opened. Perstet.

4th.—Pulse 84, soft; tongue furred, yellow; bowels open. The left eyelid and ear are slightly red. The erysipelas has disappeared from the right side of the face; the vesications are dried up. Perstet. R ol ricini ʒss. crās.

6th.—Pulse 72; skin natural; bowels open four times to-day; left his bed for three hours to-day, the erysipelas having entirely subsided; some discharge from the left ear; appetite returning.

R Haust. quinae ter die.

Rep. Ht. ric ʒss. p. v. n.

7th.—The erysipelas has not returned; is out of bed; discharge from the ear has nearly ceased; bowels open. Perstet.

9th.—Complains of weakness; discharge from the left ear still continues, and is very offensive; walked out yesterday.

Emp. Canthar. pone aurem sinist. Perstet.

16th.—Feels quite well. Discharged cured.

Case II.—John B., æt. 34, cabinet-maker, residing in Lant-street, was admitted into the Surrey Dispensary, under the care of Dr. Aldis, on January 9th, 1845. Pulse 108, soft; skin hot; tongue white; bowels open; urine free. Erysipelas of the face of a pale red colour; closing the right eyelid, and extending to left one; muttering to himself; reported by the wife to be delirious. Ailing a fortnight, was attacked with erysipelas the night before last (Tuesday), having previously been affected with shivering, pains in the knees, and across the back.

R Haust. antim. potassio-tart. ʒj.

Spirit. æth. nit. m. xv. 6tis horis.

Applic. Lotio spirit. tepida faciei.

11th.—Pulse 108, soft; skin hot; tongue furred; bowels slightly open. The erysipelas has spread over the forehead and a little way on the scalp, but it has diminished on the eyelid, and he is much more composed and rational.

Abradatur capillitium. Perstet.

Ol. ric. ʒss. statim et repr. mane.

13th.—The erysipelas has not spread over the scalp, but is extending over the right side of the face.

14th.—Pulse 96; tongue furred; bowels open. The erysipelas has subsided on the right side of the face, and has extended over the left side of the face to the ear, which is inflamed. Perstet. Rep. Ol. ric. cochleare medium. 16; pulse 84, feeble; skin warm; tongue furred; bowels open twice to day. The erysipelas has disappeared from the face; perspired very much last night; complains only of weakness.

R Haust. quinae.

Spt. Æth. sulph. c. m. xv. 6tis horis.

Rep. Ol. Riccini.

18th.—Complains only of weakness; appetite improved; bowels open; no return of the erysipelas; was out of bed yesterday for a short time. Perstet.—21st.—Discharged cured.

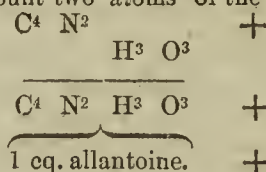
PROGRESS OF GERMAN SCIENCE.

(From our Correspondent, Dr. MUSPRATT.)

Liebig's Fourth Lecture.—I brought before your notice, in my last lecture, the prominent characteristics of cyanic, cyanuric, and fulminic acids, and concluded by stating the formulæ for uric acid, and some of its leading salts. Before entering upon the substances furnished by uric acid, when treated with the pure oxide of lead and nitric acid, I shall give you a simple recipe for its preparation. Take the solid urine of the bea-constrictor, and add it, in very small portions, to an extremely weak and boiling aqueous solution of potash: continue the ebullition for a pretty long time, and then allow the solution to cool; throw the whole into a linen filter, and edulcorate with water, until the drops percolating are dispossessed of all colour. The residuum on the filter is uric acid, in combination with potash, which, when dissolved in more of the alkali, filtered, and the

One Atom of Uric Acid = $C^{10} H^4 N O^6$

In the above equation, we find only one of the previously-mentioned products, namely, the urea, but by carrying down the cyanogen and carbonic oxide, and taking into account two atoms of the



We may regard allantoin as *hydrated urate of urea*, a supposition which is readily conceived on

3 Equivalents of Allantoin . . . $\left\{ \begin{array}{l} C^4 H^3 N^2 O^3 \\ C^4 H^3 N^2 O^3 \\ C^4 H^3 N^2 O^3 \end{array} \right\} = \left\{ \begin{array}{l} C^{10} H^4 N^4 O^6 = \text{Uric Acid.} \\ C^2 H^4 N^2 O^2 = \text{Urea.} \\ 1 H^1 O = \text{Water.} \end{array} \right.$



3 eq. allantoin. or, 1 eq. hydrated urate of urea.

When uric acid is acted upon by nitric acid, a similar decomposition to the one with the peroxide

1 Equivalent Uric Acid . . $C^{10} H^4 N^4 O^6$
4 Equivalents Water . . . $H^4 O^4$
1 Equivalent Nitric Acid . . $O^2 + N O^3$

But, as the urea cannot exist in the presence of nitrous acid, we have ammonia and water

1 Equivalent Urea . . . $C^2 N^2 H^4 O^2$
1 Equivalent Nitrous Acid . . $N O^3$

The best method for the preparation of *alloxan* is to add uric acid, very cautiously, to nitric acid, of sp. gr. 1.25, employing one part of the former for two of the latter. Crystals of *alloxan* gradually appear, which, when affused with cold water, redissolved in hot water, and the solution allowed to repose for some days, yield the *alloxan* in beautiful colourless octahedrons, containing a large quantity of water of crystallization. It may be obtained anhydrous from a saturated hot solution. Now, let us consider the relations of *alloxan* with *alloxantine* :—

Alloxan . . . $C^8 H^4 N^2 O^{10}$

Alloxantine . $C^8 H^5 N^2 O^{10}$

We find, that the only difference between the two formulæ is, that the *alloxantine* contains one equivalent of hydrogen more than the *alloxan*.

When the former is treated with chlorine, or nitric acid, it is resolved into the latter :—

$C^8 H^5 N^2 O^{10} + Cl = C^8 H^4 N^2 O^{10} + H Cl$;

that is, into a body, which is *alloxantine*, deprived of an atom of hydrogen. If, on the other hand, we treat *alloxan* with hydro-sulphuric acid, or metallic zinc, and sulphuric acid, we get *alloxantine* :—

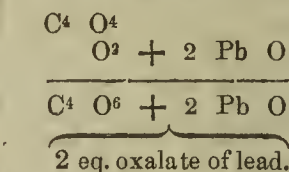
$C^8 H^4 N^2 O^{10} + H S = C^8 H^5 N^2 O^{10} + S$

$C^8 H^4 N^2 O^{10} + Zn S O^4 + H = C^8 H^5 N^2 O^{10} + Zn S O^4$

filtrate added at intervals, to a large quantity of boiling dilute muriatic acid, affords the uric acid, almost in a state of purity. Any extraneous matters may be readily got rid of by repeatedly affusing the mass with water. The first action of oxydising agents upon uric acid is very simple, but in the sequel, the number of products emerging are manifold; e. g. when we boil 1 part of uric acid with 20 or 30 parts of peroxide of lead, the latter, after a few minutes, becomes white; the ebullition must be continued for half an hour, and then the whole allowed to cool, when it will be found, that the entire portion of the uric acid has disappeared. Oxalate of lead is the residue. Filter, and let the filtrate repose for some time, when yellowish-coloured crystals of *allantoin* will be obtained, which may be purified by re-dissolving, and boiling with animal charcoal, and again filtering. The mother-liquor, which appears as a syrup, is *urea*. The decompositions which here take place are represented by the following equations :—

$C^{10} H^4 N^2 O^2 = 1 \text{ Urea.}$
 $C^4 N^2 = 2 \text{ Cyanogen.}$
 $C^4 O^4 = 4 \text{ Carbonic Oxide.}$

pure oxide of lead ($2 Pb. O + O^2$), plus three atoms of water ($H^3 O^3$), we get, in addition, *allantoin* and *oxalate of lead* :—



glancing at the annexed formulæ :—

$\left\{ \begin{array}{l} C^{10} H^4 N^4 O^6 = \text{Uric Acid.} \\ C^2 H^4 N^2 O^2 = \text{Urea.} \\ 1 H^1 O = \text{Water.} \end{array} \right.$

of lead occurs; two atoms of oxygen are given up, but *four* atoms of water come into play :—

$C^2 H N^2 O^2 = \text{Urea.}$
 $C^8 H^4 N^2 O^{10} = \text{Alloxan.}$

formed, and nitrogen and carbonic acid eliminated :—

$C^2 N^2 H^4 O^2 = 2 \text{ Equivalents Carbonic Acid.}$
 $N H^3 = 1 \text{ Equivalent Ammonia.}$
 $N^2 = 2 \text{ Equivalents Nitrogen.}$
 $H O = 1 \text{ Equivalent Water.}$

In the first case, hydrogen is abstracted, while in the last two cases, it is added.*

Alloxan may be regarded as a compound of cyanogen with oxalic acid and water :—

2 Cyanogen . . . $C^4 N^2$
2 Oxalic Acid . . $C^4 O^6$
4 Water $H^4 O^4$

Alloxan.

When we boil *alloxan* with ammonia, and add an acid, a remarkable compound is precipitated, which contains the elements of *alloxan*, united with two atoms of ammonia, and five atoms of water, or $C^8 N^4 H^{15} O^{15}$.

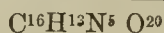
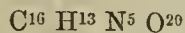
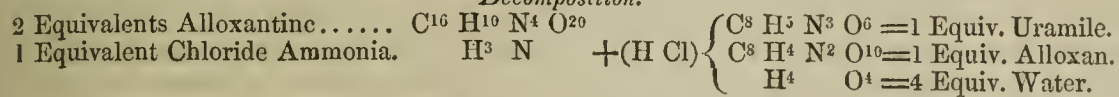
Alloxan, with barytes, yields a white precipitate, soluble in much water and acetic acid, while *alloxantine*, with the same earth, affords a violet deposit, which, when heated, becomes white. This precipitate is insoluble in the two media just mentioned. By this behaviour, the *alloxan* and *alloxantine* are readily distinguished. *Alloxantine*, when boiled with chloride of ammonium, acquires a florid colour, and the liquid, on cool-

* *Alloxan* and *alloxantine* resemble the blue insoluble indigo, and the white soluble indigo which have been analysed by Dumas, and from his results, it appears, that the latter differs only from the former, in containing an atom of hydrogen more.—Dr. M.

ing, deposits brilliant satin-looking scales of uramile, alloxan, and water are also generated. The preceding is the only instance known of chloride

of ammonium being decomposed by an organic substance, which forms new compounds with the elements of ammonia.

Decomposition.

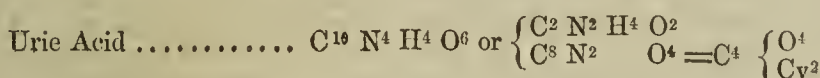
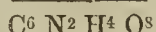
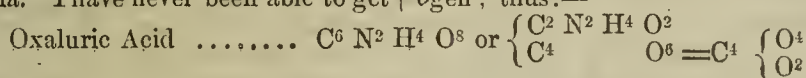


I shall now bring before you three other compounds, which are among the products of decomposition of uric acid, by nitric acid, viz.: murexide, oxaluric acid, and parabanic acid. Prout, in his investigations upon uric acid, obtained the first of these, and described it under the name of purpurate of ammonia. It may be formed as follows:—mix uric and nitric acids together—too much of the latter must not be employed, as the reaction would be prevented—and evaporate gently to dryness, when a yellow powder will be obtained, partially streaked with red. Now, by adding a few drops of ammonia, or carbonate of ammonia, to this residue, and applying a moderate heat, the whole will acquire a magnificent purple colour, which is the purpurate of ammonia of the above-named chemist. Murexide is also produced, and obtained in very fine crystals, when alloxantine is added to a concentrated warm solution of carbonate of ammonia. I have never been able to get

a constant formula for this body, owing to the great uncertainties attending its preparation. The parabanic acid is obtained by dissolving uric acid in a great excess of pretty strong nitric acid, then evaporating to near dryness, and allowing the liquid to crystallize. If we dissolve the parabanic acid in boiling water, and then saturate the solution with ammonia, it yields the oxaluric acid:—



We find, on glancing at these formulæ, that the latter acid is the former, minus two equivalents of water. It is worth while remarking, in concluding this lecture, that we may regard oxaluric acid as urea, plus two atoms of oxalic acid, and uric acid as urea, plus two atoms of oxalic acid, in which two atoms of oxygen of the latter are replaced by a corresponding number of equivalents of cyanogen; thus:—



PRESENT ARRANGEMENT OF PROFESSOR LIEBIG'S LABORATORY, WITH A LIST OF THE STUDENTS.

Dr. Will. Filial-Professor in the Laboratory.

Augustus Benseb, Assistant.

Dr. A.W. Hoffmann, Secretary to Professor Liebig.

Charles Clemm, Sub-Assistant.

Students.

1 James Allen, Edinburgh.	21 L. Hoffmann, Bavaria.	41 Dr. Renz, Worms.
2 James Archinard, Switzerland.	22 E. Horsford, America.	42 W. Rietschel, Saxony.
3 G. Bischoff, Bavaria.	23 H. James, Edinburgh.	43 D. Roher, Bavaria.
4 H. Blank, Prussia.	24 P. Kjenkow, St. Petersburg.	44 F. Röthe, Gr. Hessen.
5 H. Bleibtreu, do.	25 F. Kellermann, Gr. Hessen.	45 A. Ruef, Switzerland.
6 Dr. Blyth, Edinburgh.	26 C. Koch, do.	46 A. Schlieper, Prussia.
7 F. Bopp, Darmstadt.	27 H. Köchlin, France.	47 A. Sebue, Gr. Hessen.
8 B. Brodie, London.	28 J. Kossow, St. Petersburg.	48 T. Schriba, do.
9 C. Brinckmann, Prussia.	29 C. Küster, do.	49 A. Souhay, Frankfort.
10 Dr. Büchner, Mayence.	30 F. Lade, Nassau.	50 E. Stein, Gr. Hessen.
11 A. Crum, Glasgow.	31 R. Liaskowsky, Moscow.	51 H. Schwartz, Prussia.
12 C. Deninger, Mayence.	32 C. Link, Darmstadt.	52 M. Traube, do.
13 C. Ewald, Gr. Hessen.	33 E. Luck, Gr. Hessen.	53 H. Trautschold, Berlin.
14 W. Geiger, do.	34 A. May, Prussia.	54 F. Umscheiden, Bavaria.
15 G. Glogau, Sweden.	35 W. Merck, Darmstadt.	55 C. Vischer, Munich.
16 G. Gödechens, Hamburg.	36 C. Meyer, Hanover.	56 J. Wolf, Nassau.
17 C. Gaudenberger, Darmstadt.	37 Dr. Muspratt, Liverpool.	57 F. Wrightson, Birmingham.
18 H. Gombart, Bavaria.	38 G. Pilger, Giessen.	58 A. Williamson, London.
19 C. Hempel, Bavaria.	39 D. Pölzel, Prussia.	59 D. Zenner, Bavaria.
20 E. Hochstetter, France.	40 Dr. Ragsky, Vienna.	

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 23rd, 1845.

On Diseases of the Costo-Chondral and Costo-Vertebral Articulations, with or without Tubercular Ramollissement and Necrosis of the Bones of the Rachis: by A. Toulmouche, M.D., Professor of Surgery at the Preparatory School of Medicine and Pharmacy, Rennes, Correspondent to the Academy of Medicine, Paris, &c.—Although the researches of Messrs. Nichet, Nelaton, Parise, and many others, have cleared up many doubts, still they are far from having removed all the difficulties which surround this subject, and especially the obscurity and incertitude with respect to the symptomatology. Effectively, if the disease commenced in the superficial parts of the vertebræ, the deformation which it caused would lead to immediate detection; unfortunately, this is not the most frequent, for, in general, the lesion commences with that part of the body of the vertebræ deep seated in the thoracic and abdominal cavities, giving rise to purulent collections

easily confounded with other affections. Moreover, the development of organic lesions of the bones are slow, the sensibility of this portion of our frame being so very obtuse, that the most serious lesions, such as tubercular ramollissement, necrosis, caries, may be developed even to the destruction of the part, without causing any considerable pain, and when this does take place, it is by the pressure of the imposthume on the neighbouring parts, producing sometimes disorganisation to such an extent as to appear incompatible with life. The author divides his memoir into three chapters: 1^o That in which he studies necrosis of the head of the ribs, and lesions of the costo-vertebral articulations; such as effusion of pus into the same, and destruction of a part of their capsules and ligaments. 2^o That in which the same lesions exist, complicated by tubercular ramollissement and necrosis of the neighbouring vertebræ. 3^o That in which the same morbid appearances were limited to the theca vertebralis.

1^o Necrosis of the Head of the Ribs, and Lesions of the Costo-Vertebral Articulations.—These lesions are the more interesting, because, though necrosis

and caries of the ribs and their fibro-cartilages, as well as their fractures have been described, they have been done so in a very unsatisfactory manner. In the cases observed, there was no symptom by which it could be recognised; the tumours, formed by the collection of pus may either not be apparent exteriorly, or, on the contrary, resemble a cyst, and be treated by the numerous remedies directed in such cases. However, when in a scrophulous or phthisical patient, these tumours are remarked beside the sternum, opposite the cartilages of the ribs, or in the intercostal spaces, in two-thirds of the cases it may be concluded that a necrosis exists, not very distant; the absence of pain is also a characteristic sign. Three cases are here related: In the first, the slow development of the necrosis of the ribs causing numerous abscesses, was totally effaced by the symptoms of serious lesions of the pericardium, the heart, the peritonæum, and the intestines, so much so, that during the life of the patient it was not even suspected. In the second, it was hidden first by an irritation of the stomach supposed to have been caused by the inconsiderate use of the sulphus quininae, afterwards by symptoms of ascites and œdema, and finally, the emaciation and hectic fever caused by it were supposed to be owing to peritonitis. It is true the necrosis of the head of the fifth rib, and of its fibro-cartilage produced a fluctuating tumour, and the caries of the superior extremity of the sternum, another at the anterior and inferior part of the neck; but they were supposed to be caused by the suppuration of some of the bronchial glands, consecutive to phlegmasia of a scrophulous nature. This case, among other peculiarities, presented an example of cure, by adherence, of a pericarditis, and an extraordinary mode of conformation of the right ventricle of the heart, which offered two cavities, the one external, smaller; the other, internal, larger, and corresponding to the apex; the former was added to the inferior and external part of, and communicated just below the auriculo-ventricular valve (which did not possess its usual form); the cavity of the latter, contained a body of the size of a nut, soft, formed of a sort of net work, of a reddish colour, and analogous to fibrine about to be organised. In the third, it was only when incision was made on the tumour, supposed to be a cyst, that it was discovered to be an abscess, communicating with a necrosis of a fibro-cartilage, which prevented the obliteration of its cavity, though numerous injections, combined with compression, were employed.

2^o Tubercular Ramollissement, Necrosis, and Destruction of the Vertebrae, followed by considerable alteration of the Costo-Vertebral articulations.—Here, if anatomo-pathological researches have enabled the patient inquirer to follow step by step the various lesions, unfortunately the same cannot be said for the diagnosis in the four cases comprised under this head, two presented as primitive symptoms, pains in the back and loins, supposed in one to be owing to phtisis, and in the other, to a lumbago. In one there was an abnormal projection of the spinous process of the second dorsal vertebra, with tumefaction of the surrounding parts; in two others, in spite of the most attentive examination, nothing could be discovered; finally, in none was paralysis of the bladder or rectum observed. The reason why this kind of lesion cannot be diagnosed at an early period, is the insensibility of the osseous system, and the tendency evinced by the purulent collection, (partly of a liquid and partly of a cheesy, consistence,) to be developed before the bodies of the vertebræ, under their ligamentous envelopes, or on the deep-seated portions of the ribs, or in the thoracic or abdominal cavities, or at the inferior portion of the neck, rather than towards the skin, on account of the resistance of the thick layer of muscles, and of the aponeurosis in this region. Of the four cases related, in the first there are strong reasons to suppose that the disease originated in the vertebræ, and propagated itself to the ribs; for the development of tubercles in the spongy portion of the former, their ramollissement, followed by imposthume and necrosis of the ribs, is far more frequent than similar lesions coming on primitively in the ribs. In the second, there was only

pain in the back, but this was not considered as extraordinary, the patient being phthisical, and this circumstance, added to his silence, was the reason why the vertebral column was not examined; had this been done, undoubtedly the development of the second dorsal vertebra, and the tumefaction around it, would have led to the discovery of the precise nature of the disease. No symptom, such as paralysis of the bladder or rectum, indicated the existence of pressure on the spinal marrow. This fact proves how necessary it is in phthisical patients to examine, from time to time, the rachis, especially when they complain of pain. The same precept is applicable to individuals who appear to be suffering from lumbago, and other rheumatic affections of the lumbar region. It also shews that albuminuria may reach its second, and even third, stages, without causing œdema or ascitic affections, considered as constant phenomena. This patient presented a curious and uncommon anomaly of the styloid processes, which were very long, and articulated with the *cornua minora* of the oshyoides. In the third, the first symptoms were those of a lumbago, and it was only twenty-six days after their appearance, that paralysis of the inferior extremity indicated the true nature of the disease. Nothing could be discovered, though the rachis was examined with the most scrupulous attention, so that the disease was supposed to be not very intense, and to have affected the inferior portion of the dorsal, or the lumbar, parts of the medulla. This organ, as well as the nerves which arise from it, was compressed, and the pressure on the latter was far greater on the left than on the right side, explaining thus the intensity of the paralysis of the left inferior extremity. Here the lesions were deep seated, and no tumefaction indicated their presence; on the contrary, they produced all the phenomena of an old circumscribed pleuritic effusion; but, had the patient's life been spared some time longer, the tumour would have made its appearance in an intercostal space, below and outside the apex of the heart. In the fourth, the affection of the vertebrae extended from the fourth and fifth cervical below the diaphragm, and was produced by the development of tubercles, and the collection of a liquid, under the anterior vertebral ligament, affording all the characters of softened tubercular matter, such as M. Nichets, chief surgeon of one of the Lyons' Hospital, described in a memoir inserted in the *Gazette Medicale* (August 1844), in which numerous facts are collected, proving that in nine-tenths of the cases of this kind, the abscesses, and the destruction of the bones, are produced by tubercles, not caries.

3° Disease limited to the Theca Vertebralis.—The symptoms observed were different, according to the region.—*Cervical.* Fixed, deep-seated pain, analogous to that of rheumatism, resisting all the remedies employed against it; development of a tumour, of a pasty feel; paralysis of the arms, bladder, and rectum, with dysphagia;—*dorsal*; angular deformation of a portion of the vertebral column, weakness of the lower extremities, paraplegia; paralysis of the bladder or rectum. The disorder is far from presenting in every case this uniformity, for, in the commencement, the pain resembles that caused by rheumatism, and, on examining the rachis, nothing abnormal is to be remarked. If at a later period, paralysis of the inferior extremities, of the bladder or rectum, comes on, it is to be attributed rather to a lesion of the medulla, or compression from disease of its envelopes, than to necrosis, or tubercular *ramollissement* of the vertebrae. The reason why the compression is less in the latter is, the pus finding no resistance, can extend itself outwards, and therefore, the medulla may, to a certain degree, continue to perform its functions; on the contrary, when the bones are sound, they prevent this development from taking place, and consequently paralysis of the rectum and bladder promptly appear, and the patient totters like a drunken man. Three cases are here related. In the first, the symptoms were primitively those of rheumatism, which appeared to have terminated in suppuration; but the persistence of the tumour, its fungous aspect, and the presence of a second

swelling, led to diagnosticate an affection of the cervical vertebrae, supposed to be caries. As to the paralysis of the arm, it was owing to compression of the medulla, but whether from a solid or liquid body, it was impossible to say; finally, the abolition of motility in the arms, whilst sensibility was not lost, and the destruction of the anterior roots of the cervical nerves forming the brachial plexus, comes to the support of the opinions advanced of late by some physiologists and pathologists, that lesions of the anterior roots abolish motion, whilst those of the posterior roots are followed by cessation, or at least diminution, of sensibility. But to what is the paralysis of the bladder to be attributed? It is difficult to say; in general it is observed in cases of pressure on the medulla in the dorsal and lumbar regions, and is complicated with paralysis of the rectum and paraplegia; here neither of these two last existed, consequently it would appear that compression of the upper part of the spinal marrow is sufficient to disturb the vesical innervation, but without having any effect on the rectum, or lower limbs. The nature of the lesion of the cervical vertebrae, seemed to be a tubercular affection, with *ramollissement* of the bodies, and transverse processes of three or four cervical vertebrae, complicated with a fungous thickening of the dura mater of the spinal marrow, and consecutive *ramollissement* of the medulla, opposite the fourth vertebra. In the second, the paralysis of the lower limbs came on rapidly, and was accompanied by no pain nor tumour of the rachis, and was produced by the pressure exercised on the medulla by a tubercular mass which surrounded it, and which destroyed the intervertebral ligament, and the surface of the sixth and seventh dorsal vertebrae. In the third, the first symptoms which developed themselves might be attributed to irritation, as well as compression, of the medulla; this only when the paraplegia was complete; there being neither fever, nor pain, in the vertebral column or cerebellum, the patient not having fallen, previous to the appearance of the disease on the part; and it was only when scrupulous examination of the column having discovered nothing abnormal, that the idea of disorganization of the medulla was given up, and compression supposed to exist. But how came it that the paralysis was limited to the inferior extremities, rectum and bladder, when the compression had taken place on the upper third of the dorsal region?—and how comes it that neither dyspnoea or asphyxia were produced? This is not easily explained, unless it is because the intercostal nerves are more efficaciously protected by the surrounding bones, than the lumbar. This fact is interesting in other respects, because it shows—**1°** That the gradual pressure on the nervous centre may take place without any appreciable pain, and without disturbing considerably, or destroying its functions, to such a degree, as when it is sudden—**2°** That strychnine, in the dose of grs. ij., produced tetanic contractions, sufficiently intense to necessitate the cessation of the remedy—**3°** That the liver, like other organs, may be the seat of an erectile tumour.

Conclusions.—From the preceding facts, the author concludes:—**1°** That the diseases of the chondro-costal articulations and the anterior extremity of the ribs are not uncommon, and deserve to occupy more space than is generally allotted to them in treatises on surgery:—**2°** That the characteristic symptom in the development of a tumour like a cyst, opposite to, in the neighbourhood of, or at a distance from, the lesion, is insufficient to establish a precise diagnosis, because similar ones may be developed in the same parts produced by softened tubercles, or necrosis of the ribs, which will naturally be taken for a scrupulous abscess:—**3°** That on opening these tumours they are found to contain pus of a sero-caseous, or perhaps of a somewhat more homogeneous nature; and that, at first, the probe indicates nothing but the presence of a soft tissue, or a pyogenic membrane, lining the interior of the abscess, and when it enables the practitioner to discover the necrosis, or the lesion of the articulation, the disease is generally beyond the resources of medicine:—**4°** That necrosis of the vertebrae, or their destruction by tubercular *ramollissement* complicated with similar

lesions of the costo-vertebral articulations are, and will probably be often confounded, with old rheumatic affections and with circumscribed pleuritic effusions, except when they are accompanied with recent deformation of the spine:—**5°** that the same disorders when limited to the rachis, will, like the preceding, be considered almost always as chronic rheumatism, either of the muscles, or of the deep-seated fibrous tissues; that in the cervical region, the appearance of a tumour with a pasty feel and obscure fluctuation, dysphagia, commencement of paralysis of the superior extremities, and in a more advanced stage, diminution of the contractility of the bladder, are the pathognomonic signs: that, in the dorsal and lumbar regions, it is only when there is deformation of the rachis, that the diagnosis, presents any certitude, for paralysis of the bladder or rectum, preceded by paraplegia will rather be attributed to a lesion of the medulla spinalis or its envelopes than to disease of the vertebrae—*Gazette Medicale*.

Cases of Lithotripsia.—**1°** One by Dr. Chaumet, published in the *Journal de Medecine de Bordeaux*. Robin, ætat 52; farmer, sanguineous temperament; robust constitution; sober and temperate habits; had never been ill; the disease of the bladder commenced in 1837, by an uneasy sensation during the emission of urine and a dragging pain in the penis, principally felt at the glans, and was aggravated by the agricultural pursuits to which his profession subjected him. Several physicians having been consulted and the various remedies prescribed, failing to give relief, Robin decided upon entering the hospital in the part reserved to such patients as were in a position to pay a certain sum for medical attendance, &c. After a few days' rest during which appropriate remedies were employed in order to prepare the urethro-vesical organs, an examination was made and a very hard calculus of about 1½ of an inch in diameter was discovered. From the size and hardness of the calculus, lithotomy was deemed preferable and consequently proposed, but as the patient gave a decided negative answer, having an insuperable objection to all surgical operations, lithotripsy was of necessity had recourse to. The first trial took place on the 20th Nov. 1839, and during the whole time but little pain was felt, and several fragments were passed during the evening—(Balneum tepidum decoct. rad. tritic. repent. et sem. lini usitat. pro. potu—haustus anodyn. vesperi). On the 22nd. Second sitting during which the calculus was seized and crushed three successive times; some fragments about half an inch in diameter were also crushed. During the night of the 24th, Robin was troubled with frequent desire to urinate, and passed a good deal of gravel and several fragments, presenting all the appearances of bits of flint. Reprtr. baln. haustus; potus.) Nothing remarkable occurred after the third, fourth, fifth and sixth sittings, but the irritation, produced after those which succeeded, necessitated much longer intervals of rest than before; after the eleventh, which was performed on the 28th December, symptoms of cystitis and gastro-enteritis appeared, sufficiently intense to need an application of leeches to the perineum and hypogastrium, and of emollient poultices combined with the former remedies. Twenty days after another sitting took place, followed by paroxysmal fever which yielded to a weak infusion of cinchona, and enemas of sulphas quiniæ. The moral condition of the patient was so affected, and his desire to return home so great, that fearful of his life, he was permitted to leave the hospital, having promised to return every week to be operated until the cure was completed. This he did ten different times, after which the most attentive examination could discover nothing in the bladder, the urine being then retained and passed very easily. This amelioration had lasted hardly a twelvemonth when new accidents appeared, but this time, whether it was that the irritability of the bladder, or his want of power of resistance, or neglect of the preparatory treatment, or in fine, his not having confidence in the operation, on account of the relapse, and in the surgeon who operated, (it was not then Dr. Chaumet) was the cause, suffice it to say that the first trial was very painful and the second productive of such accidents as to cause death 36 hours after. In this case,

several circumstances are deserving of our attention. 1^o. The tolerance and facility with which at first the bladder bore the instrument, the necessary injections and manœuvres. 2^o. The rapidity with which the calculus was reformed, whether it was that the gravel was formed in the kidneys, or in the bladder around a fragment as a nucleus;—3^o the possibility of the patient's riding in a carriage and journeying five leagues to return home immediately after the operation;—4^o the fact that there are certain moments in which it is impossible, as Dr. Civiale first pointed out, to perform the least operation on the bladder, on account of its excitability, and in this respect, no part of the human frame presents such variety as the urethro-vesical organs; and in all probability, it is because this disposition was overlooked, that the result of the second sitting proved fatal. 2^o. Another communicated by Dr. Deville to the *Gazette Médicale*. The patient, Dr. Loiseleur Deslongchamps, M. A. M., had been operated on several years ago, by Dr. Leroy d'Etiolles, who, at that period, after introducing the *brise-pierre évacuateur* (a retention of urine prevented the bladder evacuating itself naturally) twenty-eight times, succeeded in removing a calculus, weight, 241 grains, and formed of urate of lime. For four years the cure remained complete, but on account of an engorgement of the prostate, Dr. Loiseleur Deslongchamps was obliged to perform catheterism six or seven times in the 24 hours. On the 15th September 1844, while at his country residence, Dr. D. perceived that his urine was turbid, had a strong and disagreeable smell, and deposited after eight or ten hours, a certain quantity of a very viscous substance, of the consistency of mucus in the second stage of coryza, and so tenacious that it adhered firmly to the vase. Dr. Leroy d'Etiolles informed of the existence of these accidents prescribed terebinthinate remedies combined with infus. summit. pin. sylvest. sweetened with syrup. tolutan, and should this not suffice, injections of tar water. The internal remedies were taken and thirteen injections used, but without any beneficial effect; on the contrary, on removing the catheter, pain, (which lasted several minutes,) was felt at the neck of the bladder. The symptoms increased in intensity, so much so that Dr. Deslongchamps could not ride in a carriage without suffering considerably. On the 4th Nov. he left his country residence for Paris; experienced much pain during the journey, though he carefully voided the bladder before he started, and repeated the operation from time to time, on the road, with the catheter. The pain subsided on his arrival, and was not so intense on the three succeeding days, though Dr. D. rode about in a carriage. Dr. Leroy, consulted on the 8th, discovered a small calculus, which was immediately crushed, and about seven-eighths removed: it was friable, and composed of phosphates of lime, ammonia, and magnesia. The condition of Dr. D. continued to ameliorate: on the 11th, several fragments were removed, by means of Dr. Leroy's *lithotriteur*, and on the 16th, nothing whatever was to be found in the bladder; the urine was then clear, and nearly limpid, there being only a slight cloud in the liquid after remaining several hours in the vase, a circumstance which has taken place ever since Dr. D. has been obliged to sound himself. In this second operation, the passage of the instruments was not near so painful as the first, though, a short time previous, pain had been felt at the neck of the bladder, after the introduction of the sound.

To avoid the danger attendant on lithotomy and lithotrity, a practitioner of Paris states that he has succeeded in making a bag in which he can seize and enclose the calculi; the bag will be so constructed as to prevent the concentrated acids, injected into the bladder, acting on the membranes of the bladder. As yet, it has not been tried on the living subject, but experiments on the dead body, and on a calculus placed in a bottle, seem to authorise the conclusion that the attempt will be crowned with success. Time will shew, how far the present attempt will prove more fortunate than those tried previous to the discovery of lithotrity, and however desirable such an event may be,

it is doubtful whether it will ever be of much, if any, utility.*

Prize.—The *Annales Médico-Psychologiques* propose a gold medal, worth £20., for the best Memoir on the following question:—"Point out the pathognomonic characters of homicidia in alienated individuals, and of monomania homicidalis, present a critical examination of the principal cases of monomania homicidalis which have been the object of judiciary prosecution; reply, especially, to this question: Is monomania homicidalis amenable, in every case, to the laws, and deserving of punishment?" Memoirs must be addressed, pre-paid, to the *Bureau du Journal des Annales Médico-Psychologiques*, before the 1st Nov. 1846. The prize will be awarded on the 1st Jan. 1847.

On the Action of Mercury on the Gums.—The following fact seems to prove that mercury has no action on the gums when toothless. An old woman, in the wards of Professor Berard, at "La Pitié," was submitted to mercurial treatment carried to salivation; of all her teeth, two stumps alone remained, and the mercurial stomatitis appeared only in the neighbourhood of these two stumps.

Academy of Sciences.—*Sitting of the 20th of Jan.* M. Elie de Beaumont in the Chair. The *ordonnance* approving the election of M. Faraday as *Associé Etranger*, in lieu of the late Dr. Dalton, was read.

On the Influence exercised by Low Temperature on Various Substances.—Professor Dumas read a letter received from Dr. Gaultier de Claubry, M.A.M., informing him that Professor Schrotlar, of Vienna, has discovered that under the influence of very low temperature, obtained by means of carbonic acid gas, 1^o That liquified chlorine has no action on phosphorus or antimony; 2^o That iron is not ignited when put into oxygen; 3^o That spongy platinum remains unchanged in hydrogen gas; and 4^o That protoxyde of azote produces no effect on potassium.

On the Digestion of Sugar and Fecula, and their Nutritive Powers. Memoir read by M. Bonchardat, in his name and that of M. Sandras.—In a memoir presented in 1842, the authors studied the modifications which ordinary food undergoes in the digestive organs, and in 1843, another on the digestion of fatty substances. On the present occasion, they present the result of their researches on the digestion of sugar and fecula, and their nutritive powers. Several causes have contributed to prevent their being as precise as desirable. As the first change, must be considered the idea generally admitted, that solid food was changed first into chyme, and then into chyle; and it was supposed that in analysing the liquid contained in the thoracic duct, the enigma of the digestion of fecula could be discovered. This opinion is erroneous, for the result obtained by the authors seems to prove that the chyle-ducts absorb in the intestines but the fatty matter, and have but a secondary action.

Digestion of Sugar.—Dogs were fed several days with a concentrated solution of cane sugar, which was found in the digestive canal in the following conditions:—in its natural state;—decomposed; lactic acid. When some days had

* A similar, if not identical suggestion, was made public by an Irishman two years since. The inventor, Mr. McElean, senior, Dentist, Stephen's Green, Dublin, sent the instrument for inspection to the eminent and accomplished Surgeon, Mr. Woodroffe, of Ely Place, in that City. It consists of an Indian rubber net-purse attached to the end of an instrument, resembling the ordinary sound: through which, however, can be introduced a sort of wimble, which is worked by a bow. When the "sound," with the purse attached, is passed into the bladder, by means of a screw, the purse is opened: after the surgeon has succeeded in enclosing the stone within it, the former is reduced to powder by a few turns of the bow—while the netting prevents any gravel from being left behind to form the nucleus for a future calculus. From the texture of the purse it would of course withstand the action of acids upon it.—ED.

elapsed, the urine contained traces; it was present also in the blood and chyle. In this last it was in very minute proportions, and there were no traces of the colouring matter, taken in the dissolution of sugar, three hours before the death of the animal. In the stomach, gastric juice decomposes it, and changes it into lactic acid, under which form it is absorbed, and found in the blood. A solution of ten grains was injected into the crural vein, and was found in the urine, but replaced by an equal quantity of glucine, in one experiment, and of decomposed sugar in the other, and neither one nor the other were met with in the urine. This is easily explained. Cane sugar dissolved in a weak alkaline liquid, and exposed to a temperature of 100¹⁰ F., experiences no change from the oxydising influence of the air; glucine, and decomposed sugar, on the contrary, are rapidly destroyed. Cane sugar, therefore, to disappear, must be decomposed and changed into lactic acid, and the ultimate products are water and carbonic acid; are there no intermediate compounds? In two cases formic acid was present, combined with soda, but it is impossible to say whether it was there by accident, or whether it was in the others in such small proportions as to escape the various tests employed.

Digestion of Raw Fecula.—Man and carnivorous animals digest it with difficulty, the greater part passing through the intestines unchanged: in herbivorous animals, it undergoes no change in the stomach, in which organ a paste, or liquid, possessing acid properties, was discovered. Its digestion commences in the small intestines; there the substances present an alkaline reaction, except sometimes at the pyloric extremity of the duodenum. Microscopical examination indicates the presence of the molecules of fecula unchanged, or more or less modified, in their shape; the indications become very manifest when an iodine solution is added. Chemical analysis shews that glucine and dextrine exist. These changes are facilitated by the following conditions: a temperature of about 104° F.; slight alkalinity of the circumambient liquid; presence of a peculiar principle, which has a similar, though not so powerful, an action as *diastase*. The cæcum, and its appendix, contain an acid paste; in one case alone, it was alkaline near the valve of Tulpinus; it was found to contain fecula, entire dextrine, glucose, and lactic acid; same substances in the faeces found in the rectum. The soluble compounds into which fecula are changed, are: dextrine, glucose, and lactic acid, which are to be met with in the blood, but never in the urine. The blood of the vena portæ contained more water, and a greater proportion of comburent matter than arterial blood. Formic acid was never found in the former. In granivora, fecula is unchanged in the *ingluvies*, very acid, and containing dextrine and glucose in the gizzard; sometimes acid at the commencement of the small intestines, but invariably alkaline in the rest of their extent. In fowls, very few entire molecules are found at the end of the small intestine; none in pigeons, owing to the high temperature of their bodies, 107¹/₂ F.; in the latter it is very alkaline, and contains a substance resembling more *diastase* than any hitherto found. The matter found in the large intestines of fowls and pigeons fed with fecula is acid; contains traces of dextrine, glucose and lactic acid; no molecules entire. The blood contains traces of dextrine, glucose, and lactic acid.

Digestion of Fecula after Cooking.—Man, and the carnivora, digest it, when the pellicle has been burst by boiling. Its dissolution commences in the stomach, and continues in the various parts of the intestinal canal; the faeces contain fecula unchanged, the dissolution is performed very slowly. The stomach and intestines contain—unchanged fecula—dextrine—traces of glucose—lactic acid—and the various normal liquids secreted by the intestines. To resume, it may be concluded—1^o That when more than 3i. of sugar for an adult dog, is injected into the veins, or absorbed and carried into the circulation, it is eliminated by the kidneys; 2^o That the slow and successive introduction of the products of fecula are owing to their being changed into soluble compounds, chiefly in the intestines, and carried to the liver, where they are taken up, converted into

bile, and a second time carried into the intestines; the soluble parts of which are absorbed, to be carried anew to the liver. This circulation of the alimentary substances, is the reason why they are carried but slowly into the circulation. The opinion here expressed is in direct opposition with that which admits that the food is changed into chyle, and is founded on the following facts:—1^o The chyle is in very small quantity after the introduction of sugar in the thoracic duct; 2^o Chyle contains neither the colouring matter of saffron, nor prussiate of potass, when given in a solution of sugar; 3^o That they are all found in the blood of the vena portæ.

Analysis of Four Species of Arseniate of Copper: by M. Damour.—The compounds, examined by the author, are *olivenite*. Crystallizes in brilliant octohedrons, composed of arsenic acid, phosphoric acid, oxyde of copper and water. Formula, Cu^4 (as. ph.) $5 + \text{aq.} = \text{Cu}^4$ (as. ph.) $+ \text{H}$, or one atom arsenic acid, 4 oxyde of copper, and one of water. *Aphanese* crystallizes in thin layers, composed of arsenic acid, phosphoric acid, oxyde of copper, oxyde of iron, and water. Formula, Cu^6 (as. ph.) $5 \text{ aq.}^3 = \text{Cu}^6$ (as. ph.) $+ \text{H}^3$, or one atom arsenic acid, 6 atoms oxyde copper, 3 atoms water. *Erinite* in green transparent, hexagonal layers, composed of arsenic and phosphoric acids, oxyde of copper, water and alumine. Formula, Cu^6 (as. ph.) $5 + \text{aq.}^{12} = \text{Cu}^6$ (as. ph.) H^2 or one atom arsenic acid, 6 atoms oxyde of copper, 12 atoms water. *Lirocenite*, 2 samples: First in crystalline masses of a sky-blue colour composed of arsenic and phosphoric acids, oxide of copper, alumine, and water. Second, in sky blue crystals, same composition; 2 Cu^6 (as. ph.) $5 + \text{al.}^6$ (as. ph.) $5 + 32 \text{ aq.} = 2 \text{ cu.}^6$ (as. ph.) $+ \text{al.}^2$ (as. ph.) $+ \text{H}^{32}$, or 3 atoms arsenic acid, 12 atoms oxide of copper, 2 atoms alumine, and 32 atoms water.

Mr. Delezoizeau presented a memoir on the crystallography of the same compounds.

Mr. de Quatrefagues addressed a reply refuting the arguments presented by M. Souleyet, in his memoir on the preceding sitting.

Academy of Medicine. Sitting of the 21st Jan.: M. Caventon in the chair.—Drs. Chassaignac and Belhomme requested to be placed on the list of candidates for the vacant seat in the section of anatomy and physiology.

Mr. Gannal solicited the Academy to name a committee to perform comparative experiments with his method, and those proposed by other individuals. M. Dupuy remarked that the request ought to be sent to the committee framed to examine the documents relative to the plague, for if it be true that this dire disease is from that country, and developed itself since embalment is no longer employed, the question ought to be examined in this light. The president, in reply, stated that a committee had been named to examine the various methods of embalment, but that it might be also examined by that named to discuss the documents relative to the plague. Professor P. Dubois presented in the name of Dr. Lucas Championniere, *Statistique du personnel Medical en France, et quelques autres contrées de l'Europe*. This work, said the honourable academician, contains important documents, and ends by a table of the medical instruction in the different departments of France.

Professor Blandin then presented a patient, on whom he had removed a tumour from the *velum palati* supposed to be cancerous; the ligature was the method employed. (This important operation shall be given in my next.)

The Academy then formed a *Comité Secret*, notwithstanding the remark of Dr. Londe, that as the subject interested the profession, it might be discussed publicly.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

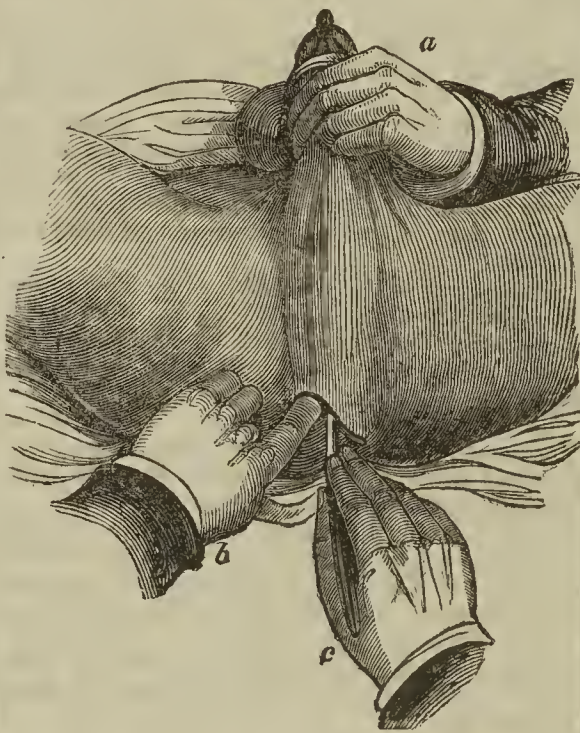
LITERARY INTELLIGENCE.—We understand that Miss Martineau's example is not without imitators, and that a second Mesmeric cure is on the eve of publication. A lady, connected with the aristocratic circles, and who has for years been a severe sufferer, but is now perfectly restored to health, as she thinks, by Mesmerism, is about to publish her case, and give the details of her sufferings and their termination.

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D.,
Surgeon-Lithotomist to the Royal Free Hospital,

(Continued from page 317.)

A LONG interval of time intervenes before any modification of the median section was introduced, and in the interim it was supplanted by another method. In this plan of operating, the incisions were made obliquely, passing through the membranous part of the urethra, the left lobe of the prostate and the neck of the bladder. It would

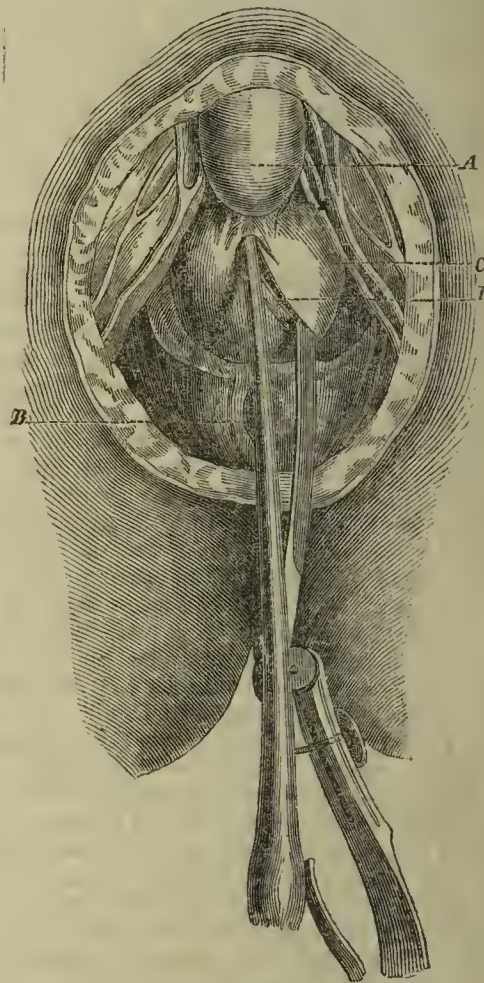


LATERAL OPERATION.—EXTERNAL INCISION.

a. The hand of the assistant drawing the penis upwards.—b. The operator's finger seeking for the groove of the staff.—c. His right hand holding the knife.

seem that this method, in which the formidable mischief resulting from the laceration of important parts were to a certain extent provided against, was not unknown to Franco and Fabricius, although its application in practice did not come into favour until near the end of the seventeenth century. The history of its origin and diffusion is still more singular than that of the median section by Collot. Its author, Jacques Baulot, compelled to military service at the early age of sixteen, and obtaining his discharge at twenty-one, led a roving life for several years, in quality of assistant to an itinerant empiric, named Pauloni, a Venetian, whose chief practice was in cutting for the stone. Separating from his master, who returned to his own country, Jacques continued to earn a livelihood as a wandering lithotomist for ten years longer. Assuming the habit of a monk, and the more high-sounding name of Jacques de Beaulien, he established himself in Besançon in 1695, where he practised with success. One of his patients, a canon of that city, recommended him to another dignitary at Notre Dame, in Paris, whither he removed in 1697, with an introduction to Harley, the president of Parliament. In the full enjoyment of professional, as well as courtly favour, his fame spread far and wide, and his operations became very numerous. His failures were numerous also, and in consequence, he became an object of severe censure and criticism. He was illiterate, ignorant of anatomy, and his instruments were defective; but the method itself was good, and Frere Jacques wanted only the suggestions of a capable instructor, to give to it a most important development. Such an one he found in Hunault, an able physician of Angers. From him he learned the anatomy of the parts, and as he had the year before been convinced, by Fagon, physician to Louis XIV, of the necessity of substituting a

grooved staff for the round solid one he continued to employ till then, he was enabled to combat his critics, and to arrive at a certainty as to the parts to be divided in his operation, which he could not attain before. In possession of a correct theory, and a more suitable instrument, his practice became astonishingly successful. He continued a wandering life for a dozen years longer, receiving public honours and rewards in Holland and France, and died in 1714, some say in 1720, in the Benedictine Convent at Besançon.



LATERAL OPERATION.—INCISION OF THE PROSTATE.

The integuments having been removed, a front view is obtained of the oblique section of the prostate. A portion of the levators and sphincters of the anus in front of the gut have also been removed, in order to expose the gland.—a. The bulb of the urethra.—b. The orifice of the anus.—c. The internal pudics taking the direction of the ischium of each side.—d. The blade of the lithotome still occupying the incision of the prostate.

The early failures of Frere Jacques were attributable, no doubt, to the euts in the dark, inseparable from the use of an uncertain guide. This defect, being corrected, and he himself being instructed as to the anatomy of the parts, the method became established in public favour.

The points of progress are readily enumerated: the evils of the median section, with its stunted incisions and blind lacerations, clearly bespoke the importance of a change in which dilatation was not employed, and free incisions left a sufficient aperture for the ready extraction of the stone. Without any further change, cases of successful operations began to be more numerous; the uncertainty as to the direction of the incisions was next provided against by the use of the grooved staff, instead of the solid one; and lastly, the establishment of correct rules, based on the anatomy of the parts, imparted a degree of completeness and practical value hitherto unattained in this branch of surgery. The docility of Frere Jacques in adopting the counsels of friends, earned for him its due reward, and it is recorded of him, that on his return to Versailles in 1701, he performed thirty-eight operations without a single failure.

Strong as was the testimony of success in favour of Frere Jacques' improved method, and widely

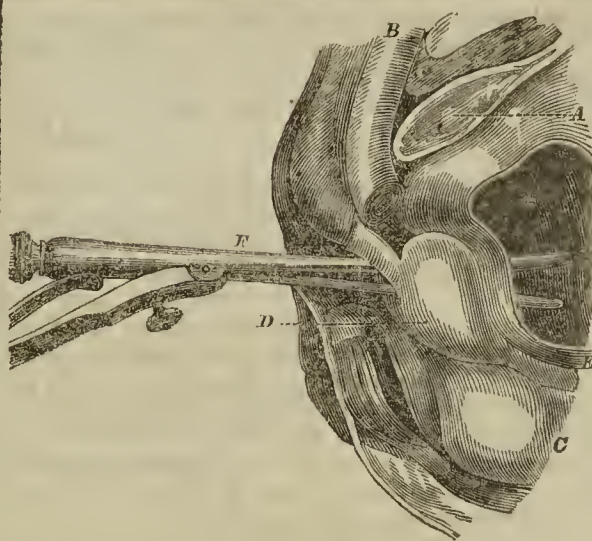
as the steps of the operation must have been known at the time of his death, from repeated publication by himself and others, it might, nevertheless, have fallen into disuse but for his disciple, Raw, who continued to practise it in Holland until his death, which took place in 1719. From the immense number of persons operated on by him in the short space of fifteen years, viz.: one thousand five hundred and forty-seven patients, it may be inferred not only that he was very successful, but that he must have been, in all probability, the only operator in his line after his master, Frere Jacques, had retired to Besançon.

After Raw's death, Frere Jacques' method was lost sight of, until it was reproduced once more through the researches and experiments of our own Cheselden. That Cheselden had little else to guide him in his trials on the dead body than a vague and hearsay knowledge of what was done by Frere Jacques, must at once be obvious from the fact that he performed his first ten operations with a solid, instead of a grooved, staff. Of these patients, four died. Dissatisfied with this result, he reviewed his experiments on the dead body, and endeavoured to follow Raw according to the description of his operation given by Albinus, that is, by cutting the body of the bladder on the groove of the staff, and completing the incision by withdrawing the knife outwards. He soon perceived the danger of such uncertain plunges, and finally settled to the method, which he may justly be said to have created anew, by dividing the prostate and neck of the bladder, without departing from the guiding groove of the staff.

His successes, the just reward of his industry and his intelligence, were such, that the Academy of Sciences, of Paris, sent Moraud to London to witness Cheselden's mode of operating. Moraud published his description of the operation in the Memoirs of the Academy, in 1731. According to this, Cheselden, after incising the superficial parts, introduced his left forefinger into the wound, in order to guide the lithotome into the groove of the staff. The assistant was then directed to draw the staff gently towards the pubis, resting its curve against the bone. By this step, he contributed to secure the rectum from being wounded. Two of the fingers of the left hand being employed to draw the rectum aside, he made the knife to pass along the groove, and thus divided obliquely downwards the prostate and neck of the bladder.

As might have been expected from such a master, Cheselden did not adhere exclusively to the plan of operating just alluded to; and this circumstance has given rise to some doubt as to the mode of operating, to which he gave the preference. But the fact that we have descriptions of his operations that differ from each other, admits of a ready explanation. It was natural that while impressed with the great importance of protecting the rectum, and seminal vesicles, he should aim at obtaining an extent of incision sufficient for the extraction of large stones, and this, doubtless, was his motive, in some cases, for introducing the lithotome, and making the division of the neck of the bladder and prostate by withdrawing it outwards with the edge turned obliquely upwards towards the symphysis of the pubis.

From this period, the operation began to be practised extensively, and the surgeon of St. Thomas' Hospital, to whom the honour of its revival may be justly said to belong, soon reckoned numerous distinguished fellow labourers in Paris, Rouen, and Lyons. When the cases of operation began to be multiplied, and failures were occurring, attention was directed to a strict investigation of the causes on which these reverses depended. Many of the patients died from extravasation of urine, and extensive inflammation of the cellular tissue of the pelvis. This observation led to the idea that the infiltration arose from the incision extending beyond the limits of the prostate, and that all that was necessary to remove this cause of mortality was to provide a certain means against such extension of the incision. This object was answered by Frere Come's lithotome caché, by means of which the extent of the incision could be accurately adjusted. The mechanism of this instrument is too familiar to require description.



LATERAL OPERATION.—INCISION OF THE PROSTATE.

a. Section of the Symphysis of the pubis.—b. The penis drawn upwards. The corpus cavernosum of the left side is cut.—c. The rectum slightly distended.—d. The prostate gland obliquely divided through the left lobe by the lithotome caché, the blade of which is now open.—e. The cavity of the bladder opened; the ends of the lithotome are seen within the cavity which is seen as if distended.—f. The lithotome opened, and about to be withdrawn.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, Jan. 14th, 1845. Mr. Stanley, the President, in the chair.—A case of aneurism of the Popliteal Artery, cured by compression of the Femoral Artery; by Edward Greatrex, Esq., Surgeon, and W. T. Robinson, Esq., Assistant Surgeon of the Coldstream Guards. Communicated by the President.

The patient, a private in the Coldstream Guards, twenty-seven years of age, and previously healthy, on the 22nd of May, 1844, complained of pain and swelling behind the right knee. On examination, a large, irregularly shaped aneurism was found filling up the popliteal space, strongly pulsating, and admitting of being partially emptied by pressure. A delay took place in proceeding to apply compression, till the 18th of June, owing to the patient having been seized with acute laryngitis; an Italian tourniquet, with modifications in its construction was then applied: but a relaxation in the treatment was soon required, from the patient being attacked with modified small pox. On the 8th of July, the tumour having increased in size, the plan was adopted of screwing the pad down firmly upon the femoral artery, and leaving the patient the key, so that when the pain became intolerable, he might relax the pressure by the instrument, and compress the artery higher up, by his finger. On the following day, this method was found to have been successful, for the tumor was perfectly solid, and no pulsation or hollow sound was afterward perceived. The compression was continued for nine days longer. When the instrument was removed, the femoral artery was distinctly felt to pulsate down to its entrance into the tendinous canal, and two arteries of the size of crow quills, could be traced over the surface of the now hard and solid tumor. From that date, the swelling gradually diminished; the patient began to walk about on the 9th of August, and he was dismissed from the hospital, to undertake light duty on the 14th of November. He returned to full duty on the 12th of December, which he has efficiently performed to the present time.

Mr. B. B. Cooper enquired if the president had seen the case, and whether he believed that the man was safe from a probability of a return of the disease?

Mr. Stanley was desirous that Mr. Greatrex, who was present, should answer the question himself.

Mr. Greatrex certainly considered the man to be safe; he had been doing duty for the last six weeks, and he thought the leg was quite as strong as the other.

Mr. B. B. Cooper observed, that the only reason he had to doubt the ultimate success of the proceeding, was because he had himself tried it in two cases, but not with the same amount of care, nor with the same instruments. One of these patients was a porter, who was in the habit of carrying oranges. He was admitted into the hospital under his (Mr. B. B. Cooper's) care about eight years ago, and he then placed a ligature on the right femoral artery. There was, at the same time, a small pulsating tumour in the left popliteal space, and not being willing to tie both the femoral arteries at once, he thought it would be a good case for trying compression, which he effected by means of starched bandages, &c., so as effectually to arrest the pulsation in the vessels, and after a time, the tumour became solid. The man underwent a protracted cure in the hospital, as regards the right leg, in consequence of the formation of abscesses, and when ultimately discharged, he was supposed to be cured of both the aneurism. This, however, was not the case; the tumour again softened, and the circulation was restored through it, either from the coagulum being absorbed, or by the re-opening of the sac by anastomosing branches. The man was again admitted into the hospital, and the operation of applying a ligature round the vessel was performed with success. Shortly afterwards, a man was taken into the hospital with popliteal aneurism, upon whom the operation of tying the artery had been previously performed on the other side. The diseased vessel was subjected to compression for six months, and the tumour became solid, but pulsation re-appeared in it, and it finally required the ligature. In these instances, the same thing occurred as in Mr. Greatrex's case; the artery continued to pulsate down to the triceps, and this is so different from what occurs when a ligature has been applied, that coupling it with the results in the two cases which he had just narrated, he should be inclined to doubt the absolute success of the proceeding, and would still keep up the pressure, instead of allowing the man to return to duty.

Mr. Greatrex observed that the compression which was commenced on the 18th of June, was left off early in July, there not being then any pulsation in the vessel, nor had there been since. He thought himself justified in regarding it as a case in which a cure had been effected, as the tumour was now generally soft, and was gradually disappearing.

Mr. Stanley confirmed the observations of Mr. Greatrex, and had looked upon the case as cured, but after what had fallen from Mr. Cooper, he would not say so positively.

Mr. Greatrex suggested, that in some cases, the blood will return into the aneurismal sac, by means of anastomosing branches, after a ligature has been applied to the principal artery itself. He inquired of Mr. Cooper, when a patient, in whom the obliteration of the artery had been obtained by compression, might be regarded as safe?

Mr. B. B. Cooper, in reply, stated that he should not look upon a patient as safe, until after the lapse of a year.

Mr. Curling observed, that there was a very great difference in the manner in which Mr. Cooper and Mr. Greatrex had employed compression in their respective cases. The instrument, which was made by Mr. Weiss, and used by Mr. Greatrex, did not interfere with the collateral circulation, but that was not the case with Mr. Cooper, and he (Mr. Curling), therefore thought it probable that a better result might be obtained in the one case than in the other. He did not deem it necessary to exert a degree of compression sufficient to obstruct the circulation completely; a less amount of pressure, he thought, would be sufficient to cause the coagulation of the blood in the sac.

Mr. Greatrex said, the only difference he could detect, was that the pulsation of the vessel which had been compressed, was, perhaps, rather more feeble than in the artery of the opposite side.

there was not any apparent diminution in its calibre, nor had there been any inflammation.

Mr. Shaw narrated the case of a man, who was admitted into the Middlesex Hospital some years ago, with popliteal aneurism, and for which it was determined to apply a ligature to the artery. The superficial femoral artery was cut down upon in the usual place, and a ligature thrown around it, with the effect of arresting the circulation, but the pulsation soon returned, and continued for three days, after which it ceased completely. Erysipelas set in three days after the operation was performed, and the man died. When the body was examined after death, an unusual distribution of the artery was discovered; it divided just below where the profunda was given off, into two equal branches, which were united below the triceps. Only one of these vessels had been tied, and, nevertheless, coagulation had taken place in the sac, which had become quite firm. It, therefore, illustrated that part of the subject of inquiry, which referred to the possibility of causing coagulation of the blood in the aneurismal sac, without inducing complete obstruction of the circulation through the vessel.

Mr. Charles Hawkins mentioned the case of a man who was admitted into St. George's Hospital, with an aneurismal tumour in the upper part of the thigh, which had existed about six weeks. It was a large pulsating tumour, and the operation of applying a ligature round the vessel was proposed, but was objected to by the man's wife; and he accordingly left the hospital, presenting himself afterwards occasionally for examination. The tumour continued to increase in size, and gradually extended upwards. He was then told that there was not any chance of recovery, and that the tumour would ultimately burst, and that he would then die from hæmorrhage. Under these circumstances the man kept his bed for a very long time, maintaining the limb perfectly at rest; and when he again presented himself, the tumour had almost entirely disappeared, and the aneurism was cured. He then promised that if there were at any time any increase in size of the tumour, or any return of the disease, he would again present himself; as he had not done so, he (Mr. Charles Hawkins) presumed that the cure was a permanent one. With reference to the remarks made by Mr. Greatrex, that the aneurismal sac is again occasionally supplied with blood, after the application of a ligature, he (Mr. C. Hawkins) related that Sir B. C. Brodie tied the external iliac artery some years ago for an aneurism in the thigh. Pulsation in the sac ceased; the case was treated as usual, and the man left the hospital, apparently cured. Pulsation, however, returned in the aneurism, and the man, at the end of two years, had a tumour larger than at first, and very hard. He ultimately died, and it was then ascertained that the aneurismal sac had been re-opened by means of the collateral circulation.

Mr. Bransby B. Cooper enquired if it had been ascertained by what vessel the aneurism had been fed. He presumed it must have been by a branch from the internal iliac.

Mr. Charles Hawkins replied that it had not been clearly made out; the preparation was in the hospital museum.

Mr. Bransby Cooper mentioned a case of popliteal aneurism, in which he had been consulted. The patient had been operated on about six months previously, by Mr. Wilson, of Manchester, and he (Mr. B. B. Cooper) found the cicatrix of the operation in the usual place. The case went on well for a few weeks, when the pulsation returned. He applied a ligature below the triceps, where the pulsation could be clearly distinguished. The artery was deeply seated. After the vessel had been ligatured, he examined the sac, and found it completely empty; but before he left the house, pulsation had returned as strongly as ever. He examined the limb very carefully, and was led to suspect that the return of the pulsation was owing to some anomalous distribution of the blood. He then placed the limb at rest, with the foot elevated; applied cold to the limb, abstracted blood from the arm, and exhibited small doses of tartarized antimony. By the tenth day all pulsation ceased, and the patient fully recovered. Ho

continued well, as regarded this aneurism, until his death, which occurred recently at Milan, from aneurism of the heart.

Mr. Stanley asked Mr. Cooper in what state he had found the artery after a ligature had been applied?

Mr. Cooper answered, as an impervious cord.

Mr. Stanley observed that this was not in accordance with his experience; he had generally found the part of the artery between the ligature and the ham to be quite free and open, and this was the case also in an instance where Mr. Lawrence had operated about twelve months previously. He did not think, therefore, that in the majority of cases the artery was obliterated below the ligature. In Mr. Lawrence's case there remained a tumor in the ham, as large as a goose's egg, containing a solid mass of fibrine in concentric layers, closely adhering together.

Mr. Cæsar Hawkins related the case of a man who was a patient in St. George's Hospital, when he was a student there. He was operated on for popliteal aneurism, and was apparently cured, so that the man resumed his work, and continued so to employ himself for seven years. There was always a tumor in the popliteal space. At the end of that time he came back with the tumor as large as before, and was admitted, under the care of Mr. Jeffries, by whom he was offered his choice, of having the artery again tied, or undergoing amputation. He preferred the latter operation, which was accordingly performed, but he died a few hours afterwards from fright. The examination of the limb shewed two large vessels communicating with the sac. He did not think that such an occurrence as this should be allowed to militate against the employment of pressure, as a means of cure for aneurism. It was not now employed as it used to be formerly, when so severe were the consequences that it was thrown aside. The pressure that was then used was so great as to cause sloughing, but it was now deemed to be sufficient if it succeeded in retarding the flow of the blood, as if it were persevered in for a sufficient length of time, it would cause coagulation of the blood in the sac. There is a case now in St. George's Hospital in which the treatment by pressure was being tried. The great fault, he thought, in Mr. Weiss's instrument, is that the pad in the under surface is flat; it ought to be concave.

Dr. MacLaughlan had been present at the post-mortem examination of a case, in which a ligature had been applied to the femoral artery for popliteal aneurism many years previously. Just below where the ligature had been applied, there was a fibrinous clot, adhering to the coats of the vessel, which was pervious, below that, down to the ham.

Mr. Shaw had seen a similar case, where the artery was pervious down to the aneurism. The patient died suddenly from aneurism of the heart bursting into the pericardium.

Dr. Jeaffreson suggested that in these cases there was something peculiar in the circulation generally.

Mr. Stanley remarked that one of the patients, to whose case he had alluded, died of old age, the other of aortic aneurism.

On the Periodicity of Neurosis. By Isaac Pidduck M.D.

This case, related as a singular instance of neuralgic periodicity, was that of a girl aged 14, in whom the catamenia had not appeared. Six years ago, she was thrown out of a swing, and struck her head against a brick—pain in the forehead ensued, which lasted about a fortnight. The right hand then became clenched, and the head-ache ceased. The hand continued immovably closed for three weeks, when it opened of its own accord, and the head-ache returned. The hand remained open, and she had the free use of it for three weeks, during which time she suffered from head-ache; it then closed with the same relief as before. From the time of the accident, to August last, a period of six years, the alternations of closing and opening of the hand, and of the head-ache, followed each other with perfect periodicity. When the author first saw the patient, the hand was closed, and a forcible attempt to open it gave her great pain in the head. She complained of tenderness along the cervical vertebrae. One-fifteenth of

a grain of schynia was given three times a day and mustard poultices were applied to the spine as the perspiration was very sour, an antacid diet was directed. Under this plan her health improved, and when the hand opened at the end of the last three weeks of its closure, she ceased to complain of the head. After this there was no return of the closure of the hand, nor of headache, and she has continued perfectly well up to this time.

Sir George Lefevre congratulated the Society on having at last a paper on a medical subject, after so much attention had been devoted to surgical matters. He made some remarks generally with respect to the periodicity of nervous affections, and mentioned the case of a young woman in whom periodic palpitation of the heart occurred regularly every twenty-eight days.

Mr. Cæsar Hawkins inquired what effect was anticipated from the homœopathic dose of strychnine, which had been exhibited? From the paper, it appeared that the spasmodic clenching of the hand began to diminish after that medicine had been exhibited.

Dr. Pidduck was not inclined to refer the relief of the spasms to the small doses of strychnine which had been given.

Three Cases of hard circumscribed Tumors in Muscle, disappearing under the influence of the Iodide of Potassium: by Thomas Tatum, Esq., Surgeon to St. George's Hospital, and Lecturer on Anatomy.—The author relates three cases of tumors in the substance of muscle, supposed to be the effect of chronic inflammation, and deposition of coagulable lymph between the fibres. In each of the patients, the swellings were situated in the sterno-cleido-mastoideus muscle; and in one, a similar tumor afterwards formed in the clavicular portion of the pectoralis major muscle, but which was distinguished by being of a bony hardness and apparently connected with the periosteum of the clavicle. The author is of opinion, that had the progress of the disease not been interrupted early, ossific deposit would probably have taken place in the tumors, and the muscular structure would have been converted into bony tissue. He draws particular attention to the decided influence which the iodide of potassium had in removing the tumors, and the inefficacy of various other remedies which had been previously tried.

Mr. Cæsar Hawkins alluded to several cases which, in many respects, resembled those described by Mr. Tatum, only that the inflammatory action was not confined to the muscular tissue.

Sir George Lefevre, with reference to the action of the iodide of potassium, mentioned a case which he had seen when recently in Paris. It was that of a young gentleman, who was labouring under secondary symptoms, following a chancre on the finger, caught while attending a midwifery case. For the relief of this complaint, he took large quantities of the iodide of potassium, and in a few months he became quite well, but as a singular consequence of taking that remedy, he lost all venereal power. He was in the habit of taking ten grains three times a day, and he continued to do so for about three or four months. Sir George Lefevre was desirous of learning whether any member of the society had noticed such a consequence of the exhibition of the iodide of potassium. The disappearance of the breasts and the diminution in size of the testicles had been mentioned by several writers, as produced by long continued, or large doses, of iodine, but he himself had never known a case where the venereal power had been destroyed by that medicine.

Mr. Cæsar Hawkins observed, that, in common with many other surgeons, he had exhibited the iodide of potassium somewhat freely, but had never heard of any such result from its use, and he thought if it had occurred, that the surgeon who prescribed the medicine would be sure to hear of it.

Mr. Curling had never met with any case of tumor in the sterno-cleido-mastoideus, but had often seen instances of induration of muscle. He had seen it in the case of an infant, two months after birth; the muscle was as hard as cartilage, and the head was fixed to one side. In this

stance one side only was affected; but it sometimes happens that both are involved in the disease. The induration is generally removed in four or five weeks, without any other application than a mild liniment.

Mr. Acton had seen Ricord use the iodide of potassium very largely, and had also done so himself, but had never noticed any such effect, as that described by Sir George Lefevre, and which he should be inclined to attribute to mental causes. The principal pathological effects produced by the exhibition of the iodide of potassium, were, pain in the stomach, which might be prevented by giving the medicine in a large quantity of fluid, and a metallic taste in the mouth, with a spongy condition of the gums. He doubted the fact that absorption of the mammae or testes was produced by the iodide. At all events it is of rare occurrence.

Mr. Snow mentioned a case of inflammatory swelling of the sterno-cleido-mastoideus, following an injury, and which was relieved by the use of lotions, &c.

We regret to announce the death of Dr. Ingleby, the eminent Midwifery Practitioner, which took place this week, at Birmingham. We shall, probably give a sketch of his career in our next number.

NOTICES TO CORRESPONDENTS.

"A Rustic Practitioner" suggests, that our Pencillings should not be limited to the aristocracy of the profession, and points our attention to the prominent characters connected with our medical associations. We shall not overlook the hint, and as the *New Association of General Practitioners* is now at its zenith we shall perhaps begin with it.

"H. F."—The College of Surgeons are to have another meeting, we believe, to-morrow, Saturday, on the Supplementary Charter. We have no doubt of their resolving decisively in favour of the propositions which we announced as forming a part of the new document. But their unfortunate procrastinations place their institution in a position of much jeopardy. Every day adds stupendous force to the ill-will that is growing against them, and increases the forces so skillfully marshalled for their destruction.

"T. H. Y." by referring to "Graves's" Clinical Medicine, will find noticed in it a preparation of iron, the "*Liq. ferri per sesquinitratum*," which possesses all the properties ascribed by him to his preparation. In the present crowded condition of the Pharmacopœia, as respects chalybeate medicines, we think that much good might be done by diminishing, rather than adding, to their number, as the majority of the present preparations, to use the language of Sterne, "are mere apothecaries' mixtures, swelling the list of names, but adding nothing to the utility of the materia medica."

"C. S."—If any situation likely to suit should come within the Editor's observation, C. S. will hear of it.

"Our Subscriber, A. E., Bulwall."—If the observations are of a character superior to the generality of those which appear on the same subject in all the journals, we shall give them the next vacant corner of our paper. But the subject on which our correspondent purposes to write, has been worn thread-bare by a multitude of essayists, from the brilliant cleric, Sydney Smith, down to the daily penny-aliner. However, let him try.

"Y. C."—Perhaps an application to the secretary of the "Sydenham Society," 24, Finsbury Place, might be successful in procuring a better price for our querist's work than he could otherwise procure for it. It is no great rarity.

"Vindex."—We must repeat that we are not going to occupy our pages with printing charges against such an individual, however much the reputation of the profession may be identified with his—as a public character. Whatever is charged against him may be fairly examined by a Committee as our correspondent suggests; and we will gladly give the results if permitted. If there be no such enquiry—so usual in all professions among gentlemen—let the fault be with the proper quarter. The charges are matter of every day knowledge, and if they are not worth refuting we cannot help it.

"Monitus."—Very true. An author wishing his name to be deliberately divulged, should communicate it in confidence to the Editor of the "*Lancet*."

W.—Mr. Cooke has the whole superintendence of our printing. The Pharmaceutical numbers included. The applications should be addressed to him at the "Medical Times" office or he should be there called on personally, at any hour from ten to seven. Our printing, from the occasionally colossal size of our journal, and the number of impressions struck off, is now carried on at the steam press, 19 and 20, Boswell Court—considered one of the largest printing machines in Europe.

The report of the Ethnological Society arrived too late for insertion this week.

The work to which "*Æsop*" refers, was published by Messrs. Whitaker, Ave Maria Lane.

Opifer, per Kent Roadem Dicor.—This clever critique, which might claim alliance with the talented historical sketches of Miss Tickletoy, in "*Punch*," is, in our opin-

ion, as well directed against its object, as would be the charge of a rifle to bring down a tom-tit. Grammatically, Opifer is correct. Usage, however, will have its defence.

Much correspondence must remain this week, unanswered. Several valuable communications are unavoidably delayed to our next number.

THE MEDICAL TIMES.

SATURDAY, FEB. 1, 1845.

PROPOSAL OF PRIZES FOR THE BEST HOSPITAL REPORTS BY MEDICAL STUDENTS.

THE aim of the MEDICAL TIMES, since it fell or rose into the hands of its present conductors, has been above all things to promote the SCIENCE of our Profession. We have looked upon our art as the world's greatest blessing; and it has been our earnest desire to give it a development equal to that astounding mechanical progression which has, of late years, characterized our country's social history. The periodical literature of Medicine, it cannot be denied, has shewn within the last few years an amazing improvement; and leaving for others the vindication of any claims we may have to paternity in the salutary revolution, we have now to submit a proposal which, we trust, may lend a helping agency to that study of our Profession, as a *Science*, which we, with our brother-Practitioners, have so much at heart.

The groundwork of most of our subsequent Professional worth is laid down in our Studentship: and the great and the only true teacher of the Student must ever be—Hospital Practice. Lectures and books have their uses: but it is by the bed which holds a human being, with the joy of health or the pain of disease, the chance of life or the peril of death depending on the aids of Science, that we acquire our true knowledge. There is there for the student no listless ear, no dull eye of the lecture-room; it is not the memory alone that is appealed to, or some abstract love of a pedantic and inapplicable lore. Every power of his mind is engaged: he is forced by the sympathies of his nature to hear and see, to observe, to reason, to prognosticate, to be *experienced*: each patient's case is a volume of Medical Science in its most practical aspect, forced on his acquaintance for life!

To promote, then, so important a portion of Medical Education, to add our mite to what should prove so vast an item in the future progress of our science, we propose to British Medical Students, attached to any hospital at home or abroad, three prizes for the three best series, of Hospital Reports, of not less than twelve cases: viz.,—

25 Guineas for the series first in order of merit.

10 Guineas for the series second in order of merit.

5 Guineas for the series third in order of merit.

The authors must be STUDENTS who shall not have received any Medical diplomas, or licenses.

Six of the cases are to be Medical, and six Surgical.

The cases must have occurred during the present year; and the names of the gentlemen, under whose treatment they may have principally come, distinctly mentioned.

Four arbitrators will be appointed—two Surgeons and two Physicians; whose names will be

duly announced. The decision will be made on the 1st of November.

The Prize Reports will be published in succession in the MEDICAL TIMES, with the names of the authors.

They are to be sent to the Editor of the MEDICAL TIMES on or before Oct. 1, 1845, accompanied by a certificate from a Surgeon or Physician to a Hospital, declaring that the writer is *bonâ fide* a Medical Student. A motto or device must be inscribed on each Report, to identify the author, whose name, with a duplicate of the motto or device must be mentioned in a private note, which will be opened when the award shall have been made.

We trust that our friends—the Medical Students—will meet our proposal in a warm spirit of praiseworthy emulation; and that they will accept our offer of to day as a fresh assurance of the lively interest we have ever taken in the scientific progress of a body—in whose numbers it is one of our proudest boast once to have reckoned ourselves.

*Quid te, excerpta juvat spines de pluribus una?
Vivere si recte nescis, decide peritis.*

On Tuesday next, we are again to have the Parliament in action. What a coming season of importance to medical men! The possible, nay the probable, instrument of that revolution in medical government which has been more or less thought about for so many years, it well becomes us to look forward to it with solicitude, and to marshal ourselves into rank and file to exercise on its doings our full influence. Much apparently *must* be done:—*how* done, will depend much on ourselves. For one year we have an influence all potent in shaping the system which afterwards, we know not for how long, will have so powerful an influence on us. What an argument for each Practitioner to exert himself, no matter what are his honest opinions, and to do his best, during the short occasion before him, to stamp his image on the coming events!

The great struggle will evidently lie between the College of Surgeons and the Apothecaries' Company. There is now a battle of life and death between them. It is obvious that both cannot co-exist in their present importance. Two years ago, and in the opinion of all, the first change that, apparently, could come, must have swept away the anomalous licensing house in Blackfriars. General Practitioners had, in fact, risen into physicians; the Apothecaries, for whom the establishment was built, had become an extinct social genus; reciprocity of practice, in all parts of the Empire, to British doctors becoming inevitable, the exclusive privilege of forcing almost all doctors, no matter how educated, through their wickets, was doomed by the increasing scientific liberality and professional good feeling of the time; and with all these circumstances prominent before us, every one was prepared for a legislative change, which, suspending the functions of the Apothecaries' Society, or limiting them to pharmacy, would honourably connect our General Practitioners with the Colleges, that in reason and equity belonged to them. But, no! The incorporated apothecaries were wiser than even their friends anticipated; the sense of peril to their pecuniary condition or social consequence, gave them a power of mind, that has astounded even their enemies; and the chances are three to one that they will reap the full profit of their mature wisdom. Turning skilfully to account the tremendous blunder of Sir B. Brodie and his friends, they have, with a rare industry, admirable tact,

and profuse expenditure of money, succeeded in creating a very general impression, that they—and they only—offer the General Practitioners an *alma mater*, and have thus persuaded two-thirds of the body into the great political mistake of treating the source of half their qualifications as the source of all; and of staking their all with the fortunes of that parent of two, which they acknowledge as the less respectable to be connected with. Wonderful change! Two years since the Apothecaries' Company was the most unpopular of our three Corporations. It was remembered that with the legal trust from the legislature of suppressing quackery, they spent more money in prosecuting qualified practitioners than empirics; and that though vested with their all-important powers for thirty years, they had scarcely prosecuted half as many quacks. It was not forgotten that, with the immense sums they had received yearly from their licentiates, and with their claims to be considered the *Alma Mater* of General Practitioners, they had done even less than the College of Surgeons, in the way of libraries, museums, and lectures, for the personal comfort and advantage of that portion of the Profession. It was objected, also, that in all the points that regard the essence of good Medical Government—the scrutiny of accounts, the publicity of governing Meetings, the responsibility of management, the consultation of the wishes and opinions of their members, they had done no one thing to secure a favourable opinion. Yet this body, thus unpopular—and we must add, thus deservedly unpopular—has suddenly, in the very hour of its most mortal peril too, managed to emerge into a *quasi* species of popularity, and to catch a good share of the “sweet voices” of the London Profession. Like the unjust steward, they have used “the mammon of unrighteousness” to some purpose; and though we fear they have wiped off none of our professional scores, have easily secured from us a new house for their reception, when turned out of the old.

There is a cleverness—we had almost said a genius—in this, that disarms us of every ill feeling; and when we turn to the contrast presented almost to the present week, by the College of Surgeons, we must own that we exult at the success of their rivals. The deepest policy of the General Practitioner who wishes to exalt his order, could not have suggested anything better for his interests than adverse chance influences of varied parties have actually produced. The Apothecaries' Company, for their own ends, have advanced to a position in which it remains wholly for our choice to decide whether they shall use us—as they intend,—or *we* them, as *we may*. Their aim is to twist us to better *their* places. What is ours? Obviously to use them for improving ours. They are our *pis-aller*. If, by a proper use of them, we can whip the Surgical Council to such a treatment of us as may place that great national institution completely under the controul of the English Profession—(we rise in our demands daily)—it may be well to ponder whether a ruling fellowship there would not do us more credit and service than a membership of any new and untried Corporation: and whether, with all our vindictiveness against the present members of the Council, it would not be most unwise to sacrifice to it a valuable advantage to ourselves. If the College Council shrink from their good intents, or fall short of our *syballine* demands, there yet remain the Apothecaries. That is our worst alternative. We may gratefully take the very tolerable position they propose to offer us in Society, when

quite sure we can get no better. At present, the Company are so placed that they must be content to abide the chance of our choice. Once our rulers, they are now our beggars, and the proverb is not of yesterday's making, that beggars must not be choosers.

Our humble estimate of the advantages of the new Incorporation, will perhaps surprize a few practitioners about town, who have reached the pleasure of some enthusiasm on the subject. These gentlemen fancy that Utopian days of bliss will come to the General Practitioner when one new College is added to our other two. It may, however be, that they are asking their own undoing, and that their enemies can desire nothing better than the Government concession of their prayer. What does the *physician*, as a general rule, seek above all things? Practice. How get this, save by a preference? How get the preference save by a real or supposed superiority of *competency*? What will give this impression more hold on the people's mind than the fact, that he belongs to College No. 1—a very select body of very few members, bearing high titles, inferring high merits. So of the pure surgeon, the Fellow of the College of Surgeons. He is decisively marked as of the best class. He is select, gentlemanly, out of the corps out of which they make the hospital-surgeons and royal attendants, and so on to the end of the chapter; so that, though both Colleges be numerically weak, they would probably be in the same proportion, individually influential. How would it be with the *omnium gatherum* College? Important, most important as a political power in an agitation with Government, individually the membership might possibly not be worth accepting. The Druggists are very potent as an incorporate society, with their three or four thousand members; but how does that fact affect the members individually? We fear it does little for them in their private practice, or in public opinion. These are, of course, hasty suggestions, thrown out in much the same spirit in which Samuel coaxed the Jews against the appointment of the tyrant king they had resolved on; and all, we trust, in the matter is, that if our London brethren will not look on the new Incorporation as a *pisaller*, they will, at all events, make quite sure that if they even got all they asked, they might not be playing the game of their enemies, and simply placing some half dozen long headed fellows in corporate births, while giving themselves, as the price of their charity, a lower corporate status in the public eye than they had any notion of. We know that not a few Physicians, and pure surgeons, agree in the opinion that any separate incorporation of the General Practitioners, would have a depressing influence in the social standing of the body, and the chances of that higher and remunerative kind of practice to which they have of late years been more and more advancing, and it does not surprise us very much that Sir James Graham should, in his answer to the General Practitioners' Association, appear to make his assent to the new Charter of Incorporation, depend wholly on the wishes of the General Practitioners. If they will have what the pure Surgeons and Physicians (we mean that great bulk of them who look to practice rather than to corporate patronage) are so glad to have granted them, what can Sir James Graham do but oblige them both? It may be that this union to give the London Practitioners what they have been demanding, may excite some suspicion. The gift so easily given, may, after all, like the wooden horse of Troy, not be worth accepting.

PUBLIC HEALTH.

ANALYSIS OF THE “FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS.”

No. V.

Evidence of Dr. Neil Arnott.

The evidence of Dr. Arnott opens with some very important statements, in reference to fever and its causes. It will be in the recollection of our readers that Dr. Smith attributes fever entirely to deficient drainage. In this opinion he is borne out by Dr. Arnott, but opposed by Dr. Allison, who has strongly expressed his opinion that too much had been attributed to decomposing animal and vegetable substances, and too little to distress, as exciting causes of fever. This objection it is Dr. Arnott's first object to remove; and as it is of vital importance to trace fever to its true cause, whatever it may be, we shall follow his example, by citing in detail the several facts which induced him to abide by his own expressed conviction, and to reject that of Dr. Allison.

The first argument advanced is, the existence in Spitalfields, during a period of full employment, of a severe epidemic, “which subsided, in a marked degree, at a time when half the looms were thrown out of work.” The medical officer of that district, who, in times of full employment, had as many as 800 fever cases to attend to in one year, then found the number fall to 250 cases; and he makes the following striking statement:—

“The greatest number of fever cases we have, is of persons who fall ill during the time they are in employment. I think they are more attacked when in work, when the windows are closed, and there is no ventilation. Many of them are obliged to work with closed windows, to keep out the moist air, and prevent the dust blowing upon their work. When they are out of work they are more out of doors looking after work—more in the open air; and that very exercise may be the means of keeping them in health. This observation applies to the weavers. I find that they have generally less fever when they are out of work. The reverse, I think, holds as respects out-door labourers, such as those who work at the docks. When they are out of work, they stand about waiting in the cold, and, when cold, they generally take cheap gin, and no food; they catch cold, and on going to their close, filthy habitations, their cold is apt to generate fever.” The fact is here better than the theory, but the statement is an important one.

Here is another illustration of the same nature:—“In May, 1832, there was an almost entire cessation of work at Paisley, so extensive, that extraordinary means were taken, by general subscription, and with the aid of the Government, to relieve the distress. At that precise time, the medical men, having charge of the Fever Hospital, were surprised by an extraordinary diminution in the number of cases of fever. There were, during that month, just one-eighth less than the average during the five preceding years. But the demand for goods and labour subsequently returned, so that the whole population was again employed, and warehouses were cleared of goods that had not been empty for ten years before. In this restored state of the labour-market, a new epidemic broke out.”

Manchester affords another case in point:—“In the year 1840, the total deaths in that town were 1 in 28.36; but, though distress increased, they were reduced, in 1841, to 1 in 31.59. In the following year, when there was an increase of general distress, they still diminished to a rate of 1 in 33. They diminished in Manchester, which was distressed, in 1842; whilst, in Liverpool, a commercial city, where the labouring population had suffered little comparatively from distress, the deaths increased to the number of 700 above the average.”

We omit one or two of Dr. Arnott's illustrations of the same principle, as being less conclusive, and shall content ourselves with the remarkable results obtained by Dr. Davidson, of Glasgow, in regard to the physical condition of 429 fever patients admitted at the Glasgow Infirmary: 101 persons (28 males, and 73 females) were full, or

plethoric, having an extra quantity of adipose texture, or of blood; 209 (116 males, and 93 females) were moderately stout, that is to say, they had an ordinary quantity of muscle and cellular substance; 44 males were muscular; 65 persons (24 males, and 41 females) were spare; and only 7 (2 males, and 5 females) were emaciated, or unhealthy in appearance. The spare and unhealthy, when added together, form only about 17 per cent. of the whole number. Almost all the patients, as far as could be ascertained, were engaged in their ordinary occupations at the time of their seizure.

These statements of Dr. Davidson are confirmed by the Report of the District Surgeons of Glasgow, who state, in reference to the fatal epidemic of 1843, that it was most severe among the labouring classes—even although the individuals were apparently somewhat robust—if their habitations were dark, damp, filthy, and unventilated.

These facts are quite conclusive as to the little direct influence which distress has on the prevalence of fever. So far from its being an efficient cause of that disease, it appears that diminished means, and want of employment, tend indirectly to check the prevalence of fever, by driving the sedentary artisan from his unwholesome place of work into the open air, and by taking away from the out-door labourer the means of indulgence in habits of intemperance.

Now this is a very important fact, for it cuts away the ground from beneath the feet of those who contend that fever is an evil incident to the condition of poverty, and one which, lamentable though it be, must be submitted to as inevitable. Instead of poverty being the cause of fever, fever must be regarded as one of the most fruitful sources of poverty. This is a wholesome view of things, and one calculated to stir men to action, and to encourage them in the performance of their duty. If fever be not the offspring of poverty, but of the filthy state of the streets and houses which the entire labouring class are constrained to inhabit, then fever may be prevented by sewerage and ventilation.

Dr. Arnott, having settled this important question of the influence of distress in the production of fever, quotes from American authorities some striking passages illustrative of the condition of two American cities, New York and Philadelphia.

Most of our readers are aware that Liverpool was, until recently, regarded as a remarkably healthy city; but, knowing what it really is, they will not be surprised to be told that the condition of the American town population, which has been referred to in Parliament as an instance of what may be done, independently of any sanitary regulations, is not a whit more creditable to Brother Jonathan than Liverpool is to us. Hear what Dr. Griscom, the Inspector of Funerals in New York, says of that city:—

"Upwards of 33,000 of the population of that city live in cellars, courts, and alleys, of which 6,618 are dwellers in cellars."—(Only 6,618! Why Liverpool has 22,168 cellar-inhabitants.)—"Many of those back places are so constructed as to cut off all circulation of air, the line of houses being across the entrance, forming a *cul-de-sac*: while those in which the line is parallel with, and at one side of the entrance, are rather more favourably situated, but still excluded from any general visitation of air in currents. As to the influence of these localities upon the health and lives of the inmates, there is, and can be, no dispute; but few are aware of the dreadful extent of the disease and suffering found in them. In the damp, dark, and chilly cellars, fevers, rheumatism, contagions, and inflammatory disorders, affections of the lungs, skin, and eyes, and numerous others, are rife, and too often successfully combat the skill of the physician and the benevolence of strangers. I speak now of the influence of locality merely. The degraded habits of life, the filth, the degenerate morals, the confined and crowded apartments, and insufficient food of those who live in more elevated rooms, comparatively beyond the reach of the exhalations of the soil, engender a different train of diseases, sufficiently distressing to contemplate; but the addition to all these causes, of the foul influences of the incessant moisture, and more confined air of under-ground

rooms, is productive of evils which humanity cannot regard without shuddering."—Can any one be surprised to hear that this cellar-population is often ravaged by fever, while the population occupying the upper apartments of the same houses are untouched; or that the physician is aided in his search after a patient, by "a peculiar and nauseous effluvia issuing from the door;" or that the average age of death, in such a town, in an average year, does not exceed 20 years."

Men of Liverpool, with your 55,534 inhabitants of courts, and your 22,168 inhabitants of cellars, what say you to this description? Do you recognize its truth? Do you feel its force?

Philadelphia seems to be as little better than New York, as Manchester is than Liverpool. With regard to the former city, Dr. Griscom informs us that, "in the average of 12 years, the mean age of death has not exceeded 20 years and 7 months. Half of those born there, appear to die before the fifth year, and no less than 27 per cent. of the remainder die under 50 years of age; and the average age of death, of all who die there above 20 years of age, appears to be below 46 years: whilst in Bethnal Green, one of the worst districts in London, it is nearly 49 years; and the average in London appears to be 53 years." This mortality, excessive as it is, would not appear to be greater than that of many other cities of the United States; for Dr. Gouverneur Emerson states, in opposition to the representations of some of the American publications, that Philadelphia presents "as low, if not a lower, rate than any one of them." Our space does not allow us to cite at length the passage which Dr. Arnott extracts from the Medical Statistics of Philadelphia, by Dr. Emerson. Fever, in some of its forms, is almost universal among the inhabitants of the undrained and unimproved outskirts, but of rare occurrence in the central parts, which are well paved and drained; "by far the greatest proportion of the annual sickness and mortality of ordinary seasons, furnished by the narrow and confined alleys and courts existing in various parts of the town;" "the difference, though sufficiently obvious in adults, most lamentably conspicuous among children;" deaths, from cholera, rare in houses with large and well-aired apartments; the influence of meagre and unwholesome food, and immoderate indulgence in strong liquors, though usually mentioned as the chief causes of the excessive mortality of the labouring class, insignificant when compared to that of breathing air that has been previously expired, and which, moreover, is commonly charged with animal and vegetable effluvia;—these are some of the points touched upon; and they confirm the opinions of all who have inquired into the condition of our large towns.

Before we dismiss Dr. Emerson, we must quote his opinions on the necessity of legislative interference in behalf of the health and lives of the labouring class. If a citizen of the *soi-disant* land of liberty *par excellence*, can contemplate without a shudder such interference with what the *laissez faire* school are in the habit of calling, the rights of property, then our consciences may be more at ease when we proceed to take measures to restrain our own landlords. "The numerous instances," says Dr. Emerson, "wherein the mercenary calculations of individuals have tempted them to put up nests of contracted tenements in courts or alleys, admitting but little air, and yet subjected to the full influence of heat, have often induced us to wish that there could be some public regulation by which the evil might be checked. Mankind have inhabited cities long enough to know from severe experience, that there are certain limits to the denseness of population, which, when passed, always lead to disease and mortality. As we think everything tending to the preservation of public health must be a fit subject for legislation, we do not see why a law should not be procured by which the undue crowding of population might be prevented, and the number and size of dwellings adjusted to superficial limits. There are, at present, municipal regulations intended as a protection against conflagration, by designating the materials of which houses shall be constructed: and if such precautions be deemed so important

when property is the consideration, of how much more consequence would be those for the preservation of health and life."

So thought the framers of the new Building Act, which makes provision for the future; and so must think every humane and reasonable man as regards the houses of the poor now in existence. Existing evils must be remedied, as well as future ones guarded against. Our Punderson's Gardens and Lamb's Fields, our Liverpool cellars and courts, must be looked to. The operation of the new Building Act will be too slow to meet such pressing abuses.

Having quoted the opinions of an American physician in favour of legislative interference between the landlord and the tenant, we will support them by a passage to the same effect from a recently-published work on the mortality of Brussels, by M. Ducpetiaux, of which some account was given in the *British and Foreign Medical Review*, January, 1845:—"People will, perhaps, urge, as an objection to our plans (for the improvement of the condition of the houses of the poor), the necessary interference with the rights of property. But is our respect for the rights of property to be carried so far as to endanger the public health and security? The rights of the proprietor are necessarily limited by the rights of society. That limit is inscribed upon nearly every page of our law. Why does it not also exist for the speculator who lets his houses to the workman and indigent? We impose rigorous conditions on the sale of commodities; we confiscate, without hesitation, meat of bad quality, putrid fish, adulterated liquors, and bread below the legal weight; and we not only confiscate these things, but we punish their owners. By what strange contradiction do the proprietors of these hideous dens, these infectious holes—to inhabit which is at least as dangerous as the use of the most unwholesome food—not only remain unpunished, but continue to enjoy a peculiar protection, and a sort of privilege, inasmuch as they are exempt from the greater part of the conditions imposed upon other proprietors. If we forbid the sale of arsenic, &c., why do we allow a host of wretched beings to perish by slow poison in the unwholesome habitations in which they are necessarily confined?"

Thus is it that from every side we hear the same complaints of the wretched habitations provided for the poor, and the same representation of the necessity for legislative enactments to correct the present and prevent the future evil. America joins with Europe in the demand that the health and lives of the poor shall no longer be made the sport of avarice or negligence. Take courage, then, ye timid Statesmen; rouse yourselves, ye torpid victims of the system of *laissez faire*; put forth your utmost strength, ye working aristocracy of rank and intellect; there is work for you to do, and more honour to be won in doing it, than in a thousand victories by sea or land. The pestilence is no unworthy foe, for it destroys every year more than twice as many as fell in the battle of Waterloo. Be it your task to overcome it, and to gain a victory worthy of a Christian nation.

We shall conclude this notice by a somewhat lengthened summary of Dr. Arnott's views, reserving his evidence on ventilation till our next:—"Our inquiries," he says, "gave us the conviction that the immediate and chief cause of many of the diseases which impair the bodily and mental health of the people, and bring a considerable proportion prematurely to the grave, is the poison of *atmospheric impurity* arising from the accumulation, in and around their dwellings, of the decomposing remnants of the substances used for food and in their arts, and of the impurities given out from their own bodies. The means of removing these sources of injury are:—1st, the labour of scavengers for bulky solid matters; 2ndly, the use of sewers or drains, with a sufficient supply of water for liquids and comminuted solids, which running water can carry; and, 3rdly, modes of ventilation for aerial matters. Now, in our best towns and improved localities, prodigious faults are still committed in respect to all the particulars mentioned.—1st. There is in many places defective work of scaven-

gers, as became notorious when the cholera was prevalent.—2ndly. Drainage is yet generally imperfect, and that in various ways. (a.) In some places there are only open or surface drains, allowing exhalations freely to rise into the atmosphere, and these often are stagnant, and by that more noisome—as still seen in some parts of the suburbs of London. (b.) Even covered drains are often made with insufficient fall or declivity, and so become only extensive cess-pools, contaminating the soil around them, and the atmosphere above—as may be discovered at any time in some of the streets of London, where the drains have to be opened at intervals, for the removal, by scavengers, of solid deposit, accumulating to obstruction. (c.) Even with good street drains, there may be defect in the house drains, or in their connection with the others; or in the sinks, water-closets, &c., as proved by noted cases, when fevers have infested particular houses for long periods, until the drains and adjuncts were put into good order. From want of proper supervision, one or other of these defects is very common, rendering the heavy expense of the present system nearly fruitless to many parties. (d.) Then the supply of water requisite to render drains effective is often altogether wanting, or is obtainable only at an expense which many of the poorer inhabitants cannot afford. Yet we know that with good arrangements, such as have indeed already been made by the municipal authorities of certain places, abundant supplies of excellent water for every useful purpose, may be had at less expense than, in most places, it costs in money or labour to the poorer classes, to obtain what is absolutely necessary for their mere drinking and cooking.—3dly. The subject of ventilation has, as yet, been so little alluded to, and is so little popularly understood, that even our Houses of Parliament, in which the intelligent and wealthy of the land assemble, were, until lately, seriously hurtful to those who had to be much in them, from the great impurity of the air occasioned by the crowd. The same fault, unsuspected, exists to a considerable degree in many of our ordinary domestic arrangements; and in workshops, and the dwellings of the labouring classes, it is one of the great scourges of the people. In the use of fuel, also, by which so much impurity is produced, in the form of smoke and deleterious gases, the people generally have yet much to learn and much to amend.

"Now, I fear that without legislative interference, the evils here referred to would long remain with little mitigation; but I believe that, as in a regiment, or a ship placed in trying circumstances, the exertion of competent skill and authority, has often made the difference between a body of men broken down by disease and loosened discipline, and British troops, or a war vessel remaining in full perfection equal to any high task which the public good might assign—so may suitable laws, and a fit administration of them in regard to the health of the whole community, go far to annihilate influences, which on weaker constitutions, generate epidemics, and doom many of the labouring classes to hospitals and workhouses, with the consequences to all around of them of lowering the morality and the general tone of mind. Thus would a labouring population, among whom there is now much depression, suffering, and disease, be changed into a more healthy, hardy, and happy people, likely to prosper in their undertakings, and to exhibit civilisation in improving forms."

Much to the same effect is the concluding passage from the Review already referred to. "Health and strength," says the reviewer, "are a nation's best possession in peace, and her surest defence in war. In both, the power of making great, rapid, and continuous efforts, is, at least, as important as the possession of ingenious machinery and powerful artillery; and the time, perhaps, is not far distant when the cost of provisions and mechanical skill and dexterity shall be so nearly equalised, that superiority shall mainly turn on the strength and power of endurance of the mechanic and the soldier; and that nation which has best husbanded its living resources, shall be most prosperous in peace, and most certainly successful in war."

PENCILLINGS OF EMINENT MEDICAL MEN.

ELLIOTSON.

WE acknowledge to some consciousness of distrust of ourselves, some feeling of diffidence and embarrassment, in approaching the task we have perhaps too daringly undertaken. No physicians in our day, few at any time, have stood out more prominently before their contemporaries, or exercised a greater influence on the science of their age, than Elliotson. For many years it was an European heresy to doubt that he was a great man: beyond dispute he has done great things: at this moment the medical world divides itself on the question of his true status; and the picture of ourselves advancing, mental balance in hand, to poise an intelligence, in any hypothesis, so much larger than our own, invests our pen with a humility which, if securing it no extended or daring freedom, guarantees it the merit of a very cautious fairness.

Elliotson was born some time before the beginning of the present century, though how long, is a question of much contention among the ladies. His father, who amassed a very considerable fortune, was a respectable chemist residing in Southwark, or thereabouts, and John boasts that he first drew breath within the fair sounds of Bow-bells. How much his father's avocations inclined the future physician to his after-studies, it would be difficult to surmise; but an anecdote, well authenticated, vouches for the fact, that at the age of fifteen he contemptuously rejected army, navy, and church, and declared that "he would be a physician, and ride in his carriage." His father spared nothing to carry out so worthy an ambition. A private tutor was provided him of great erudition; classical studies were early fostered; and when a riper time had come, John was packed off to Edinburgh, whose medical school, at that day, enjoyed a reputation, we fear, that fails to belong to it now. Here commenced his life of labour. He was a student indeed; ever alive for his work; always at the lecture and dissecting room. Physiology was his favourite subject; he believed that its study would explain some mysteries the curious mind must ever feel an interest in; and to aid himself on his way, he mastered the difficulties of the German language. To this double circumstance are we indebted for his magnificent work on Physiology, which was originally but a translation, with notes, of the great work of Blumenbach.

Graduating at Edinburgh, Elliotson now betook himself to the continental medical schools, and after extending his observations on that fruitful field for a short time, he returned to England in 1810, entered his name as a Fellow Commoner of Cambridge, and, following up his studies, by a careful attendance at Guy's Hospital, completed a medical education not often boasted of by even the most devoted disciple of Hippocrates.

And with all this preliminary preparation, Elliotson sat himself down in his native metropolis to make the grand struggle of life. Private practice came slowly; and no chance of anything that suited his aspirations appearing, save through an hospital officership, he proposed himself, in 1816, for an assistant physicianship to St. Thomas' Hospital. Foiled then by Dr. Williams, he returned to the charge the following year, and succeeded, and six years later succeeded to the physicianship, vacated by the death of Dr. Currey. Elliotson, through the effect of principle or personal demeanour, was at this period in possession of a characteristic not unused to his later career; unpopularity with his equals and superiors. Extraordinary efforts were made by his brother officers, to exclude him from the high post, which, to those who had filled, like himself, the assistant physicianship, was considered a matter-of-course elevation. His influence, however, through the connections of his father—who was rich—was considerable, and the attempts at opposition failed. Elliotson's greatness now began, without his collisions with rivals ceasing.

During his assistant physicianship, there were lectures given in the hospital, but only by the lecturers of Guy's Hospital. Cline and Astley Cooper who had built the theatre, had little notion of making it the foot-stool of fame to men

out of their clique, and Elliotson had quite as little notion of being excluded. It was no trait of Elliotson's to hide his height, especially when as a tall candlestick under a bushel. At first he coaxed the Clines and Coopers to let him lecture on a new subject, forensic medicine; to creep in among them as a supernumerary. The monopolists understood their man; to spare the ell, they kept rigidly the inch, and Elliotson betook himself like a chafed lion to Grainger's, there to vent his deep detestation of a system which he painfully felt. He was thus situated when the higher vacancy occurred, and to conciliate the aroused apprehensions of some of the hospital authorities, he made his lectureship at Grainger's, the price of his promotion. He stipulated not to lecture provided they stipulated not to oppose, and so clutched the prize. The pledge so unworthily asked was cancelled, it is just to add, immediately afterwards by a full board of governors. He was even invested with the high privilege of saying what he pleased in his own wards, a privilege he was well calculated to turn to good account.

It was now he commenced those clinical lectures which formed the wide base of a subsequently huge fame. They were telling things; full of learning, acuteness, careful discrimination, philosophic and expansive liberality, daring and often wondrously-accurate decisiveness. They had an interest almost peculiar. The cases were carefully selected: each stage marked with the greatest nicety; and the principles, whatever they were, on which the patient was treated, recklessly unbarred to the world. In addition, there was a large dash of novelty, either in the principle of treatment, or its explanation. His motto seemed everlastingly, "onwards!" If he did not look with hate, he did with distrust, on all that was old: the past seemed nothing to him, the future boundless in his vaulted imagination. Beyond the mere narrative description of disease, he seemed to think that nothing had been done before our time: that the medicædifice had yet to be erected, and seemed quite determined to have his full share of the labour. The spirit of progress, that marks our age, appeared to have permeated his whole being in an especial manner: with so much of art, unexplored before him, and so little of life for the task in expectation, his genius sought to reach the goal by leaps. He sought distinction in medicine as a Murat, or youthful Napoleon in war: his favourite help—a vigorous *coup-de-main*. The essay that robbed him of a patient saved a hundred lives. Thus know we the use of prussic acid against vomiting and nausea,—the employment of quinine in heroic doses,—the value of carbonate of iron in chorea,—of hydriodate of potash in many maladies,—the utility of sulphate of copper in some forms of diarrhoea. "We have received from him, also," says the *Lancet*, "numerous important facts in auscultation and percussion—amongst them, a knowledge of the varying effects of posture during auscultation of the bellows'-sound of the heart; the fact of a great difference existing in the sound of the same phenomenon, when listened to at different parts of the chest; the advantage of removing the plugs of the stethoscope when examining the sounds of the heart;" with a variety of other unnoticed phenomena connected with auscultation.

On the establishment of the University of London, or, as it is now more modestly called, the University College, Dr. Elliotson moved there, as to a temple fitted after his own heart, and gave himself up to its progress (*progress* again) with an enthusiasm that enchained his whole organism. He was all for the College; its great impelling power; working for it with an alacrity and energy that explains much of its early progress. The hospital may mainly be said to have been his creation. Yet here, in the home of his labours, the scene of his triumphs, was the *locale* of his greatest check. Dupotet's visit to this country excited much inquiry about Mesmerism, and Elliotson, who frequented the Baron's *seances*, in a moment of relenting incredulity, resolved to try himself the marvels that had been elicited before him. With his own patients, Elliotson, to his astonishment, succeeded in producing the magnetic sleep that he had more than half pronounced a delusion. Enough; Elliotson saw here the opening to what

might prove a splendid vista of unexplored science; and proceeded with his experiments with as much zeal and daring enthusiasm as if his conversion had been that of all other scoffers. *Fiat justitia, ruat cælum* appears to have been his motto; and the enemies his reckless independence, and we must add, unsocial communion, had made around him soon availed themselves of the golden opportunity. The Medical Committee were taught to think that Mesmeric essays might be dangerous to the character of the Hospital: interferences rather derogatory to the position of an hospital physician were made, and Elliotson finding that a free trial of mesmerism would not be allowed him in the hospital, and that resolutions, of no flattering character, perhaps, would be passed, withdrew wholly from the institution, much to the loss of both. From that moment to the present, Elliotson has adhered to mesmerism, through good report and evil report, sacrificing to it, for at least a time, friends, position, and practice. Of late, we understand, a revolution has occurred; practice is accumulating about him faster than in what have been called, his best days, sneers are proportionately becoming rarer from the mouths of his former friends, and Elliotson is looking sanguinely forward to the hour when the profession shall say of mesmerism as of creosote, prussic acid, auscultation, &c.—“a useful novelty if properly used.” How long before such a verdict shall be given it is not for us to surmise.

Elliotson's appearance gives little notion of a man of consequence, yet makes that sort of impression on the mind that once seen, we cannot meet him again and not recognize him. He is of the middle height, and of somewhat thickly knitted limbs and muscular awkward-built frame.

He has a hand that would tell at Tom Spring's: no pugilist would desire a more ponderous “mauler.” His head is large—very large—for his height, though not for his breadth; the increased development being, however, less in the intellectual regions, as Phrenology would call them, than his great literary achievements would prognosticate to the stranger. The head is less oval than circular: the cerebellum is of a size that assures one of force of character. If Elliotson had received a bad instead of a good training, we would not have had him our friend—perhaps still less our enemy—for twice his wealth. We would pledge ourselves that he is none of those half-haters that Samuel Johnson detested; Spurzheim, who saw his bust, is said to have said, “Keep me well with that man;” in vain—for Elliotson, who thought he discerned shallowness and plagiarism in the friend of Gall, when lecturing in London, boldly avowed his opinion, and has mentioned it with no little vehemence and power in all his subsequent writings. Spurzheim, annoyed at having his teachings underrated, is said to have refused the admission money to Elliotson, with his regrets that he should be supposed to be taking money for nothing. The money was returned: came back again: and so made half-a-dozen journeys—with what result our memory fails to say.

The brow is good—more massive, however, than high; giving one the notion of a very practical sort of man. His eyes are large, standing out very prominently: the nose—very good as noses go—but no model on which one would form a favourite child's: the teeth seem to answer very well for mastication to an economy that demands no small service in that way; and the two sides of a rather dark face are encircled with a pair of whiskers of a very ostentatious size and colour, the first of which, we believe, is natural; the second is certainly a very brilliant black. In manners, there is no more unassuming gentleman than Elliotson. There is a timid, hesitating address, full of appeal to the opinions of those around him; and always appearing to be asking, “am I quite right?” His lectures partook somewhat of this characteristic. They were given with some hesitation and indecision, yet always without serious interruption; and though perfectly extemporaneous, as to style at least, were as correct in matter and manner, as if written with the utmost deliberation.

Elliotson's private patrimony is considerable; and his practice at one period is said to have realized him some ten thousand a-year more.—He has been President of the Medico-Chirurgical Society, and of the Phrenological Society, which he founded. He has filled, also, the office of Censor to the Royal College of Physicians, and delivered by appointment one of its stated courses of lectures. At present, his active mind expends the energies—left him by a practice rapidly re-establishing itself—on the editorship of a quarterly journal, the *Zoist*, an uncompromising and extremely able combatant for Mesmerism; and he may be said to reign sole monarch over the huge domain of that *terra incognita* of science. He is still a bachelor, we may say, for the information of our fair unmarried readers, a fact we can testify to on better authority than our statement of Dr. Copland's celibacy, who it appears for twenty-five years has been enjoying matrimonial blisses we had no suspicion of.

H. B.

THE JURY OF MEDICAL GENTLEMEN.

TREACHERY TO MR. LAWRENCE.

TO THE EDITOR OF THE LANCET.

SIR,—The morbid fancy of the dying Tiberius discovered treason in each precious act of a most faithful service. His suspicious mind saw everywhere the accusations his guilty breast acknowledged. Alas! my labours for you, Sir, are under like fatality. On the eve of excommunication by society for honouring you with my notice, I seek solace in your gratitude, and, unthankful man! you threaten me with a lawsuit. Like so many of your former friends, I am to be undone by my toils for you. Almost before the first copy of my vindication issued from the press, you hurried to the printers, breathless, and ruddy with rage, denouncing your benefactor as a villain, and pledging your sacred, your very sacred oath, to be his ruin. It is true, that amid your tortured vehemence and smartful irascibility, your thoughtful generosity prompted you to confound me with Mr. Healey. But his pen has qualities I would vainly ask for mine; and all acquainted with his character will understand my regret that your mistake must be founded on such small grounds of likeness. May I suppose that, however vexed with an advocacy you thought indiscreet (for *quieta ne movere* is a very good maxim), you would yet recognise my friendly intent with an indirect compliment?*

But whither has fled your time-worn tact, Sir? How does it look, the spectacle of an M.P. running stamping mad through the town, because, with a very pure-minded intention, I propose an investigation of your public character? Can you deny that a public attestation of your probity would be of use to you, and of credit to the Profession in the present divided state of public opinion? You cannot. Who, then, thinks best of your career—I who, relying on your goodness, ask for the enquiry; or you, who, knowing all, pertinaciously resist it? Unwise man! to be frantic with me for a suggestion which should have made you my friend for life!

The indiscreet panegyric of a friend has been declared the bitterest of satires in disguise, and on this principle I must suppose, the surprise of my good opinion has touched you to the suffering you have exhibited. But making every allowance for the torturing novelty of a kindness, the extent of your sensibility yet astounds me. The *LANCET*, as illustrated by the deaths of Tobyns, Shaw, Carlisle, Earle, and the sufferings of Bransby Cooper, Elliotson, and other friends to Science, is a monumental evidence of a heart that never knew a feeling for another: how is it so sensitive for itself? Is it by some dispensation that the hardened muscles soften to tenderness, the petrified valves tune to torture, now that the hour of retribution is come?

Yet what says rumour? A few hours before you, thus sensitive, were prancing about London, from printer to printer, you were steeping yourself to the neck in treachery, to breed a low quarrel by personal *exposés*, between two eminent surgeons.

Twenty years since, or more, an hospital officer trusted you, in good faith, with an anonymous libel against the peace and good name of another. A second thought taught him that it was too foul for publicity. It was cancelled. What did you? Treasuring the suppressed document with careful malice, for a quarter of a century, you at length publish it, announcing, with frontless audacity, the very name of the man who had trusted in your honour! What have we here? A dark plot, in part your own hatching “peached” by you twenty years after, to destroy the more respectable accomplice whose repentance cut short the deed! A cancelled mischief vivified, a repented deed forced into criminal activity by an agency almost demoniacal—the secret of plighted honour, the editorial seal, that should be binding as the mysteries of a confessional, unblushingly violated rather than that wanton wrong should not be done! There is honour among thieves but among Jonathan Wildes and ———s, what?

Adieu! keep the peace, I pray you. I pledge my word it is worth your while. It looks ill to bellow so lustily at a taste of that scourge which you so long and mercilessly brandished yourself. Pity is forgotten for you in an inconsistency too gross to escape detection. If you challenge to foils, you must be content, if less skilful, to be pinked. The world has given you no monopoly of phillipics. Besides, with the whole medical community your enemy, it is not wise to teach it that your back responds so well to a lash even feebly applied as by

VINDICATOR.

* Our correspondent has not given all the facts. The honourable gentleman obtruded himself in succession into our composing and printing-offices, among the workmen; and calling out a journeyman in one of them into the passage, incoherently declaimed, in no measured terms, against “*Vindicator*,” and Mr. Healey, asseverating that the latter was poor, and that he would make him poorer; that he would ruin him; that Mr. H.'s object was to put down the *LANCET*, but that he would find that it would be more difficult than he thought, &c. The journeyman, we are assured, in no way encouraged the string of incoherent remarks he was compelled to hear from his distinguished visitor. Really we have no patience at such nonsense from one who has given our journal more provocations, and worthy men more attacks, than the India House clerks could count in a twelve-month. His best image is the boy-bully threshing without pity all the smaller youths about him, and who, on one of them (more than ordinarily vexed) giving him a thorough pummeling, goes home blubbering to his mother to help him against the naughty boy that beat him.—ED.

SIR JAMES GRAHAM AND THE NEW INCORPORATION.

[At the rooms of this society in Hanover-square, we have had an opportunity of reading two memorials, presented to the Home Secretary, by Messrs. Pennington and Hussey, President, and Vice-President, of the above association. We should have given both memorials in full, but luckily the power of condensing voluminous matter into a small space, which the Right Hon. Bart. possesses to perfection, has rendered this task unnecessary. He having compressed the substance of both into the preamble of his answer to the society, we consider it quite unnecessary to devote any more of our space to the subject, save that occupied by Sir James's reply, the more particularly as our columns this week are somewhat overtaxed for space.—ED.]

SIR,—I have had, under consideration, the memorial of the president, and the other members of the Association of General Practitioners in Medicine, Surgery, and Midwifery, instituted at a public meeting, held at Hanover-square, Dec. 7th, 1844, addressed to me, and signed by yourself, as president, and several other gentlemen, as members of the provisional committee of the association. The aim of the memorial is, to induce me to advise her Majesty to incorporate the General Practitioners by Charter, into an independent College, with a

governing council, and power to frame bye laws; and to provide for the education of the General Practitioners, and to place them as respects the management of their own affairs, in every respect on a footing of perfect equality with the existing Colleges of Physicians and Surgeons. This subject was recently brought before my notice by a letter signed by the Master of the Apothecaries' Company of the City of London, expressing, as the opinion of that society, "That the desire for an independent organization of General Practitioners, by an incorporation of a Collegiate Charter, has been of late, so generally, and unequivocally, expressed at public meetings of these practitioners, and through other public channels, that the Society think themselves warranted in believing that a very large portion of the general practitioners of the country, have declared their wishes in favour of an incorporation." In answer to this letter, I directed the master of the Society to be informed, that *I was ready to receive any matured plan for incorporating a new body of general practitioners, but that before I could form an opinion, or even consider such a project, all the details of the scheme must be laid before me, and the names of the leading persons who promote it, and who are parties to the proposed organisation, be named. Your memorial does not sufficiently comply with either of these requisite conditions. The names appended to it, though of great respectability, and deserving of high consideration, belong exclusively to Metropolitan practitioners, and the subscribers do not profess to have any authority to represent the wishes of their provincial brethren. The memorial neither expresses the proposed organisation of the intended corporation, nor furnishes the names of those to whom the charter is to be granted, who, as is usual in such cases, would be named the first office-bearers in the new corporation. As soon as you can supply these deficiencies, and satisfy me that the expressed wish of your association is felt also by a large number of country practitioners, I shall examine the draft of your proposed charter, with every disposition to promote the usefulness and respectability, of the important branch of the profession to which you belong.*

I have the honour to be,

Your obedient servant,

(Signed) JAMES GRAHAM.

R. R. Pennington, Esq.
4, Hanover Square.

SALT HILL INQUEST.

[We have been induced, by a very grave and important charge, somewhat uncourteously brought against us by Mr. E. W. Norblad, a statement "utterly at variance with the facts," again to refer to the reports in the *Times* of the proceedings at this inquest, and notwithstanding a very careful and attentive examination of the details, we cannot come to any other conclusion, than that the medical men who gave evidence at the inquest exceeded their duty, or else committed an error in the delivery of their evidence, in stating, that they had themselves performed the analysis which Mr. Norblad now asserts was made by Mr. Cooper. They have themselves, therefore, only to thank for the position in which they have been placed by the tenor of the remarks, which, in the performance of our duty as public journalists, we have deemed it right to make. These observations will be fully confirmed by the following extracts from the reports: the first contains the chemical part of the evidence, given by Mr. Champneys, and it will be observed, that he distinctly states, that Mr. Norblad and himself analysed the contents of the stomach. The date of the report is Monday, January 6th.

Mr. Champneys, after describing the *post mortem* appearances, then proceeds:—I was then ordered by the coroner to make a further examination, with Mr. Norblad, and the result is as follows:—upon analysing the contents of the stomach we found them to be generally acid. We tested them for various poisons, viz., for oxalic acid, sulphuric acid, and arsenic, but found none. We then tested them for those poisonous salts, antimony, lead, and copper, the presence of which we could not discover. They were then tested for prussic acid, and the results proved that poison to

be present. It might not, however, have been prussic acid by itself, but that poison in conjunction with some salt nearly allied to it. * * *

We have not been able to discover what salt, if any, was taken in conjunction with the prussic acid. The salts of this acid have not the pungent and peculiar odor of prussic acid itself. * * *

The evidence of Mr. Norblad is equally conclusive. He clearly avers that the contents of the stomach were analysed by him and Mr. Champneys.

Mr. Edward Weston Norblad, surgeon, of Slough.—I examined the body of the deceased, in conjunction with Mr. Champneys, on the morning of Thursday last. Having discovered no external marks of violence, we proceeded, by the order of the coroner, to make an internal *post-mortem* examination. We found the whole interior of the body to be free from existing disease. We then removed the stomach, laid it open, and turned out the contents. We discovered no smell of prussic acid. *The contents were afterwards analysed by me and Mr. Champneys.* The application of the usual tests did not enable us to discover any ordinary poison. We then submitted portions to tests expressly for prussic acid, which was unequivocally proved to be present. From the entire absence of disease, from the manner of the death of the deceased, and from the presence of this poison, I can come to no other conclusion than that she died from the effects of prussic acid, or from some one of those salts in the composition of which prussic acid enters. From the absence of the odour of prussic acid, and knowing that there is a salt equally poisonous, which by chemical analysis would give the same results, I qualify my last answer. That salt, although it has not the odour of prussic acid, would destroy life in one or two seconds, or from that to a quarter of an hour, according to its strength. I cannot say what quantity was given in this case, but I think there was sufficient poison discovered in the stomach, to produce death.—* * * The particular salt I allude to is the cyanuret of potassium, which contains a considerable quantity of the elements of prussic acid in its composition.

At the adjourned inquest, an account of which is published in the *Times* of the 9th inst.

Mr. Norblad deposed as follows:—I have in conjunction with Mr. Champneys since the last examination, analysed the contents of the bottle found on the table in the room of the deceased. They contain no poison of any description. I have also analysed the contents of the tumbler, but could not detect the presence of any poison. The results of these analyses I have preserved, and they are now in the possession of Mr. Champneys; who with Mr. Cooper was present when I made the examination in Mr. Cooper's laboratory, in London. Mr. Cooper concurred with me that there was no poison mixed with the portion we found in the bottle and tumbler.

By the coroner: I analysed the liquid in the presence of Mr. Cooper. I have sufficient knowledge of chemistry to swear to the results from my own experience.

Mr. Champneys afterwards stated that Mr. Cooper applied the tests in his presence.

It appears then from the general character of the examination, that we were justified in assuming that Messrs. Norblad and Champneys made the analyses themselves; in fact they both distinctly stated as much with regard to the contents of the stomach, and Mr. Norblad said the same also as respects the bottle, &c., Mr. Champneys alone referring that part of the analysis to Mr. Cooper. The general remarks made by us as to the discrepancies in the evidence are left untouched by Mr. Norblad, although it must have been evident that the presumed error committed by them interfering in the chemical analysis themselves, instead of requiring the assistance of an operative chemist was alluded to, solely to illustrate the errors made in describing the results of the said analyses.

We must beg to disclaim all personal feeling against either of these gentlemen; our object has been solely to elicit truth, and by drawing attention to the nature of the error committed, to obtain its avoidance in future. It is right to add that,

we have learnt, that the letter of Mr. Norblad, referred to by us last week, was not as we supposed, intended for publication.

BIBLIOGRAPHICAL RECORD, FROM JAN. 14, TO JAN. 25, 1845.

Frésenius (D. R.) Précis d'Analyse Chimique Qualitative, 8vo. 3 fr. 50 c.—Liebig (J.) Lettres sur la Chimie, traduites par G. W. Bichon, 18mo. 3 fr. 50 c.—Siebert (N.) Technik der Medicinischen Diagnostik, 8vo. 9 rthlr.—Gavarret und Landmann (S.) Allgemeine Grundsätze der medicinischen Statistik oder Entwicklung der für die numerische Methode gültigen Regeln, 8vo. 1 fl. 48 kr.—Reichenbach (G.) Medicinische Phänomenologie, 8vo. 3¼ thlr.—Stilling (B.) Ueber die Textur und Function der Medulla Oblongata, 3 rthlr.—Maffei und Rosch (Drs.) Untersuchungen über den Kretinismus, 8vo. 2 rthlr.—Meyer (F. G.) Die Lehre von den Frakturen, 12 thlr.—Wattmann (C. J. E. von) Sicheres Heilverfahren bei dem schnell gefährlichen Luftentritte in die benen und dessen gerichtsarztliche Wichtigkeit, 8vo. 1 thlr. 4 gr.—Lampe (E.) Cursus der Practischen Geburtsbülfe, mit vorzüglicher Berücksichtigung der Ansichten der Wiener geburtshülfflichen Schule, 8vo. 1 rthlr.—Kugler (J.) Practische Abhandlung über die Verengerung der Harnöhre und ihre Heilung ohne Aetzmittel, 8vo. 12 gr.—Minding (K. J. A.) und Behr (A.) Taschenbibliothek der gesammten Medicin, 1 band (Anatomic).—Archiv für Physiologische und Pathologische Chemie und Mikroskopie in ihrer Anwendung auf die Praktische Medizin.—Kiene (J.) Die Warmen quellen zu Gastein, 1 thlr. 16 gr.—The Medical Guide and Almanac for 1845, 12mo. 2s 6d—Martineau (Miss) Letters on Mesmerism, 8vo. 1s—Wilson (E.) The Anatomists' Vade Mecum, 3rd edit. 12s 6d—Milburn's (M.M.) Report on Experiments with Guano, to which the Prize of the Yorkshire Agricultural Society was Awarded, 8vo. 6d—Abercrombie's (J.) Essays and Tracts, 18mo. new edit. 3s 6d—Draper's (Prof.) Chemistry of Plants, 4to. cl. 18s—Durlacher's (L.) Treatise on Corns, Bunions, Diseases of the Nails, and General Management of the Feet, 8vo. cl. 10s 6d—Maddock's (A. B.) Practical Observations on Pulmonary Consumption, 8vo. cl. 5s 6d—Quain's (R.) Anatomy of the Arteries, folio, £13—Mialhe (Dr.) Traité de l'Art de Formuler, ou Notions de Pharmacologie Appliquée à la Médecine, 8vo. 3 fr. 50—Abbeys of England: Yorkshire, part 3, containing the Choir of Rievaulk Abbey; Roche Abbey; Howden Church, East End; Effigies; Vignettes, Ground Plans, &c. folio, 21s—Burke's Genealogical and Heraldic Dictionary of the Landed Gentry of Great Britain and Ireland, or Companion to the Peerage and Baronetage, vol. 1 (A to L), royal 8vo. cloth, 21s—Narrative of the United States Exploring Expedition, during the years 1838-9-40-1-2, by Charles Wilkes, U.N.S. Commander of the Expedition, 5 vols. imp. 8vo. and an Atlas (Philadelphia, cloth, £8 8s—Lady Cecilia Farrencourt, by Henry Milton, 3 vols. post 8vo. bds. 31s 6d—Lingard's (J.) History and Antiquities of the Anglo-Saxon Church, containing an Account of its Origin, Government, Doctrines, Worship, Revenues, and Clerical and Monastic Institutions, 2 vols. 8vo. cloth, 24s—The Diaries and Correspondence of James Harris, First Earl of Malmesbury: containing an Account of his Missions to the Courts of Madrid, Frederick the Great, Catherine the Second, and the Hague; and of his Special Missions to Berlin, Brunswick, and the French Republic. Edited by his Grandson, the third Earl, vols. 3 and 4, completing the Work, 8vo. post. cl. 30s—Pictorial Museum of Animated Nature, vol. 2, Birds, Reptiles, Mollusca, Insects, folio, plates, cl. 18s—Robertson's (W.) Journey of a Clergyman during a Visit to the Peninsula in the Summer and Autumn of 1841, cloth, 10s 6d—Valentine McClutchy, the Irish Agent; or Chronicles of the Castle Cumber Property, by W. Carleton, 3 vols. post 8vo. cl. 31s 6d—Dispatches of Field Marshal the Duke of Wellington during his various Campaigns, an enlarged edition, in 8 vols. royal 8vo. vol. 5, cloth, 20s

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CLINICAL LECTURE ON THE TREATMENT OF STUMPS.

By WM. FERGUSSON, Esq.,
Professor of Surgery in King's College, and
Surgeon to King's College Hospital.

Gentlemen,—Having lately been engaged with the subject of amputation in my lectures at the College, I intend now, in accordance with the promise which I made on a recent occasion, to draw your attention to the mode of treating the wounds, which the surgeon, of necessity, makes in these operations,—a subject which can be more practically discussed in the hospital, than in the theatre of the College. I have the greater satisfaction in finishing my lectures on amputation in this manner, as we have recently had a variety of opportunities of witnessing the practice which we are in the habit of pursuing in this institution in such cases.

A stump of the thigh gives a good example for illustrating the general principles of treatment, and having had three cases of the kind under observation since the beginning of the session, we may not possibly have a more favourable time than the present, for the objects of such a lecture as that in which we are now engaged.

In former clinical lectures, I have alluded to the cases in question, but chiefly with the view of pointing out their histories, and the causes which seemed to render amputation necessary; and as you have now witnessed the treatment subsequently pursued in all of them, you have had opportunities of judging for yourselves as regards the results.

The cases were:—

1. Sarah Crantz, æt. 18, congenital paralysis, and deformity of lower extremity. Amputation performed at her own desire. Operation on lower third of thigh, by double flap, anterior and posterior. Limb removed 8th October, 1844, at half-past 1 o'clock, p. m.; wound permanently dressed at eight in the evening.

October 13th.—Some of the dressings removed for the first time.

15th.—Dressings entirely renewed.

31st.—Wound completely cicatrised, excepting a small circumscribed spot.

2.—Morris Welch, æt. 42. Ulceration within knee-joint; hectic; October 12, 1844, at half-past 1 p.m.: double flap operation (anterior and posterior), six inches above joint: wound dressed in the evening.

Nov. 28th.—Stump entirely healed.

3.—Eliza Sanderson, æt. 27. Chronic ulceration of knee-joint, of ten years' duration.

Dec. 7th, 1844.—Limb removed, as in preceding cases. Wound dressed at the time of the operation.

18th.—Old dressing removed for the first time: wound ordered to be dressed daily afterwards.

January 1st.—Stump nearly well.

22nd.—Walking about the ward in better health than she has enjoyed for years.

Although it is not customary to include the formation of the stump as a part of the treatment, (as it may be said that the treatment does not actually begin until the stump is formed by the process of severing the diseased part), I am, nevertheless, inclined to consider it as such connected

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with the results, as regards the qualities of a stump, depends upon the manner in which the operation is performed: and I, therefore, deem it the duty of the surgeon so to conduct his incisions, and so to fashion the soft parts, as to give himself the smallest possible amount of after-trouble, and ensure his patient as good a covering to the end of the bone, which must of necessity be divided, or exposed, during the operation, as the circumstances will permit. The common rules of practice are as much to be attended to here as under other conditions. Thus, when the surgeon has to remove a tumour which has caused great distension of the skin, he has to calculate how much of that tissue he must take away with the disease,—how much he must reserve, to permit the wound to be dealt with according to the common method of dressing, so as to procure immediate union. If the skin be much distended, he must take away a portion of it, else, were a single line of incision on the surface employed, there would be such loose folds as might endanger a collection of matter, for the surfaces could not be accurately laid in contact. On the other hand, were he to take away more skin than the circumstances demanded, he would be unable to bring the cut margins into contact, and so could not secure a speedy union. In either proceeding he would err, and the rule is to follow the medium course. A similar rule should guide the surgeon as to the amount of soft parts which ought to be left in forming a stump: if he leaves the materials too long, the wound is unnecessarily large, and if they be too short, the end of the bone cannot be properly covered. He must steer the medium course here as well as under the circumstances alluded to above, and some consideration is requisite ere the knife is applied, as to the length and position of the incisions before to be made.

It is the custom for some to give rules as to where the incision should be made, but there are so many things to be taken into consideration in each individual case, that I should not recommend you to trust entirely to such rules. I stated when I was showing these operations on the subject that I trusted to my eye chiefly in determining the length of the soft parts intended to form the stump. These are made in proportion to the thickness of the limb, but in one instance it may be requisite to have them much longer than in another, for in certain cases the elasticity of the parts, as well as the natural action of the muscles, will cause far greater contraction than in other examples. In a chronic affection, when the muscles have been long out of use, they will probably not retract or contract so much as when amputation is required immediately after compound fractures. As a general rule, it is well to leave the parts rather long than otherwise, for you will then have less trouble with the stump than if the parts were short. It ought to be borne in mind however, that under any circumstances, and whether the stump be well or ill formed at first, its ultimate condition will depend greatly on the treatment pursued for weeks or months after the operation. The best cut stumps may turn out badly if the surgeon or his assistants be regardless of the after-treatment, while even in cases where there has originally been some defect, much may be done by care to bring the parts into a creditable condition.

The mode of operation followed in the cases to which your attention has been directed, was that of the double flap, one from the anterior part of the limb, the other from the posterior. In such an operation, it is of great consequence to keep the posterior flap considerably longer than the anterior. In front, the muscles and other soft parts retract but slightly, compared with those behind, where those muscles which pass from the pelvis to the leg, without taking any attachment to the femur, contract so greatly, that unless they be left considerably longer, than in the anterior incision, they will assuredly give the stump a very awkward appearance, by drawing the parts upwards and backwards, so as to cause the bone to appear very imperfectly covered by the tissues in front of the limb.

I am inclined then to consider, that it is as much the duty of the surgeon to look to the fashion of his incisions, before and during the time of his operation, as it is his custom with reference to other operations, but this of course, forms only a small part of his duty on such occasions.

The attention of the operator, as soon as the limb is severed, is immediately given to the vessels. Whatever he may have done to stop the circulation in the limb, during the requisite incision, he has to look to the means of securing the vessels by a method more permanent than by the hand or tourniquet. The main artery of the limb, and such others as are likely to bleed freely must be secured with the thread, or in such other mode as the surgeon may choose. The ligature (for reasons which I have often explained to you before) is the method which I prefer to all others; it ought in my opinion always to be chosen torsion, for notwithstanding the high authority of Amussat and Fricke in favour of this practice, it possesses no such advantages as should supersede the ligature. In taking up the arteries I usually proceed thus:—I look for the known site of the main artery, and seize the vessel between the nails of my thumb and forefinger, or possibly I use the forceps—the ordinary dissecting forceps—and carefully separating the surrounding tissues, at the same time drawing the artery slightly out of its sheath, have it encircled by a ligature, which is fastened in the ordinary way with a double knot. For the smaller arteries I generally use the forceps: the end of the vessel lying between the blades is gently pulled out, and the assistant puts on the ligature as with the larger vessel. In the thigh below its middle, one ligature, or possibly three or four may suffice, but occasionally as many a dozen may be requisite. I am in the habit of securing every vessel which conspicuously throws out arterial blood. It saves much trouble and pain afterwards, for such vessels are apt to bleed so freely after the patient has been put to bed and has in some degree recovered from the shock which usually follows the operation, that it may become necessary to undo all the dressings, open up the raw surfaces so as to expose them again to the air, or to have more ligatures applied. I have never yet traced any serious results to the presence of a few additional ligatures, which possibly might not have been absolutely necessary; and the security, from their presence, amply compensates for any ex-

Sometimes a tenaculum is more serviceable than the forceps in laying hold of the arteries, or perhaps the hook-beaked forceps will be found useful.

The method of twisting the arteries (torsion) is such as I shew you here (the method was exhibited on a stump in the dead subject): with a strong pair of forceps whose blades can be kept closed with a catch, I seize the end of an artery, isolate it, and having drawn it from the sheath for half an inch or so, grasp it in a transverse direction with another pair of forceps similar to those first used, and then holding the vessel steady with the instrument last applied, I twist the end of the vessel round, some four or six times, when on removing the forceps, the mass remains in the condition into which it has been thrown, the tunics having become so twisted and matted together that they do not become undone again. It must be evident that this process cannot be effected in all vessels, and I should consider it unwise to adopt it as a substitute for the ligature. (The usual methods of securing the arteries with the forceps and tenaculum were now mentioned and exhibited, and notice was taken of the kind of ligature generally used on such occasions.)

Bleeding from the veins may be somewhat copious, especially from the main vein in the upper third of the thigh, unless care be taken to apply pressure with the point of the finger; but very slight pressure in this way will suffice to restrain the flow until the wound is about to be closed, and when this is done the bleeding immediately ceases. A ligature is rarely required on such vessels.

The bleeding being arrested, the surgeon has then to close and dress the wound. Whilst attending to the vessels, he will have to use the sponge from time to time to wipe away the clots of blood, and in taking his last look at the surface, he will probably apply the sponge over it once more, so as to make it thoroughly clean. The ends of the ligatures are now to be laid where they can be hung out of the wound, and I generally prefer putting them where they will have the most direct way to the surface. I place one by itself, or two or three together, as may seem most convenient, and commonly make a knot on the thread which surrounds the main artery, so that I may recognise it when it separates. The surfaces are now brought accurately together, and while an assistant gives careful support to the flaps, the surgeon secures their edges to each other by a series of stitches of the interrupted suture; four or six at least being requisite, and the spaces are accurately adjusted and the surfaces held together by means of straps of adhesive plaster. Next a piece of lint, dry, or wet with cold water, as you choose, or else spread with simple ointment, is laid along the track of the wound, and finally a roller is carried round the stump from above downwards; that is, from the pelvis along the thigh, so as to give support and steadiness to all. A few turns of the roller are made across the wound, these being suitably secured by several additional circular turns near the end of the stump, and so the dressing for the present may be deemed completed—(The process of dressing was here exhibited on the subject).

On some occasions, the propriety of closing the wound in the manner just described, may be questioned. From the continued oozing of blood from numerous small vessels, the surgeon may suspect that it will continue for a considerable time, and separate the surfaces, were he to close them. Under this impression, it is better to leave the wound open for a few hours until all bleeding has ceased, and this, as you will remember, was done in two of the cases under notice. But some surgeons always treat their stumps in this manner; they do not dress them till the lapse of six or eight hours after operation; at this time the blood having ceased to flow, and the surface being covered with an exudation of lymph, the parts are accurately laid together, and the dressing is conducted as it usually is at the time the patient is on the operating table. I think well of this practice in many instances, though, as a general one, I prefer the mode of completing the first dressing as part of the operation.

Some difference of opinion still obtains as to the use of stitches in closing wounds. For my own part, the more I see of practice the more am I

satisfied that they are to be preferred to all other modes. I have never on any single occasion seen reason to attribute bad results to their use, and I have so far modified my own practice, that instead of cutting them out on the second or third day of their introduction, I allow them to remain for days longer,—sometimes till the eighth or tenth;—often until one end ulcerates out. It is only, however, when there is no evidence of their presence causing irritation that I do this, for if they seem to fret the parts I take them away immediately. The straps of plaster are so placed as leave most of the stitches uncovered, so that when the next dressing is being attended to, you can deal with the stitches as may be deemed advisable.

After the first dressing, it is intended that nothing further shall be done for the next two or three days; but an important feature of treatment must be attended to during the interval, and this has reference to the position of the stump. The limb should always be so laid as to obviate any stress upon the surfaces where union is expected. In the thigh for example, the part should be kept nearly on a level with the bed. Most patients desire to have the part bent upon the pelvis and so supported with pillows. In some the previous bent state of the limb predisposes to this attitude; but it is infinitely preferable that the end of the stump should be kept down, for if it be allowed to remain in an almost upright position, the weight of the soft parts is apt to endanger an exposure of the end of the bone, and much greater care in such a case is required in the application of a bandage in the after-treatment, than if the limb were kept horizontal.

If the patient has no particular uneasiness about the wound, it may be well to leave it till the third or fourth day: generally it is desirable to look at the part on one or other of these days: possibly this may be requisite on the second day, or you may not see reason for interference until some later date. However, when you do resolve to uncover the parts, you should have them soaked with moist warm cloths for several hours before you can undo the dressings. The moisture, thus applied, will permit them to be more readily separated. The bandage had better be cut, for you can remove it with less disturbance to the adhesions, than by attempting to unroll it. The roller and lint being removed, you will take away the straps or not as may seem necessary: if they be not soiled, let them remain; and do not meddle with the stitches either, if this is the case. Put on a clean piece of lint, spread with unguentum cetacei, and cover all with a roller again, just as on the first occasion. Pay the same attention to position, and next day undo the roller, or cut it if you choose, and repeat the steps. On this occasion, however, it may be requisite to remove some of the straps, and put on fresh ones. You may also see the propriety of cutting away some of the stitches. Afterward the process of dressing every day must be repeated: and within the first three or four, all the stitches and original straps will probably be removed. By the tenth, or fifteenth day, most, or all, of the ligatures will have separated, and, if all goes on well, the sores and sinuses left behind them, will close rapidly. A change of ointment, or from time to time, a new lotion, may be used with advantage, just as you would vary them in an ordinary ulcer:—and so the treatment comes to a satisfactory conclusion. Let me advise you to pay the utmost attention for many weeks after to the application of the bandage. The good quality of the stump depends greatly on the care bestowed on this part of the business. However well the stump may be formed originally, it may turn out badly in the end, if neglected in this respect. In the early stages of treatment, the bandage need be but loosely applied,—just sufficiently tight to support the flaps, but latterly it may be used with more force, and the shape of the stump may be completely controlled by its judicious use. The treatment now described, has been pursued in the cases which have been under your notice. Fortunately for the patients, every thing has gone on favourably, and you have not had any opportunity as yet of witnessing the casualties which happen, from time to time, in this department of surgical practice,

CHEMICAL LECTURES.

By JUSTUS LIEBIG, M.D., Ph.D., F.R.S., &c.,
Professor of Chemistry, in the University of
Giessen.

Prepared for the Medical Times,

By Dr. SHERIDAN MUSPRATT, F.C.S.,
Translator of Plattner on the Blowpipe.

Leibig's Fifth Lecture. The Question of Animal Heat.—Gentlemen, the source of animal heat is a question of vast importance at the present time. Lavoisier supposed that the quantity of animal heat was entirely dependant on the quantity of oxygen consumed, and that out of the 21 per cent. which the atmosphere contained, 4 per cent. were retained and combined with carbon and hydrogen. Now, in whatsoever way oxygen may combine with carbon, the union cannot ensue without heat being developed, and it is quite a matter of indifference whether the union occur at a high or a low temperature, as the amount of heat disengaged must be constant. From the preceding conclusions, it was a point of great importance to ascertain if the quantity of heat which an animal developed in a given period, compared with the oxygen consumed, corresponded with the quantity of heat which the latter should yield when burnt with carbon and hydrogen. Experiments in this direction have been made by Dulong and Despretz. Taking 100 as a standard, the former found that the quantity of heat developed by the combustion of oxygen, was 69, min. 80, max.; the latter, 74, min. 90, max. They next encased an animal in a copper box, surrounded by water, the temperature of which was known by having two thermometers immersed in it; the apparatus was connected with two gasometers, the one filled with oxygen (quantity known), the other for the reception of the carbonic acid, &c. They drew their conclusions from the increase in the temperature of the water, the decrease in the oxygen, and the proportion of carbonic acid, &c., yielded. Pure oxygen was afterwards burnt in the same copper box, which, according to Dulong, yielded 10 p. c., and Despretz 5 p. c. less than in the former experiment. From these data, a philosophical conclusion was drawn, which was, that the heat evolved by the combustion of the carbon and oxygen in the body, was less than that developed by the actual combustion of these elements, and therefore from these experiments, physiologists were compelled to assume another source for animal heat. If these results are true, why numberless theories, as to the real cause of animal heat, may be admitted; but when we contemplate the chemical processes going on from year to year in the animal organism—the continual production of carbonic acid, ammonia, and water, and this without any appreciable increase in our weight—surely we must allow, either that the researches of Dulong and Despretz are not sufficiently exact, or else that they are founded upon a wrong basis: and when physiologists supposed that there was an unknown source of animal heat, it was not, I am sure, a very logical inference. The conclusion should have been, either that the carbon and hydrogen consumed in the body afforded more heat than when burned in a free state, or that these two elements could not develop more caloric when consumed in one way than another, (which they cannot.) Lavoisier and Laplace performed some experiments by surrounding a vessel with ice, and burning, in the interior, known quantities of hydrogen and carbon. They found that,—

1 lb. hydrogen melted	285 lbs. ice, and
1 lb. carbon	96 lbs. ice.*

* An extensive series of researches on the specific heats of bodies, conducted by the illustrious associates, Lavoisier and Laplace, have been found, on repetition, to have been rendered useless by the imperfections of the apparatus they employed: it was termed the "calorimeter," and consisted of a vessel containing ice, in the centre of which the heated body was placed, and the quantity of heat thus given out on cooling, was measured by the quantity of ice which was melted into water. Outside, there was another case of ice, to defend the instrument from the action of the air. It was found, in practice, impossible to collect all the

Now, when 1 lb. of water at 75° is mixed with 1 lb. of snow at 0°, there results 2 lbs. of water at 0°: 75° × 285 are required to melt 285 lbs. of ice; 1 lb. hydrogen yields 21375° heat, or will raise 213 lbs. water to the boiling point; while 1 lb. carbon gives 7237°, or will raise 72 lbs. water to the same temperature. Despretz found the following quantity of ice melted by carbon and hydrogen:

1 lb. hydrogen melted 315.2 lbs. ice
1 lb. carbon " 104.2 "

The quantity of heat ascertained by Lavoisier and Laplace was considerably under the true quantity; but Dulong, in his pamphlet on Animal Heat, remarks that their calculations are much too high.

The experiments of Despretz show that 1 part of carbon gives 7912° of heat, (Lavoisier 7243°) and that 1 part of hydrogen yields 20624°, (Lavoisier 23702°.) (These results of Despretz were obtained in a calorimeter similar to the one which I described at the commencement of the lecture.)

Now these quantities differ materially from those found by Laplace and Lavoisier, from which Dulong and Despretz calculated their experiments; and therefore, if the results of the first two chemists are incorrect, they will alter in no slight degree those of the last two.

The annexed results, which agree very closely, were subsequently found by Dulong. Barometer, 0°, 1 litre of hydrogen developed 3120°, 3118°, 3108°, 3111°, 3075°. According to the preceding, when 1 litre of oxygen combines with 2 litres of hydrogen, it must develop twice as much heat as the litre of hydrogen. Thus, Dulong's last experiments show that 1 gramme by weight of hydrogen gives 34743° of heat; therefore, this, divided by 8, must give the heat for 1 gramme of oxygen=4342°. Some experiments have since been performed by Hess, which agree very closely with those of Dulong, and therefore must be taken into consideration. He found that 1 part of hydrogen yielded 3114° of heat, (mean of his experiments.) Reynault found recently, that the latent heat of water was 79°, and not 75°,—a fact which will also affect the solution of the questions we are discussing. The principal sources of error in the experiments of Dulong and Despretz lay in the carbon which they burnt for their determinations. The first took wood charcoal, which contains hydrogen, oxygen, (water) and 2 per cent. of ashes; and the last employed carbonized sugar, containing always from 2 to 3 p. c. of water. They could not readily burn the diamond in their apparatus, as a quantity of carbonic acid would necessarily be lost; therefore we find how much easier it is to determine the heat evolved from a given quantity of such an inflammable gas as hydrogen, than from so difficultly a combustible element as carbon.

Dulong found that 1 litre of carbon vapour gave 7858° of heat. Now, what did he mean by one litre? This question cannot now be answered by the experimenter, and for the best of all reasons—because the man is dead; but according to Berzelius, carbonic acid consists of 1 volume of O. + $\frac{1}{2}$ volume of carbon. Now, 1 litre of carbonic acid contains 0.5404 of carbon = the weight of 1 litre of carbon; therefore, 1 litre of carbon vapour must weigh 0.5404;—but, according to the French mode, twice as much is reckoned i. c. = 1.0808. If we regard the litre according to the highest number, we shall, on calculation, find the heat developed in the apparatus to agree very

water. A quantity remained infiltrated among the ice, some solidified in one part of the vessel after having been melted in another, and consequently, the numbers given by two of the greatest men that have ever been attached to science, must be considered as quite without authority. In cases, however, where the quantity of heat was very large, as when the calorimeter was employed to determine the quantity of heat produced in combustion, these sources of error became less influential. Kane.—Dr. M.

* It is a most unaccountable circumstance, that these two philosophers, calculating from the determinations of Lavoisier, instead of seeking more correct data.—Dr. M.

closely with theory. I have calculated from the given data, and therefore place the results before you:*

According to my opinion, the quantity of heat which the same amount of carbon or hydrogen should develop when burnt *per se*, is greater than when consumed in an animal, because a much longer time is necessarily required in the latter case, and the loss by radiation, &c., is not inconsiderable.

Dulong also burnt different gases, viz. cyanogen, olefiant gas, &c. He found that 1 litre of cyanogen gas yielded 1200°; 1 litre cyanogen contains exactly 100808. Now this quantity of carbon burnt *per se*, only yields 7860; but the cyanogen also contains nitrogen, which consumes oxygen to form nitrous acid, and therefore the preceding numbers will be less. Now oil gas, when burnt, which only contains carbon and hydrogen, would allow us to determine precisely the quantity of heat expended. I have burnt 1 litre of carburetted hydrogen, which gave 15338° heat. I shall now calculate the heat from the combustion of alcohol and ether vapours:

1 litre alcohol vapour (1 litre of oil gas) = 14378°
 $\frac{1}{2}$ litre ether " () = 16674°

These gases also contain oxygen and hydrogen in the proportion of water, which, of course, cannot be supposed to afford any heat. After deducting the quantity of heat which 1.0808 hydrogen developed, we obtain the quantity of heat which carbon affords, equal 9249, which, calculated according to 100, gives 8548; *c. g.*—

15461° This is the heat of combustion of oil gas.

Minus 6212° The heat of combust. of hydrogen.

9249° Heat developed by carbon = in 100, 85.48.

When I take 8548° and recalculate according to Dulong and Despretz's results, the following numbers will be found. Animal heat 100°:—

Dulong.	
94.9	100.30
90.1	104.00
91.0	
100.47	&c.

Dulong's experiments are also calculated on the same basis.

Despretz.	
107	101
101	104
98	&c.

These are obtained by taking into account the quantity of heat developed in the experiments of Despretz, and calculating according to the above data.

Therefore the quantity of oxygen inhaled and consumed agrees with the quantity of heat yielded in our organism. In conclusion, I must remark that the high temperature of our system is uniformly, and under all circumstances, the result

* Theoretical Heat.

Despretz.	
102	
96.7	
94.7	
96.8	
98	
99	
93, &c.	

These numbers were only placed upon the black board—the Professor having calculated them previously from Dulong's paper. The tendency of the lecture was to demonstrate the *real* quantity of heat developed by carbon and hydrogen, and this being found, the quantity of animal heat is at once ascertained.

Dulong.	
90	
85	
96	
93	
96	
99	
98, &c.	

These numbers are the calculated temperatures of the quantity of heat developed by the combustion of carbon and hydrogen, and they are reckoned from the most exact experiments.—Dr. M.

of the combination of a combustible matter with oxygen. It does not signify what intermediate forms food may assume, what modifications it may undergo in the animal body—the final uniformly being, the conversion of its carbon into carbonic acid, and of its hydrogen into water, and the amount of heat liberated during this chemical process is always a *constant quantity*, and this quantity could not be arrived at by experiment, as Dulong and Despretz calculated their results from wrong data; that is, they estimated the heat evolved from carbon and hydrogen in a free state, at too low a standard. But I think that I have clearly shown you, that when I include their results, and recalculate them with the heat evolved in the combustion of *pure* carbon, &c. that I obtain for every pound of oxygen disappearing in the animal economy an exactly corresponding amount of caloric; thus proving that the theory of respiration is the only real source of animal heat.

[We learn from Dr. Muspratt that a more detailed account of Liebig's views upon this important subject, will be printed in the next "Annalen."—ED.]

FURTHER OBSERVATIONS ON THE USE OF PRESSURE, AS A MEANS OF DISTINGUISHING RESPIRATION AND INFLATION,

By WILLIAM A. GUY, M.B. Cantab;

Professor of Forensic Medicine, King's College, and Physician to King's College Hospital;

With Two Cases Reported by Mr. F. J. Hensley, in which the Test of Pressure was applied,—accompanied by Remarks on the Proper Mode of Performing Artificial Inflation in New-Born Infants.

By DR. ARTHUR FARRE.

In the *Medical Times* of November, 1844, I published a case, reported to me by Dr. Henry Browne, as the text for some remarks on the value of the test of pressure as a means of distinguishing respiration from inflation, and I arrived at the conclusion, that in the two extremes of imperfect respiration or inflation, on the one hand, and complete respiration or inflation, on the other, the test in question entirely failed. I had previously shown that lungs completely inflated out of the body could not be made to sink by any amount of pressure short of that which would entirely destroy their texture; Dr. Browne's case proved that the same result happens when the lungs are completely inflated in the attempt to restore animation to a still born infant. Thus, as I have already observed, "The two extremes of inflation and respiration are removed beyond the reach of the test of pressure, and it is only to an intermediate degree that it can be applied. In excepting this intermediate degree of distension, I would be understood to do so only so long as I am not in possession of experiments calculated to show the effect of pressure upon it. It is not improbable that further experience may condemn the application of pressure to this average state of the lungs as it has already done to the two extremes." This expectation had not long to wait for its fulfilment; for, in both the cases reported by Mr. Hensley, inflation was performed with the effect of imperfectly distending the lungs, and in neither instance could the lungs be made to sink by the strongest pressure, carried in the second case to the extent of reducing them to "mere shreds."

The value of these cases is, perhaps enhanced, by the consideration, that in them, as in that reported by Dr. Henry Browne, the experiments on the lungs were made by persons who cannot be supposed to stand committed, as opponents of the lung tests. Their testimony may, therefore, be received as that of unprejudiced witnesses.

Another question involved in the case reported by Dr. Browne, excited the curiosity of a correspondent of the *Medical Times*, who was anxious to be informed as to the best method of practising inflation in the new-born infant. He will find all the information which he requires in the valuable commentary appended to Mr. Hensley's first case by my colleague, Dr. Arthur Farre, who has kindly placed it at my disposal.

CASE I.

Mrs. Whitburne, aged 30, at present residing in No. 45, Regent-square, was attended two years and three quarters ago, by Mr. Lewis Hensley, surgeon, of No. 3, Great St. James-street; at that time she was in labour of her first child from Friday evening to Monday morning, the child's breech presenting; a delivery was at last effected by means of instruments, and on this account, she anticipated a difficult labour when pregnant with her second child, and again requested Mr. Hensley's attendance. On the evening of Monday, December 2nd, Mr. Hensley was summoned, on his arrival he found that true labour pains had commenced at four o'clock, p.m. On making an examination, the head could be felt presenting, the os uteri was soft, moist, and dilatable, and about the size of a crown piece. At eight, p.m., the membranes ruptured, and the liquor amnii escaped. At half-past ten, the head could be felt in the first position, very hard and large, and about midway through the brim of the pelvis; the pains at this time were very strong at moderate intervals, notwithstanding, that for 6 hours, the head was apparently stationary. At four, a.m., Mr. Hensley sent for his son, desiring him to bring the forceps. At this time the os succedaneum was very large, the soft parts of the pelvis much swollen and somewhat tender, but the patient was not much exhausted, the pulse being, though quick, of moderate strength, but the pains were evidently diminishing, both in strength and frequency. At half-past five, after the administration of an enema, which was immediately returned, Mr. Hensley proceeded to introduce the forceps (Dr. Haighton's curved forceps were used), the lower blade was introduced without difficulty, but the upper could not be passed between the head and the pelvis, sufficiently to lock, he was, therefore, obliged to desist, and at half-past six, a.m., sent for Dr. Arthur Farre, in order to consider whether the use of the perforator might become necessary. On Dr. Farre's arrival at half-past seven, it was agreed to give the forceps a further trial (substituting Dr. Blundell's straight forceps for those before employed). These were successfully introduced in the left oblique diameter, and, in half an hour, the delivery of the head was accomplished. The child made two or three unsuccessful efforts to breathe. Ten minutes elapsed before the uterus made any effort to expel the shoulders, so that the chest was much compressed; in five minutes more the body was born; the child then made no effort to breathe, notwithstanding the use of the ordinary expedients to excite respiration; the cord was flaccid and did not pulsate, and the heart could not be felt to beat: the child was, therefore, immediately separated from the mother and immersed in a warm bath; artificial respiration was performed by Dr. Farre, and continued by me for twenty minutes, but without effect, the face and chest becoming cold; our attention was then directed to the mother.

The head was very large and well formed, the fontanelles small.

Measurement of the head:—

Diameter from occiput to root of nose, $4\frac{1}{4}$ inches.

Occipito-mental, $5\frac{1}{8}$ inches.

From one parietal protuberance to the other, $3\frac{1}{2}$ inches.

From occiput to anterior fontanelle, 4 inches.

Between fontanelles, 3 inches.

Circumference of head, 14 inches.

Circumference of head and face, 18 inches.

Breadth of shoulders, $6\frac{1}{2}$ inches.

Length, 21 inches.

The lungs were examined by me at half-past four, p.m., December 3rd; they were collapsed, and of a rose red colour; the surface presented violet patches studded with vermilion spots, evidently contained in the substance of the lungs, and very numerous near the margins of the lobes; the lungs were crepitous throughout under pressure, and readily floated, with the heart attached, or separately in water: being cut into pieces, a frothy serum exuded. Each portion floated in water, nor could any portion be made to sink by repeated pressure, by twisting in a coarse cloth, and even treading thereon. In this case there is some probability that the child was carried more than nine calendar months. Mrs. Whitburne menstruated

last at the beginning of February, having before been quite regular, and quickened June 6th, so that reckoning from the last menstruation, or from the period of quickening, a considerable excess over the ordinary period is apparent.

FREDERICK JOHN HENSLEY.

Dec. 5, 1844.

Remarks on the foregoing Case. By Dr. Arthur Farre.

I have been much interested in the results of the experiments made upon the lungs of the still-born infant, which I delivered by the forceps, as described in the notes taken by Mr. Hensley, of the case. And I am induced to add to them a few remarks upon what appear to me to be the practical bearings of the subject.

I conceive that in regard to the hydrostatic lung test, the main point which remains still undetermined is, whether by the aid of compression, any difference can be detected between the foetal lung, which has been artificially inflated, and that which has naturally respired, a question which appears likely to be soon settled, by the accumulation of cases like the present, in the negation of any such supposed difference existing.

In making such experiments, it is obviously very important to observe that they are made in those cases only, in which we are quite satisfied that natural respiration had not previously taken place. Of this I was fully satisfied in the present instance. As soon as the head had passed the perineum, I uncovered the face to expose it to the air, and during the interval that elapsed between the birth of the head and the extraction of the shoulders, I twice observed a momentary twitching of the face, as if the child were making an effort to breathe, but I am satisfied that no air entered the lungs: and after the whole body was extracted, no respiratory effort whatever was made: nor did the child exhibit any signs of life. The whole of the air, therefore, found in the lungs was artificially introduced, and the experiments show that it could be no more expelled by compression, than it can from lungs which have naturally respired.

This case is further interesting as bearing upon another question of importance, namely, whether the lungs of an infant born in a state of asphyxia can be equally well inflated by the direct application of the mouth of the operator to that of the infant, as by the intervention of a trachea tube. I have long discarded the trachea tube, and always inflate the lungs directly from the mouth in cases of asphyxia, being satisfied that the lungs can be fully inflated in this way; but if any doubt is entertained on this point, it ought to be removed by such cases as the present, which prove that the lungs can be so perfectly inflated without the tube, as to be rendered incapable of being distinguished by the hydrostatic test, from those in which respiration has been naturally performed.

I have two objections to the use of the tube. First, that a much narrower stream of air is carried into the lungs than can be conveyed by the mouth directly applied, and that thus the air entering more slowly, becomes deteriorated by being delayed in the lungs of the operator longer, than when it is expelled in a larger stream, and, consequently, more pure; and, secondly, that a hard tube introduced into the trachea of a newborn infant, and retained there for half an hour or more, as is sometimes requisite, is very likely to excite severe, or fatal bronchitis, so that after we may have succeeded in establishing respiration, we may still have the mortification of losing the infant by disease artificially produced.

The objection of throwing deteriorated air into the lungs has been proposed to be obviated by substituting a bellows for the mouth. But its application causes delay, is inconvenient, and may not always be obtainable, while I think the injection of cold, instead of warm air, into the lungs a greater objection, than the introduction of air already partially deteriorated. It is of great importance to keep the body as warm as possible, and I think this is prevented by using the bellows.

Against this, it will probably be urged, that numerous experiments upon decapitated animals, shew that the circulation may be maintained by artificial inflation with the bellows. But I do not think the cases parallel, for the new-born infant

has been just transferred from the high temperature of the mother's body, to one in which it easily chills, and having little power in itself of maintaining its temperature, any circumstance which further tends to rob it of caloric, is unfavourable to the restoration of its circulation. The objection that the carbonic acid contained in the air expelled from the lung of the operator, may affect the rima glottidis of the infant, so as to prevent the entrance of the air, obviously cannot be maintained, since these are the effects of pure and not of diluted, carbonic acid. If the air is rapidly inhaled, and again quickly expelled into the lungs of the infant at short intervals, quite enough of pure air is contained in the portion thrown in to restore animation, if other things are favourable.

As I have objected to the use of the tube, and recommended the mouth alone to be used in resuscitating the new-born infant, I may perhaps be allowed to add to these remarks, a short description of the mode which I have found most useful in restoring animation. This I should have thought hardly worth detailing, as I am not aware that it possesses any novelty, had I not, on several occasions found, upon enquiry into the mode in which the operation had been conducted, and where it was found to have failed, that I could trace the probable cause of failure either to a want of method in the means used, or of sufficient perseverance in the application of them.

If the umbilical cord still pulsates, the child should not be separated until we have succeeded in exciting respiration, by the simple means commonly used on such occasions, so that the placental circulation may not be cut off, before the pulmonic is established.

If the cord has ceased to pulsate, there is no benefit to be derived from preserving its connection with the mother, but it may be at once separated; and if the ordinary simple means, as shaking, slapping, blowing on the face, sprinkling with water, &c., fail to rouse the child, it should be immediately placed in a pan or tub of warm water, immersed to the shoulders, and artificial inflation be commenced.

The infant's mouth being wiped, to remove mucus, the operator, taking a quick and deep breath, expels the air from his lungs into the infant's mouth—first pinching its nostrils with the forefinger and thumb of one hand, while with the other, he commands the chest and glottis. The fore-finger of this hand, pressed upon the larynx, opens the rima, at the same time that it compresses the œsophagus against the spine, so that the air can enter the lungs only, and is prevented from passing into the stomach, or escaping by the nostrils. The thumb of the same hand compresses one side of the chest; the three remaining fingers the other side, and the palm the middle, as well as the abdomen. By alternately blowing into the mouth, and pressing with the hand on the chest, and abdomen, the lungs are filled and emptied as often as necessary. If sufficient pressure is not made on the larynx so as to compress the œsophagus, the air will be heard entering the stomach also, with a rumbling noise, and will be again expelled from the mouth each time that the abdomen is compressed. This will not materially interfere with the inflation of the lungs, as the infant's stomach is not large enough, when filled, to compress them to any great extent; but it should be avoided, especially as the noise is unpleasant to the bystanders. The first indication of returning animation is generally observable in the infant's lips, which gradually lose their purplish hue, and assume a pink tint—the purple colour again returning whenever the respiratory efforts are suspended for a short time. This is a clear sign not only that the circulation is going on in the extreme branches, but that the blood is also undergoing the necessary changes in the lungs. Whenever this change is perceptible, it ought to encourage us to perseverance; and I have seldom failed in restoring respiration where I have observed this change to take place, although for the first half-hour, it was the only encouragement I had to persevere. If, on the other hand, no such effect is produced during the first 20 or 30 minutes, there is little or no prospect of ultimate success from

further employment of these means, and I generally then abandon the case as hopeless. Should, however, this change occur during artificial inflation, and especially if the whole face becomes changed from purple to pink, success may be anticipated, but the artificial inflation may still be necessary, at intervals at least, until the infant has acquired the full power of inflating its own lungs. I have known this power continue imperfect for the first two hours after birth, in a case where the infant was born in a state of asphyxia, but where natural respiration was ultimately fully established, though the infant required to be carefully watched for an hour longer, before I considered it safe to leave the case.

The common application of brandy, or other alcoholic stimulants, sprinkled, or rubbed upon the surface, acts, I think, in two ways, partly by promoting the cutaneous circulation, for under its use, the skin becomes of a bright red colour, and the centre of the circulation is relieved by promoting the onward movement of the blood in the extreme branches, and partly by stimulating the intercostal, and other respiratory, muscles, to contract spasmodically, thus establishing the first respiratory movements.

This effect may be shewn by pouring a few drops of brandy upon the front of the chest, as the infant lies in the bath with this part a little exposed. A quivering motion of the skin is sometimes seen to follow, shewing the spasmodic action of the muscles beneath. Then, in a little time, the consentaneous action of the whole respiratory muscles is suddenly called forth, and a quick and sudden inspiration occurs. And this result may be frequently obtained by a repetition of the same means. The diffusion of brandy through the bath in which the child is immersed, produces both these effects, but in a less degree.

22, Curzon Street, May Fair.

CASE II.

Mrs. Baker, residing at No. 15, Bruuswick Grove, Cromer Street, was delivered on January 9th, 1845, of a still-born female infant—the death of the child was probably owing to a separation of the placenta, previously to delivery, (partly owing to a severe blow from the fall of a coal sack, received a month before delivery, and partly to the large quantity of liq. amni.) since the child and placenta were expelled together. There was no pulsation in the cord, no congestion of the face, the heart could not be felt pulsating, and the child made no effort to breathe or cry. Artificial respiration and the warm bath were persevered in for more than half an hour, but without avail.

At 4 o'clock the following day, (before there were any visible signs of putrefaction), the lungs were examined in the presence of Messrs. Ody and Baines. They were found well developed, universally crepitant, presenting rose-coloured, well marked air cells, evidently contained in the substance of the lung, with here and there violet-coloured spots; these latter existed principally in the lower lobe of the right lung: the lungs with the heart attached, readily floated when immersed in water, as they did when separated and cut into pieces; portions were cut from the violet-coloured spots, where, apparently, the air had entered but little, these floated readily, nor could they be made to sink by pressure in a cloth, so long continued as to reduce them to mere shreds.

F. J. HENSLEY.

Jan. 15, 1845.

In addition to the foregoing cases reported by Mr. Hennesley; a second one in which inflation was successively practised, and pressure unsuccessfully, and as a means of discrimination, has been mentioned to me by Dr. Henry Browne. I have, therefore, no longer any hesitation in rejecting the test of pressure to whatever extent the lungs may have been distended.

MAGIC, MESMERISM, HYPNOTISM, &c.,
HISTORICALLY AND PHYSIOLOGI-
CALLY CONSIDERED.

By JAMES BRAID, (of Manchester), M.R.C.S.E.

(Continued from p. 220.)

Whoever has attended to the remarks contained in my two last communications, must have

observed, that, in the hypnotic method of cure, the first thing to be done is to *diagnose the disease*, and then to judge of the *pathological condition*, which is the only rational mode of determining how to conduct the *after processes*. Now, this necessarily implies the *previous possession of professional knowledge*; and, I hesitate not to say, that none but professional men ought to attempt *this method of cure*, any more than is the case, in reference to the *ordinary methods of cure*, by prescribing medicine. The mere induction of the hypnotic condition, and the mental impression thereby resulting may, no doubt, *occasionally* prove successful, just as any other prescription, given at random, and taken in faith, may be followed by a cure, or amelioration in *some cases*; but, in either instance, there is far greater chance of harm than good resulting from such hap-hazard proceedings for which reason they ought not to be encouraged. Hypnotism is perfectly safe in judicious hands, but it ought not to be trifled with by those ignorant of its influence on the patient, any more than medical treatment by those ignorant of its power in the particular cases in which each may be expected to produce a salutary effect, upon established principles.

I feel pretty confident that the mesmerists who recommend the indiscriminate use of mesmerism *by all and sundry*, are adopting the very course which will bring their method into disrepute and contempt, however valuable in itself, when well directed.

When discussing the subject of the influence of mental impressions in changing physical action, I intentionally declined referring to their power to turn the hair suddenly grey—such as in the course of a night. However, I am now induced to advert to it, as one of the *most extreme cases which we can imagine possible*, from having lately met with a clerical friend who is an example in point. I happened to be conversing with him on the reports which I had heard regarding such cases, and referred to others on record, but added, that I was so much at a loss to conceive how it was possible for such a remarkable change to take place so rapidly, in such a structure as the hair, that I had not ventured to adduce it in my papers as I otherwise should have done. To my great surprise, in answer to this he replied, that however difficult it might be to account for it, there could be no doubt of the fact, as he, himself, was a living instance of that remarkable phenomenon. When only 24½ years of age, his mind had been greatly excited by two contending feelings, filial duty and inclination. He had entertained an ardent desire to go abroad as a missionary, but his father was resolutely opposed to his doing so. After a long conflict of this sort, one night it seemed to have come to a climax. He felt it impossible to sleep, and a most peculiar feeling was experienced by him over the whole of the right side, including the right leg and arm. When he went to dress the following morning, to his great astonishment, *he discovered a large grey patch on the right side of the head; there were hundreds of grey hairs where none were visible the night or day before*. He had naturally *strong dark hair*. From that it extended farther, but it was many years before there was any sprinkling of grey on the *left side*. This gentleman is now about 43 years of age, and very lately repeated the above description of the occurrence to my family. I inquired particularly whether he had had his hair cut the night before, which might have revealed what was previously concealed, but his hair had *not been cut for some time before*, so that this is a genuine case in point.

To this I shall add two cases recorded by my friend J. C. Colquhoun, Esq. in his learned work, "Isis Revelata"—a work which is a miracle of learning, industry, research and ingenuity. At page 113, of vol. 1, he introduces the subject with the following pertinent remarks: "Bodily suffering always affects the mind, in a greater or less degree; while impressions made on the mind have been known to produce surprising changes on the habit of the body. The remarkable histories of John De Poitiers and Henry IV. of France, have been recorded by historians, and corroborated by physicians. The former

having been convicted of being an associate in the conspiracy of the Constable of Bourbon against Francis the I., and condemned to lose his head became so distracted by fear and violent passion, that, *in one night his hair turned entire'y grey*; and he was seized with so violent a fever, that, though his daughter procured his pardon from the King, no remedies could preserve his life. The latter, when he heard the unexpected and mortifying news, that Henry III. had published the edict of July, 1585, against the Huguenots, was so greatly affected, that, *in an instant, one of his mustachios was turned grey*."

In my former paper I stated the successful result of a mouthful of water, or beer, given to two patients, or simply drawing the hand over the bowels during hypnotism, *predicting aloud that such would cause the bowels to move*, and that in the second case, it had been tried *seventeen times with the result of procuring an alvine evacuation before I left the house*. Since then, the experiment has been tried other ten times, with this patient, with like results on each occasion. It has also been tried once, and with success, with her sister, four and half years of age. I have also tried it with *another patient, advanced in years*, with the same result. In the latter instance, the patient was *self-hypnotised*. At the end of the time predicted, this patient, whilst still asleep, repaired to the water-closet and had an evacuation, and returned to the room *still in the sleep-walking condition*, and on being aroused, remembered nothing of what had happened. When in the sleep again, however, there was a perfect recollection of the whole circumstance, but, during the waking condition, this patient, up to this moment, is perfectly ignorant of any such occurrence.

Amongst the various aids to the cure of disease, that I may not appear to treat with too little respect, one of the *most important*—viz. the "*vis medicatrix nature*," I shall briefly state my reason for not having referred to it sooner, which was this:—*as it plays AN IMPORTANT PART IN EVERY MODE OF TREATMENT*, I thought it best to treat it as mathematicians do symbols of equal value on the opposite sides of an equation—let the one cancel the other, and thus shorten the process. The only advantage which can tell more in favour of one mode than another, in this respect, will be that which professes to require the *longest time* to produce its effects. In such cases, of course the *vis medicatrix* will be able to accomplish more than during a shorter treatment.

In my communication, in number 272 of the *Medical Times*, I referred, in a very brief manner, to the curious and extraordinary feats of the Eastern devotees, throwing themselves, by their own personal efforts, into the state of profound hypnotic trance, or one of temporary and artificial hybernation, during which they suffered themselves to be buried for a considerable time, and after exhumation, were speedily restored to a state of vital energy and activity. It has occurred to me, that many of your readers might feel interested in having a detailed, and minute account of these curious proceedings, I, therefore, now transmit you the following, which a friend has furnished me with for the purpose, copied from the work of the Hon. Captain Osborne:—*The Court and Camp of Kunjeet*.

"The monotony of our camp life was broken this morning by the arrival of a very celebrated character in the Punjab, a person we had all expressed great anxiety to see, and whom the Maha-Rajah had ordered over from Umrutser on purpose.

He is a "fakir" by name, and is held in extraordinary respect by the Sikhs from his alleged capacity of being able to bury himself alive for any period of time. So many stories were current on the subject, and so many respectable individuals maintained the truth of these stories, that we all felt curious to see him. He professes to have been following this trade, if so it may be called, for some years, and a considerable time ago several extracts from the letters of individuals who had seen the man in the Upper Provinces, appeared in the Calcutta papers, giving some account of his

extraordinary powers, which were at the time, naturally enough, looked upon as mere attempts at a hoax upon the inhabitants of Calcutta. Captain Wade, political agent at Ludhiana, told me that he was present at his resurrection after an interment of some months, General Ventura having buried him in the presence of the Maha Rajah and many of his principal Sirdars; and, as far as I can recollect, these were the particulars as witnessed by General Ventura:—After going through a regular course of preparation, which occupied him seven days, and the details of which are too disgusting to dilate upon, the fakir reported himself ready for interment in a vault which had been prepared for the purpose by order of the Maha Rajah. On the appearance of Runjeet and his court, he proceeded to the final preparations that were necessary, in their presence, and after stopping with wax his ears, nostrils, and every other orifice through which it was possible for air to enter his body, except his mouth, he was stripped and placed in a linen bag; and the last preparation concluded by turning his tongue forwards, and thus closing the gullet, he immediately died away in a kind of lethargy. The bag was then closed, and sealed with Runjeet's seal, and afterwards placed in a small deal box, which was also locked and sealed. The box was then placed in a vault, the earth thrown in and trod down, and a crop of barley sown over the spot, and sentries placed round it. The Maha Rajah was, however, very sceptical on the subject, and twice in the course of the ten months he remained under ground, sent people to dig him up, when he was found to be in exactly the same position, and in a state of perfectly suspended animation. At the termination of the ten months, Captain Wade accompanied the Maha Rajah to see him disinterred, and states, that he examined him personally and minutely, and was convinced that all animation was perfectly suspended. He saw the locks opened and the seals broken by the Maha Rajah, and the box brought into the open air. The man was then taken out, and on feeling his wrist and heart, not the slightest pulsation was perceptible. The first thing towards restoring him to life, was the forcing his tongue back to its proper position, which was done with some little difficulty by a person inserting his finger and forcibly pulling it back, and continuing to hold it until it gradually resumed its natural place. Captain Wade described the top of his head to have been considerably heated; but all other parts of the body, cool and healthy in appearance. Pouring a quantity of warm water upon him constitutes the only further measures for his restoration, and in two hours time he is as well as ever.

"He is, apparently, about thirty years of age, with a disagreeable and cunning expression of countenance. We had a good deal of conversation with him, and he volunteered to be interred for any length of time we pleased, in order to convince us that he is no impostor. We took him at his word, and he is to be buried on our arrival at Lahore, and to remain under ground during our stay there, which will probably be three weeks or a month; and though he complains that the period is too short, and that it is hardly worth his while to undergo all the trouble of the preparation; if he comes out alive I will willingly give him credit for being able to remain a hundred years if he chooses it.

"He states that his thoughts, and dreams, are most delightful, and that it is painful to him to be awoken from his lethargy.

"His nails, and hair, cease growing, and on his first disinterment he is for a short time giddy and weak, but very soon recovers his natural health and spirits. His only fear, whilst in his grave, is that of being attacked by insects, which he obviates by having his box suspended from the ceiling."

To the above interesting account, Captain Osborne adds, in a note, the following curious particulars:—

"On my return to Simla, accident placed in my hands the appendix to a medical topography of Loodhiana by Dr. MacGregor of the Horse Artillery, by whose permission I have extracted the following account of the former interments and resurrections of the fakir.

"A fakir who arrived at Lahore engaged to bury himself for any length of time, shut up in a box, and without either food or drink. Runjeet naturally disbelieved the man's assertions, and was determined to put them to the test. For this purpose the fakir was shut up in a wooden box, which was placed in a small apartment below the middle of the ground: there was a folding door to his box, which was secured by a lock and key. Surrounding this apartment, there was the garden house, the door of which was likewise locked, and outside the whole a high wall, having its door way built up with bricks and mud. In order to prevent any one from approaching the place, a line of sentries was placed and relieved at regular intervals. The strictest watch was kept up for the space of forty days and forty nights, at the expiration of which period, the Maha-Rajah, attended by his grandson and several of his sirdars, as well as General Ventura, Captain Wade, and myself, proceeded to disinter the fakir. The bricks and mud were removed from the outer door way; the door of the garden house was next unlocked, and lastly that of the wooden box containing the fakir: the latter was found covered with a white sheet, on removing which the figure of the man presented itself in a sitting posture; his legs and arms were pressed to his sides, his legs and thighs crossed. The first step of the operation of resuscitation consisted in pouring over his head a quantity of warm water; after this a hot cake of otta (wheat flour) was placed on the crown of his head; a plug of wax was next removed from one of his nostrils, and on this being done, the man breathed strongly through it. The mouth was now opened, and the tongue, which had been closely applied to the roof of the mouth, brought forward, and both it and the lips anointed with ghee (*clarified butter*). During this part of the proceeding, I could not feel any pulsation at the wrist, though the temperature of the body was much above the natural standard of health. The legs and arms being extended, and the eyelids raised, the former were well rubbed, and a little ghee was applied to the latter; the eyeballs presented a dim, suffused appearance, like those of a corpse. The man now evinced signs of returning animation, the pulse became perceptible at the wrist, whilst the unnatural temperature of the body rapidly diminished. He made several ineffectual efforts to speak, and at length uttered a few words, but in a tone so low and feeble as to render them inaudible. By and bye his speech was re-established, and he recognised some of the bystanders, and addressed the Maha-Rajah, who was seated opposite to him watching all his movements. When the fakir was able to converse, the completion of the feat was announced by the discharge of guns, and other demonstrations of joy. A rich chain of gold was placed round his neck by Runjeet, and ear rings, baubles, and shawls were presented to him. However extraordinary this fact may appear, both to the Europeans and natives, it is difficult, if not impossible, to explain it on physiological principles. The man not only denied his having tasted food or drink, but even maintained that he had stopped the function of respiration during a period of forty days and nights. To all appearance this long fasting had not been productive of its usual effects, as the man seemed to be in rude health, so that digestion and assimilation had apparently proceeded in the usual manner; but this he likewise denied, and piously asserted, that during the whole time he had enjoyed a most delightful trance. It is well known, that the natives of Hindoostan, by constant practice, can bring themselves to exist on the smallest portion of food for several days, and it is equally true, that by long training, the same people are able to retain the air in their lungs for some minutes; but how the functions of digestion and respiration could be arrested for such a length of time, appears unaccountable. The concealment of the fakir during the performance of his feat, so far from rendering the latter more wonderful, serves but to hide the means he employs for its accomplishment, and until he can be persuaded to undergo the confinement in a place where his actions may be observed, it is needless to form any conjectures regarding them.

(To be continued.)

ON THE TREATMENT OF HYPOCHONDRIASIS, &c.,

By F. MICHEA, M.D., Laureat of the Academy of Medicine, &c. &c.

(Continued from page 381.)

Treatment of Sympathetic or Secondary Hypochondriasis.—As the pathognomonic symptoms in the present instance originate in a disease, not of the mind, but of the body, evidently it is against the latter that all the means furnished by the materia medica must be directed. The moral treatment is, therefore, no longer seasonable: for, of what effect could it be on a physical sufferance? At the utmost, moderate its intensity, by directing the attention to another object. But as the bodily affections which give rise to, or keep up, hypochondriasis, are of a very different nature, naturally the remedies they claim are far from being identical; and to avoid all confusion in so important a subject, they will be classified under different heads, and at the same time, the cases in which they are applicable will be indicated.

¹ *Antispasmodics.*—The substances composing this class must be carefully distinguished from narcotics, for though both act on the nervous system, still they are far from modifying it in the same manner. Effectively the latter diminish, benumb, or momentarily paralyse, the nervous powers, whilst the former restore these powers to their normal condition. The one, to make use of a trite saying, kills the reptile, in order to destroy the venom, whilst the other destroys the venom, without injuring the reptile. Therefore it is those that shall occupy our attention, as the only ones by which we can combat directly the disturbances of the nervous centres, and attack the root, the principal seat of the disease: as to these they will be examined under the head of the treatment of the various symptoms. But in what way do anti-spasmodics act? Unfortunately, it is impossible to indicate precisely; but be this as it may, they ought to be prescribed whenever hypochondriasis appears to be the result of an essential neuropathy, or a disturbance of innervation, caused neither by plethora, nor a change in the composition of the blood, nor in fine by any appreciable organic lesion.

The most efficacious remedies of this class are: assafoetida; pulvis-valerian. off.; castoreum, mosehus; camphora; digitalis; and such like, administered in pills, decoctions, infusions, or enemas. They must be changed from time to time, in order to obtain all the benefit possible; and to be administered with perseverance, except when the excitation they produce, acts too powerfully on any important organ. In some cases electricity and magnetism may be had recourse to, for though the electro-magnetic fluid is not of the same nature as the nervous, as was long supposed to be the case, and as many savants still think, at least it is positive that nervous diseases are considerably, and often advantageously, modified, by the means just mentioned.

² *Tonics.*—They are indicated whenever the disease originates in a state of weakness, not apparent, but real; whenever there is anaemia, let the cause of the impoverishment of the blood be what it may. Except in these cases, tonics ought never to be prescribed, because, when given for some time, they may produce acute or chronic inflammations, and numerous other organic disorders. They are evidently useful when the following symptoms exist: paleness of the body; hæmorrhages furnished by the catamenial or hæmorrhoidal flux, transparent, or producing spots of a light rose colour; bellows sound, or *bruit de diable*, in the larger arteries, especially the carotids. Laennec was the first who remarked that these stethoscopic phenomena existed some time in hypochondriacal individuals. Indeed, were auscultation performed oftener, how many therapeutical errors would be avoided, and how often would it not be ascertained that numerous disorders, known under the vague denomination of neuropathia and organopathia, are caused by an alteration of the blood, and not of the solids?

The first rule, the most important indication to be followed in the treatment of hypochondriasis

consecutive to anæmia, is to endeavour to remove the cause which perpetuates the latter affection. Thus, if it is produced by a mental affection, or from over study, the patient must not be allowed to brood over his thoughts, but must give up his studies. If from insufficient food, nourishing diet, good and generous wines must be prescribed; if from excessive hæmorrhages, they must be stopped; from an abundant, or involuntary loss of semen, the means must vary according to the cause: for instance, continence, when it is owing to venereal excesses, or onanism; antiphlogistics, when owing to an inflammation of the testicles; anthelmintics, when produced by the ascaris vermicularis in the rectum; cauterisation of the urethra with lunar caustic, when owing to an irritation, or a chronic phlegmasia of this canal.

The causes of anæmia removed, the next thing to be done, is to restore to the blood its lost properties. This is to be obtained by very nourishing food, such as meat jellies, broth, eggs, arrow-root; in short, by every substance which, in small quantity, contains considerable proportions of assimilable substances. Roast, or grilled meat, ought not to be allowed at first, because the stomach, in an enfeebled state, cannot digest it.

The diet having been attended to, appropriate remedies must next be prescribed, and in this respect, the ferruginous preparations, alone, or combined with antispasmodics, must be chosen, in preference to all others. The sub-carbon. ferri, in pills, is very efficacious, beginning with gr. ij., *per diem*, and if the stomach bears it well, the dose must gradually be increased to 3ss., and even to 3j. Ferruginous mineral waters—Spa, Pyrmont, Passy—alone, or mixed with wine, may be had recourse to. When these compounds, even in very small doses, excite the stomach, and produce pain in the epigastrium, a narcotic, especially opium, gives relief. After these preparations, the most efficient tonics are: cinchona, gentiana, quassia amara, cortex querci, and cort. fruct. aurant.

3^o *Antiphlogistics*.—If the partisans of the system of Brown have made use of exciting remedies with too liberal a hand, those of Broussais have fallen into the opposite extreme; but, at the present time, by the aid of the eclecticism, which has regenerated medicine, causing it to return into the path of truth, from which it had so often strayed, debilitating measures are rightly employed, only when the cause of hypochondriasis is evidently a sanguineous plethora, or a phlegmasia.

When the blood increases in the system, on account of the suppression of a customary hæmorrhage, such as the catamenia, hæmorrhoids, epistaxis; leeches must be employed in the neighbourhood, or on the surface, of the part from which the blood escaped: on the vulva for the first; at the anus for the second; and in the fossæ narium for the third. If the plethora is general, phlebotomy must be preferred.

When the inflammatory erethism of an organ is manifest, the patient must take no food whatever, but drink mucilaginous, or acidulated tisanes, and make use of tepid baths. Chicken broth so highly lauded by Pome; milk, in whose efficacy Viridet placed such reliance, and which Tissot considered as equal to the most heroic means furnished by the materia medica, are here very useful. It must, however, never be forgotten, that diet and debilitating measures ought never to be persisted in too long, as in all chronic phlegmasia, there is a moment in which the blood ceases to accumulate in the capillaries under the influence of an inflammatory action, because the walls of these vessels have not the force to expel the liquid. It is at this stage—not always easily appreciated—when the hyperæmia is passive, that tonics must be administered.

4^o.—*Sudorifics*. They must be employed whenever hypochondriasis has been caused by a neuropathia, whether partial or general, produced by an alteration in the quality of the blood, owing to a diminution or a suppression of the perspiration. Now the best means of obtaining diaphoresis are, as Sanctörinus stated, hot baths, and bodily exercise. The temperature of the former ought to be from about 77° to 86° F., and as to their duration, they must not be taken so long as Pome recommended, that is to say, eight, ten, twelve, and some-

times twenty-two hours, but never longer than three quarters of an hour, an hour, or an hour and a half, so as to avoid producing a weakness or relaxation in the economy—a state attended with some danger. Finally, the patient, when coming out of the bath, must always be made to get into bed, and be well covered up. As to the latter means (bodily exercise), it must be subjected to certain rules in order to produce an advantageous effect, that is to say, it must not be used in moderation, but carried to such an extent as to give rise to transpiration. Thus, a patient who for years had taken regular and moderate exercise without any benefit, saw his hypochondriacal gastralgia disappear, as soon as by fencing, he was thrown into a perspiration (obs. 36).

The cutaneous excretion may likewise be promoted by the administration of sudorific tisanes, and, in general, by all kinds of hot infusions. It must, however, be always borne in mind, that the patient must be preserved from cold, moisture, in a word, from every cause capable of disturbing the functions of the skin.

Evacuating remedies.—Except when there are evident signs of *colluvies gastrica*, neither emetics or purgatives ought to be prescribed. In hypochondriacs, the digestive tube constitutes an apparatus whose functions are easily disturbed, and in which there is such a concentration of vital force, that the practitioner must always dread giving, without urgent necessity, remedies that may produce considerable disturbance. Experience shows that they are often injurious, and that not only drastics, but likewise gentle purgatives, may increase the intensity of the disease (Cases 21, 55, and 69).

These are the principal heads under which the various remedies, useful in symptomatic or secondary hypochondriasis, may be classed. As to complicated hypochondriasis, nothing more need be said, than, as the disease is produced at the same time, by a mental, as well as a corporeal, lesion, the union of the moral with the physical treatment, is indispensable; and, as these various means have just been passed in review, repetition is unnecessary.

Treatment of the various symptoms.—Hitherto the treatment of hypochondriasis has only been considered with respect to its causes. But if the practitioner, guided by rational principles, ought to seek and destroy the disease in its very nature and essence, still he must not neglect to combat it in the numerous and various forms by which it makes itself known; in the elements by which it is revealed to the observer, by the symptoms which enable him to discover it, the more so as among the number there are many which are predominant, and so troublesome to the patient, that it becomes absolutely necessary to relieve him by some means or other. Moreover, as in every other disease, sympathetic phenomena sometimes supervene, which do not yield always to the most appropriate and rational treatment. Now whether a disorder is attacked in its shadow or its substance, in its effect or its cause, a great deal has been done when the patient has been relieved, if only for a moment.

One of the most painful symptoms are the lancinating, dull, or terebrating pains which affect the stomach, the intestines, the heart, the head, and as they produce insomnia, it is the more requisite to combat them, sleep being of absolute necessity to hypochondriacs. To attain this end, anodynes must be employed externally and internally; opium and its various preparations, viz: tinctura opii, syrupus papaveris albi, emplastrum theriacum, are very useful in gastro-enteralgia, (cases 21st, 51st, 52nd, and 65th.) The lactucarium and codéine are preferable to morphine in as much as they do not cause a sense of weight in the brain, nor narcotism. When the patient is very much constipated, (and this, as is well known, is not infrequent in hypochondriacs,) in order not to increase this complication, narcotics must be prescribed by the endermic method.

Whenever the digestion is accompanied by a burning heat, six or eight Vichy lozenges taken before or after dinner render digestion much easier, (case 21st): as to revulsives externally, they produce little or no effect.

If the patients are troubled with much wind,

without any odour, and without any pain in the hypochondrium, Celsus recommends giving at short intervals a small quantity of cold water, and to recommend the patient to endeavour as much as possible not to belch.* Frederic Hoffmann lauds much the administration of cold water against this flatulence, the cause in his opinion of all the other symptoms of hypochondriasis. "Many patients," says this author "having uselessly had recourse to various pharmaceutical remedies, were relieved by taking cold, pure or mineral waters, for several months or more." † He advised swallowing every evening on going to bed about ʒviij., of certain tonic infusions, especially of wormwood: it succeeded in removing flatus, (case 41st.)

These various remedies are equally useful in the cases in which the patients are troubled with *hiccough* or *vomiting of ropy liquid*. Finally, iced liquids containing carbonic acid gas.

Palpitations almost always yield to the tinctura digitalis ætherea or what is still more potent, to the infusum digitalis; the aqua distill. lauro-cerasi, &c. *Insomnia* demands opiates—constipation, gentle purgatives, a mild and cooling diet, raisins, stewed prunes, &c. sometimes the large intestine is so irritable that the least opening medicine produces pain; in such cases enemas and frictions on the abdomen with croton oil, must be had recourse to.

These are the principal symptoms which are deserving of mention and which require, on account of their intensity to be especially attended to. Others it is true might have been added, but the sagacious reader will without difficulty fill up the hiatus.

(To be continued.)

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 30th, 1845.

On the Utility of Urea, and Abstinence from all liquids, in Albuminuria, by Professor Piorry.—Two years ago, after having, fruitlessly, had recourse to the various methods recommended in this affection, about five or six quarts of tisane were in two cases (both men) ordered to be taken daily. In both, the kidneys were hypertrophied, not painful, but twenty-four hours after, not only did they increase in size, but likewise became the seat of intense pain. Observing this, a contrary plan was adopted, viz. :—abstinence from liquids, and from all aqueous food; the day after the adoption of this mode, the pain ceased, and the amelioration for some time persisted, and for one or two days, albumine was not present in the urine. Unfortunately, the change was but for a moment. The weakness, the œdema, reappeared, and the disease relapsed. One fact however is certain, that the use of strengthening food, and the prohibition of liquids caused the œdema to diminish for a time. As to the utility of urea, it was prescribed, under the idea that the principal product of the urinary apparatus, ought to have an effect on these organs. It was consequently administered to patients, whose urine was highly albuminous, in the dose of ʒiiss. or 3j., increased gradually to ʒij. or ʒiiss. In one of the two cases (a woman) the œdema, the serous peritoneal effusion, and the weakness, disappeared to reappear and disappear again, according as the urea was taken, or not. Finally, the mode of action of urea can only be explained by hypothesis, and, therefore, is unworthy of serious discussion; what is, however, important to state, is, that urea, administered internally, produces a beneficial result on persons affected with Bright's disease. Professor Piorry prescribed, in a case of this disease, ice to the loins, with little or no effect.

Tumour of the Velum Palati, Removal by Ligature, by Professor Blandin.—A man, about thirty-five years of age, had suffered for some time from a disease of the velum palati, supposed, by several practitioners consulted on the subject, to be cancerous and incurable. Desirous of relief, he came

* Loc. cit. lib. 1. cap. 2—

† Loc. cit. vol. 7. p. 464.

to the Hotel Dieu, and was placed in the wards of Professor Blandin, who, after due examination, and, considering the age and the good health of the patient, that the disease was completely limited to the part affected, that the surrounding lymphatic ganglions were not engorged, and that Dr. Recamier had been successful in similar cases, decided upon operating by ligature as follows: five sutures having been introduced into the base of the tumour, this was closely tied, by means of a *serre nœud*, and the constriction gradually increased, until the swelling sloughed off. A small portion still remaining, two more ligatures were applied, and on their falling off, the disease was completely removed. The patient was thus radically cured, by an operation, employed for the first time on a part from which no surgeon would ever have dared to extirpate a tumour with the bistoury. A very curious circumstance occurred during cicatrization,—the mucous membrane of each side of the fauces was drawn inwards, so as to form a new *velum palati*.

On *Hydrarthrosis and its Treatment by strong and increasing Doses of Antimonium Tartarizatum*, by Dr. Gimelle, M.A.M., *Chirurgien Major* at the Military Hospital of the Gros Caillou.—Since the publication of a former memoir in the *Bulletin de l'Académie Royale de Médecine* (vol. 3, p. 344,) the author has prescribed this substance with complete success, in eighteen cases of effusion of synovia in the femoro-tibial, and two in the humero-cubital, articulations. The liquid was constantly absorbed in eight or ten days; the dose of the antimonium tartarizatum was at first grs. iv., increased (as soon as tolerance was established) by grs. ij. per diem, until grs. xvj. were administered, which was the most ever prescribed. The age of the patients varied from twenty-seven to sixty-three; fifteen were males, five females, three of whom were washerwomen; the disease was recent, and produced by long exposure to cold, immersion in cold water while warm, and dwelling in low and damp situations. From the facts observed, the author considers himself authorized to conclude:—1° that antimonium tartarizatum, administered in strong, and gradually increased, doses, exercises a specific action on the synovial membranes, the effect of which is the absorption of the liquid contained in their cavities;—2° that this action takes place at every age, and in both sexes;—3° that it is produced, in chronic, as well as acute, effusions, whenever the membranes have not undergone any organic lesion, and that the liquid retains its normal qualities. Three cases are recorded, the first, of a child four years old, both of whose knees were affected from his having caught cold while convalescent from scarlatina. Purgatives, temporary blisters, and frictions, with an ammoniacal liniment, or an ointment containing Iodine and hydriodate of potass, were employed, but without effect. A draught, containing antimonii tartarizati gr. j. and syrapi papavaris ʒij., was prescribed; knees to be covered with carded linen and oil-cloth; vomited twice; evacuated five times. The next day, same prescription; no vomiting; only one stool; abundant sweating. The dose of emetic was increased gr. j. per diem, until it reached grs. viij. On the fifth day, the circumference of the right knee had decreased about three quarters of an inch, the left, somewhat less; finally, on the eleventh day, the knees were of their normal size, and there was no effusion whatever into the articulation. The second, M. R., ætat 34, had, for the last three years, suffered from hydrarthrosis of the right knee, which part was in circumference an inch and a half more than its fellow; leeches, blisters, cauterics, different irritating liniments, various internal remedies, mineral waters, internally, and externally, compression, had all failed. The affected limb has considerably diminished in size, so much so, that the thigh just above the spot, where the effusion commenced, presented in circumference about 2½ inches less than the opposite side; the leg could not be bent beyond an angle of 120 degrees. On the 10th May, 1842, a mixture containing antimonii tartarizati gr. iv., and syrapi papaveris ʒv. was prescribed: vomited ten times, and evacuated six: same dose next day, only vomited twice: the 12th, same dose, which

caused only one alvine evacuation, and abundant sweats; the quantity of tartar emetic was gradually increased, so that on the 20th, it was gr. xvj., the diseased limb now being only three quarters of an inch more than the other. From this time until the 31st, the mixture was given every other day, and then ceased; the size of the knee being about four lines more than the other, and the leg could be bent to a right angle. The third, a soldier, ætat. 32, was affected with a voluminous hydrarthrosis of the left knee, which he states to have commenced six years previously. The numerous remedies employed gave only temporary relief, consequently, on the 8th June, 1844, a mixture containing antimonii tartarizati gr. iv., tincturæ opii gtt. xj. was exhibited; neither vomiting, nor, alvine evacuations, but abundant sweating was the result; the dose was increased gr. ij. per diem, until it reached grs. xvj., and on the ninth day, the liquid was entirely absorbed, and nine days after, when he left the hospital, a friction sound could be heard at some distance. During the whole of the treatment, the limb was kept covered with flannel. The author, in concluding, states that in two cases of hydrothorax, tartar emetic, administered, as just recommended, produced beneficial results; and though two facts are not sufficient to authorize a positive conclusion as to the utility of this substance in hydrothorax, still, on considering how analogous are the structure, the functions, and the secretions of the two parts, it may naturally be concluded that the result will likewise be analogous; at all events, it is worthy of the attention of the profession.—*Journal de Chirurgie*.

Extraordinary Pæthological Fact, observed by Dr. Bary, surgeon, to the Orphan Hospital, Nivelles. A girl, eleven years of age, employed as a seamstress, had the custom of biting off the end of the thread, and after keeping it some time in her mouth, of swallowing it. All at once, she complained of a tumour, situated at the root of the nose, near the inner canthus of the left eye, and a few days after, through an abnormal opening in the caruncula lacrymalis,—the eye, at the same time, being red, and inflamed—numerous bits of thread, of various lengths, and different colours, at least sixty-two in number, escaped. Having ceased to bite off the bits of thread, nothing more appeared in the eye.

Cases of Rupture of the Tendons inserted into the upper edge of the Patella, by Lamarc Picquot, D.M.P.—1° Mr. Pasquier, ætat 72, while walking up a slope, slipped, and experienced, in the left thigh, a smart pain, as if he had been struck. On endeavouring to rise, he found he could not stand. Examined immediately after the accident, the parts were found to be in the following condition. Left patella entire; tendons of the extensor muscles, evidently torn from their insertion, as there was a depression, just above the upper edge of the bone, in which two fingers could be laid; no pain. The thigh was enveloped in a band, from the hip downward, to counteract the muscular contraction; the limb, kept motionless by a long splint, was placed on an inclined plane, the heel being about ten inches higher than the pelvis, so as to relax as much as possible the extensors; in this position the depression just mentioned was considerably diminished. After being made to remain in this position fifty days, during which time, the femoral bandage was tightened, when requisite, the patient was permitted to get up, and move the knee gently: this manœuvre was repeated on the following days, but without bending the limb to any great extent; on the 60th day, he walked with crutches, and shortly after, with a stick. For some time the limb remained weaker than its fellow, but it gradually got stronger, and now Mr. P. is as well as before the accident: 2° M. Ironside, ætat 72, fell while going down stairs, and a similar lesion to that just described, was produced. The same mode of treatment was adopted; on the 60th day the patient moved about on crutches, replaced soon after by a stick, which, likewise, was thrown aside six months after the accident.—(*Journal de Chirurgie*.)

On *Hare Lip*.—Two memoirs have just appeared on this subject; one in the *Gazette Médicale*, by M. Demarguay; the other in the *Journal de Chirurgie*, by

G. Mirault, M.D., professor of surgery at the Preparatory School of Medicine, Angers. In the former, the author 1° describes phenomena not common in hare-lip. These consisted in absence of the undulations which characterise the lower lip, which was longer than usual, to enable it to reach the median tubercle, formed by the inter-maxillary bones, and considerably pushed forwards; had not this been the case, the saliva would have constantly escaped, forming a serious complication: this form of lip occurred not only in the child, but likewise in the mother. She had been labouring under the same affection, and was operated upon by Franco's method,—and presented on each side of the mesial line, two small cavities, which at first sight appeared to be owing to the pressure exercised by the incisors, but a probe introduced, penetrated about half an inch, and raised the buccal mucous membrane, showing that they were caused by an abnormal development of the follicles; this peculiarity was also presented by all the woman's family. In neither was there a division of the soft, or posterior portion, of the bozy palate, but from the foramen palatinum anterius, forward, the mouth communicated with the fossa narium, as if the intermaxillary bones had been separated from the superior maxillary bone, and pushed forwards forcibly by the vomer. 2° Points out the utility of Professor Blandin's method,* and its superiority over that proposed by Franco. The comparison was here easy, the mother having been operated upon by the latter method, the child by the former. In an anatomical point of view, no doubt can exist as to the preference to be accorded, for whilst the lip of the child was natural, and offered no traces of the affection, that of the mother presented indelible marks: beside which, on account of the loss of the intermaxillary bones, the upper lip was considerably depressed, the nose projected forwards and downwards, and the lower lip was highly developed. There was also an opening by which the mouth communicated with the nostrils, and which rendered the sound of the voice disagreeable; and even certain syllables could not be pronounced. In the child, the voice is more agreeable than before, the central tubercle having been preserved. 3° Draws the attention of the Profession to the influence exercised by "Heredity" in this disease.—In addition to two observations related, in one of which the mother, grandfather, and great-grandfather of the child, had been affected with the same deformity, and in the other, the mother; the authors add the following facts: M. Lacazette, a student in medicine, saw a carpenter and his son both affected with hare-lip. M. Lebut has lately operated on a Swiss child ten days old, whose mother had the same deformity. Dr. Thierry performed the operation on a young man, who told him that Desault had operated upon his father. Professor Roux, in a lecture delivered not long since at the Hotel Dieu, said, "not only do I admit the influence of 'heredity' in the production of this anomaly, but also that of the mother's imagination on the fœtus, as secondary causes, added to the non-development of the parts, to which this error of formation must be attributed." In the second memoir, the author (Dr. Mirault), after recording another case of labium leporinum successfully operated upon, in examining, 1° the most appropriate mode of treatment in cases of double hare-lip, complicated with jutting out of the intermaxillary bones concludes: that the method to be adopted must vary according to the degree of the deformity: thus, when the bone projects, very little deformity is caused by a simple change of its normal direction; here compression, as recommended by Desault, must first be employed, and then the ordinary operation had

* This method, has been already described, *in extenso* in the *Medical Times* (vol. viii., p. 250): the only modification being, that in order to prevent the nose drawing up the central tubercle, a strip of sticking plaster was made to pass over the tip of the nose, the ends crossing each other at the nape of the neck; the nose by this was somewhat flattened, but was restored to its normal shape by pledgets of lint placed on each side of the nose, and kept in place by straps of diachylum.

recourse to. When the intermaxillary bones are so firmly united to the septum narium, or rather to the prolonged vomer, as to render compression useless, Dr. Gensoul's method, modified by Dr. Champion, may be employed. It consists in pushing back, forcibly, the projection, so as to crush the pedicle. When the deformity is very considerable, the operation must be performed, as recommended by Dupuytren, or Professor Blandin.

2°. At what period ought surgeons operate? Is it at the birth of the child, as advised by Busch, Bonfils, Roonhuysen, Heister, &c.? No, because the arguments advanced in favour of this opinion are far from being conclusive, it ought to be considered as positively necessary in very few cases. Is it during the first year? Dupuytren said the operation ought to be performed when the child was three months old, and Professor Velpeau before six months, and should this period be passed, he thinks it ought not to be done before the tenth or fifteenth year. The reasons here are not more conclusive than in the former instance. Finally, the author concludes, with Dionis, Garengeot, Boyer, and Sanson, that the most appropriate time for performing it, is between the third and fifth year, because then children are old enough to wish to be relieved, and, consequently, resistless; because they can swallow liquids without moving their lips; because the tissues, being firmer, are not divided so soon, and because the parts are more extensible.

Curious case of tumours of the head.—Dr. Nelaton presented to the *Société de Chirurgie*, a man who was received in his wards, at the *Hospital de la Vieillesse, Bicêtre*, offering the following symptoms: four tumours, adhering to each other, existed on the head, about four lines in height, with a circular base, and a diameter about $2\frac{1}{2}$ inches; consistency firm, but not that of bone; no hardness, pastiness, heat, or any other signs of inflammation; not painful when pressed; no pulsations. Emplastrum cicutæ was applied to the tumours. Three days after, one of the tumours presented pulsations, isochronous with the pulse, and shortly after the same phenomenon was observed in two others, at the same time, their gradual diminution was visible, and continued until they had disappeared completely, leaving in their stead, as many perforations of the cranium. As to the fourth tumour which did not pulsate, it disappeared also, but without leaving any perforation in the spot it had occupied. At no period did any lesions of sensibility, motility, or the organs of sense exist; the general health was good, and the patient had never been affected with syphilis.

Academy of Sciences. Sitting of the 27th January.—M. Elie de Beaumont in the Chair.—Received *Plantæ Javanicæ Rariores*, 2nd and 3rd parts, offered by M. Robert Brown.—Transactions of the Royal Society of Edinburgh, Vol. XV.—Journal of the Royal Geographical Society, London, Vol. XIV. 1844, part 2nd.—Practical Tunnelling by Frederic Walter Sims, F.R.A.S., F.G.S., M. I. C.E. Civil Engineer.

On the quantity of Oxygen in Water, necessary for the life of Fishes.—By M. Morreu, Dean of the Faculty of Sciences, Rennes. In its normal condition, the proportion of oxygen dissolved by water is about 32 or 33 per cent, the author however has observed it as high as 60 per cent. and as low as 19, 18, or 17 per cent; in the last, fishes in order to live are obliged to raise their heads above the surface, to take from the atmosphere the quantity of oxygen they need. As disoxygenation increases, the fishes die, but not with equal rapidity: thus, the most voracious—pike, perch, and such like die first; as to the causes they are numerous, and the author, among the number, quotes the two following, which he has had frequent opportunities of observing.—1° Owing to the presence of vegetable substances in the water, the diminution reached 18 per cent. at which period the mortality was at its maximum.—2° A sudden diminution of the temperature producing the destruction of the numerous yellow microscopical animalculæ contained in the water, which as they were decomposed, absorbed the oxygen; the quantity was here reduced as low as 18 per cent.

On the Cultivation of the Tea Plant.—M. Boyer, (Director of the Colonial Museum at Port Louis,

Mauritius,) addressed, on the 14th Sept., 1844, M. Benjamin Delissert, stating that he had, after much time and trouble, obtained a plantation, containing about 40,000 plants of tea, and that a part of last year's crop was sent to London. He concluded by drawing the attention of the inhabitants of Bourbon to this subject, convinced that a sufficient quantity might be collected to meet the wants of France.

On the Therapeutical Treatment of Cancer, and other abnormal or accidental Products.—From the facts contained in this memoir, the following conclusions may be drawn: 1° That cancer, being produced by a special cause, coinciding with a peculiar modification of the organism, requires an internal and external treatment, appropriate to the general and local symptoms; 2° That the cancerous diathesis consists in a hypersthenia of the blood-vessels, especially of the arterial system, and needs, at the same time, internally and externally, vascular debilitating remedies, their choice being abandoned to the skill of the practitioner; 3° That as diametrically contrary to the cure of cancer, except when it attacks the bones, the operation must never be performed with the bistoury, because it is invariably followed by a relapse; 4° That in conformity to this opinion, the potential cauteries, which are not poisonous, in harmonizing according to their peculiar qualities, with the nature of each morbid product, in its different stages of development, and even of its outward appearances, ought to be preferred to the bistoury, in cases of cancer of the soft parts: and that the reproaches addressed to both, instead of identifying the two modes of treatment, prove the difference which exists between them.

Description of a New Instrument for ligature of Fistulæ in Ano: by Dr. Nelken.—This instrument is composed: 1° of a rod, about $11\frac{1}{2}$ inches in length, the upper third of which is divided into four equal parts, united to each other by hinges, so arranged, that they can be closed only in one direction, the last being furnished with a knot, and a hole to pass the ligature; and 2° of a tube through which the former is passed when threaded. The finger being placed in the rectum, the apparatus thus prepared is passed upwards into the fistula, until the extremity reaches the finger, the tube is then withdrawn to an extent equal to one of the four divisions of the rod; the whole is next pushed forwards, the finger in the rectum causing the rod to bend downwards as it penetrates into the intestine; the same manœuvre is repeated until the ligature appears at the anus, when the surgeon seizes it, and terminates the operation.

Case of Peritonitis in a Caïman à Lunettes: communicated by A. Lereboullet, M.D., Professor at the Faculty of Sciences, Strasbourg. On the 8th January, the body of a female caïman, was brought to the author, who, in opening the abdomen, discovered the following lesions: peritoneum, thickened and lined throughout its whole extent with a layer of pus, and pseudo-membranes, these last could be removed by large portions, being in some spots about half a line in thickness; intestines of a dark colour, varying in intensity, covered with a layer of yellowish pus, and adhering to each other by means of false membrane. The phlegmasia was caused by a bit of cork about three quarters of an inch long, and two lines thick, which had penetrated into the peritonæum after having perforated the intestine, the opening was about half an inch in length, and one or two lines in breadth, the edges torn and covered with a thick yellow pus similar to that in the peritonæum. This case presents all the signs of real inflammation; intense redness, exudation of plastic lymph, formation of pseudo membranes, agglutination of the intestines, purulent secretion, and proves that the opinion, that inflammation is impossible in cold blooded animals, is erroneous.

Mr. Mialhe addressed a letter, claiming his right to a priority of discovery of the action of alkalies on saccharine substances during digestion.

Mr. Stevens addressed a memoir on a new obturator in cases of perforation of the bony palate. (A description of this instrument shall be given shortly in the *Medical Times*.)

Dr. Briere du Boisment addressed a copy of his work on Hallucinations.

Dr. Grebter presented his thesis, containing

some new anatomical considerations on the dissection of the arteria innominata, and on its rapport with the ascending aorta.

GARLAND DE BEAUMONT, D.M.P., B.L., and S.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

BY SIGISMUND SUTRO, M.D.

On the Mineral Bath of Neumarkt in Ober-pfalz.—Notwithstanding the unfavourable state of the weather, this bath displayed again in 1842 its usual effects against rheumatic and arthritic complaints, however differently modified by various complications. The cure was generally effected by a crisis by the skin, urine, and bowels, the movements of the weakened limbs became freer, tumours and pains disappeared; appetite and digestion improved; sleep became refreshing; cheerfulness of the mind and general strength of body were gradually exhibited more and more: the douche and mud baths proved particularly efficacious against metastatic paralyses: convalescents from long and weakening diseases speedily recovered through their use.—Dr. Schrauth in *Bayr. Correspond. Blatt*.

The Whey and Bath Institution of Kreuth, in the years 1842 and 1843.—The author expatiates again on the great curative powers of the goat's whey, prepared in Kreuth, against diseases of the lungs, particularly against tubercular pulmonary phthisis; the second stage of phthisis tuberculosa, against diseases of the larynx and wind-pipe; against spitting of blood; palpitation of the heart; hæmorrhoids; plethora abdominalis in general, particularly when combined with spitting of blood, &c., &c.; against induration of the liver; chronic diarrhœa; great nervous irritability; and against tetter. To confirm the above assertions, a number of reports are given, which it is not considered necessary to transcribe.—Dr. Kramer of *Tegernsee*;—*ibidem*.

On the Nature of Bile, according to original experiments.—Fresh bile is a greenish or yellowish liquid of sp. gr. 1.026 at 16° C; of peculiar smell, and bitter sweetish taste, either weakly alkaline, or neutral; miscible with water in all proportions, and frothing strongly when shaken. It contains 7.162 per cent of solid matter. As long as it is mixed with mucus, it easily putrefies; but when mucus is removed (by precipitation, with an acid, or by evaporation to dryness and resolution in alcohol), it may be preserved undecomposed for years. The quantity of mucus amounts to 4 or 5 per cent. Bile, besides soda and its own peculiar constituents, contains an inconsiderable quantity of different salts, with a non-saponifiable fat (cholesterine) which requires for its fusion a temperature of 167°; colouring matter (cholepyrrhine) originally yellow (according to Berzelius); afterwards becoming green, it is called *biliverdin*, and *bilirubin*, according to the author, if its colour has become red. By adding concentrated nitric acid, the colour of bile changes suddenly: the same change is produced, though more slowly, by atmospheric contact. It becomes, at first, green, then blue, violet, and at last red. This change of colour, probably, arises from a gradual oxydation of the colouring matter. *Cholepyrrhine* has not been obtained as yet by Berzelius, from bile itself, but from biliary calculi. *Biliverdin* contains, according to him, no azote, and is identical with the green of leaves. But the colouring substance obtained by the author, contains azote, and consists when dry, of a green, easily pulverisable, resinous mass, insoluble in water; easily soluble in alcohol; with difficulty soluble in ether; inodorous, and of bitterish taste; insoluble in muriatic or sulphuric acid, but soluble in solution of potash and ammonia, at the same time losing its green colour, and turning yellow. In dry heat, the green colour turns pale, and is changed into brownish yellow or yellow. The views entertained on the nature of bile may be brought under two heads: according to the one, (Liebig, Schlosser) it is a sort of soap, composed of soda and an organic acid (cholœinic or bilic acid); according to the other, it consists of

several peculiar bodies, containing soda, which, however, stands in no peculiar relation to them. According to *Thenard*, bile is chiefly composed of bile-resin and picromel (the former is dissolved by the latter). Gmelin adds *cholic acid* and *taurin*. According to *Berzelius*, it chiefly consists of one substance, *Biline*, which is very readily decomposed, presenting in this state the following products: *felinic* and *cholinic* acids, which form with one part of undecomposed *biline*, *bilifelinic*, and *bilicholinic* acids. These latter bodies, by the action of acids, are changed into *Dyslysin*, a body insoluble in water and alcohol. It cannot be any longer doubted that the organic matter of bile forms a constant combination with soda; but the question remains whether this matter is simple or compound. As yet, *Liebig's* school has only assumed it to be a simple body. But it has not explained why this body, after being separated from soda, could not be changed again into bile by re-combination with soda. The author has obtained such results from his experiments as would seem to throw some light on this point. Bile is most likely a double salt, composed on the one hand of soda, with carburet of nitrogen, and the elements of water, and on the other hand, of soda, with carburet of hydrogen, and the elements of water. The former of these bodies, procured in a crystallised state, by the author, has been called by him *natrocholin*, the other, *natrocholoidin* (the choloidin separated from its original combination, will be called *choloidinic acid*. *Natrocholin* (recognised by *Liebig* as a crystallized superbilate of soda,) is obtained by exposing bile to an intense, and rapidly produced, degree of cold, forms snow-white, semi-transparent, needle-shaped, crystals; readily soluble in water and alcohol, forming with these fluids a clear, colourless, solution, it attracts moisture from the atmosphere with such rapidity as to deliquesce within a minute: on this account it can only be kept under ether. The watery solution is perfectly neutral: after atmospheric deliquescence, the liquid generally exhibits an acid reaction, but this immediately disappears on the addition of a few drops of water. It undoubtedly depends on some adhering choloidinic acid. The *natrocholin* possesses a sweet taste, followed by a bitterish one, burns on platina-plate with a strong, sooty, flame, leaving an alkaline residue. Its solution is not precipitated by sugar of lead, but subacetate of lead and nitrate of silver immediately produce a dense white precipitate. Chloride of iron, nitromuriatic, and sulphuric acids produce no precipitate. This body, (different, according to the above history from Gmelin's "bile-sweet," and containing all the nitrogen of bile,) is not at all deprived of its soda, either by the effects of acids or of spontaneous decomposition upon it, or at farthest, these agents rob it of but a small share of this alkali; this accounts for the great difficulty of depriving bile entirely of its soda by means of acids: *Demarcay's* choloidinic acid, and *Liebig's* bilic acid are therefore not free of soda. *Berzelius's* *bilin* also contains soda. Double affinity presents the easiest and readiest mode of decomposing *natrocholin*. But it seems that *cholin* cannot exist by itself, and that separated from soda or any other substitute, it assumes different metamorphoses. This Gmelin's azotised cholic acid seems to be formed when *cholin* is exposed to the air without an alkali. When boiled for some time with strong acids *natrocholin* is resolved into *taurin*, *ammonia*, and *culinary salt*. *Natrocholoidin* is easily decomposed by acids. Choloidinic acid separates in the form of a yellow, resinous body, perfectly free of soda. When in a pure state and dried, it is brittle and pulverisable, not deliquescent in the air; it has a strong bitter, rather acrid taste, is insoluble in water, easily soluble in alcohol, and precipitated from this solution by water. Its solution reddens litmus, expels carbonic acid from the carbonates of ammonia and soda, forming with the bodies in question, soluble combinations. Choloidinic acid is also soluble in caustic potash, soda and ammonia, but insoluble in carbonate of potash. The author has every reason to consider this acid as identical with Gmelin's bile-resin. The author could not ascertain, whether it still remains unchanged and single body, when separated from

soda, and *natro-cholin*.—*Dr. Plattner*, Privat-docent of *Heidelberg*, in *Müller's Archiv*.

On the Diagnosis of Hydrocephalus Acutus.—The following symptoms are sometimes disregarded as unimportant, but still contribute materially to an accurate diagnosis of acute hydrocephalus: 1° Indifference to external impressions; 2° Continual lying on the back, this position being adopted also during convulsive paroxysms; 3° Open fontanelles, generally the quadrangular, sometimes also the triangular; 4° Boring the head into the cushion; 5° Heightened temperature of the hairy part of the head; 6° Dilated pupils, sensitive, however, to light; 7° The eyes always directed upwards, quivering, and turning with great rapidity to the right or left; 8° Sardonic laughter; 9° Pale yellowish-white cadaverous face, with dim eyes, blackish crusts at the nostrils, the lips dry, and, with the chin, of a bluish colour; 10° Greatly diminished urinary secretion; 11° Spasms of the toes; 12° Convulsions.—(*Dr. Melion*, of *Frauenthal*, in *Oesterr. Medic. Wochenschrift*.)

Tumor Cysticus Cerebri.—A strong marine officer, ætat. 46, who never suffered under dyscratic diseases, was received, on the 18th, March, into the hospital, complaining of very troublesome, chronic, rheumatic pains of the extremities, and of the skin of the skull (which was only thinly covered with hair). His bowels were moved every third or fourth day. After the operation of an emetic, the pains of the extremities ceased, but those of the head became more troublesome and oppressive, causing giddiness, humming in the ears, momentary dimness of sight (particularly on using rapid motion). Calomel (with the most energetic derivative treatment) was of little avail, and was necessarily discontinued on salivation being induced. The pains in the head became more torturing, the obscuration of sight more lasting, and the pupils rather torpid and slightly dilated. The patient now began to emaciate, and was attacked with hectic fever, accompanied with obstinate obstruction of the bowels. His features at this stage were like those of a drunkard, they appeared as if disfigured by fright or fear, with a vacant dull expression. His powers of perception remained unaffected. All the symptoms increased rapidly, and the patient died on the 20th November, presenting all the appearance of a person labouring under the advanced stage of hectic fever. The post-mortem examination showed all the cerebral membranes thickened, and of the colour of mother of pearl, and containing between each a watery yellowish exudation: from six to seven ounces of a similar liquid was found in the cavities of the brain. The plexus choroides very pale; medullary substance solid and dry; cortical substance pale; on the right lobe of the cerebellum a hydatid tumour was found of the size of a pigeon's egg, lying beside the *pons varolii* on the inferior surface of the right peduncle, and in the direction of the *thalamus opticus dexter*. Its internal surface was rough from a deposition of coagulated lymph which could be separated in the form of membranes at the bottom of the sac.—(*Dr. Krcbel* in *Medic. Zeitung Russlands*.)

FALLOPIAN PREGNANCY.—*Mr. Elkington* at a meeting of the Birmingham Pathological Society, exhibited a specimen of Fallopian pregnancy of the right side. The uterus and ovaries were normal. In the uterine extremity of the right Fallopian tube was developed a tumour, about the size of a seven months' foetal head, which pressed upon the colon, and the ileum, near to the ileo-cæcal valve, to which intestines it had formed adhesions. The tumour contained the bones of a three months foetus, which were folded around what appeared to be a fibrinous clot, about the size of a small orange.

* I think I may safely deny the sensitiveness of the pupils to light from several cases, which I have lately witnessed. The widely dilated pupils did not show the smallest contraction, though the eyelids were rubbed, when closed, and then suddenly opened to the candle-light.—*Note by Dr. Sutro*.

NOTICES TO CORRESPONDENTS.

A Subscriber in London on sending his subscription of £1. 1. to our office, will receive the Medical Times for twelve months, by post, every Saturday morning.

I. B.—*Gray's Supplement*, and similar works, give the following as a good depilatory: rub up two drachms of powdered quick lime, with an ounce of lard or cold cream. This application will, of course, produce irritation on the parts where it may be applied. A good blue ink may be made by dissolving in one ounce of distilled, or rain water, half a drachm of refined sugar, twenty grains of commercial prussiate of potash; and by adding to the solution one drachm of the muriated tincture of iron; but our correspondent will perhaps do well to consult one of the ordinary compendiums of recipes.

An Old Subscriber.—The "second Fagan," advertising in the "Times" as Galvanist, is best punished by silence. Notoriety assists pretenders.

Nella.—We know of no remedy. The discretionary power of the Coroner is made very great by law; and if unjust to a medical officer by partial preferences of other witnesses, there is no remedy but an appeal to the press. The hardship is great—but not unusual. We are constantly receiving complaints against Coroners, one a Medical Coroner, who uses a rare ingenuity in excluding medical evidence, except in the cases where he can force in his own instrument. Lately he excluded medical testimony, on the ground that the deceased had evidently a "suicidal face." The abuse certainly calls for a remedy.

C.—We have learnt, almost to our surprise, that a wretched existence is still dragged on by an ignominiously obscure print, conducted by a speculating factionist, in Dublin, of low fame, an actively uneasy person, exciting the most curious wagers which shall have him first, the police, mendacity, or lunatic services of the country? This disappointed "shadow" very reasonably counting, that we should otherwise not hear in what bad English he could rail at our success, has carefully sent us by post copies of a leading article, in which he endeavours to say that our recent report of an extremely interesting case of mistaken diagnosis, was sent to us by Mr. O'Ferral, and that our praise of that gentleman was the laudation of an empiric. Our readers, knowing anything of the calumniator we are speaking of—especially if gentlemen moving in good Dublin society—will be prepared to hear that Mr. O'Ferral is one of the most respectable and honoured of the rising surgeons of Dublin, and that the charge of his writing the report is a wanton and calumnious fabrication. One wonders how with even no greater bereavement of the senses than leaves a man vibrating in the twilight region, between sanity and madness, such foolish essays at slanders, as dangerous as easy, can be made.

A Provincial Surgeon, and General Practitioner, in our next. The wish expressed in the Postscript shall be attended to.

A New Subscriber must make application to the College of Physicians. If his diploma has been conferred by any Foreign University, to be recognised by the future Council of Health, he may register as a Physician.

If our Six Month's Subscriber be a medical man, and the tenor of his letter would lead us to infer that he is not, he ought to be aware of the empirical character, the giving of prescriptions in any journal, must throw around it. Nothing can savour more strongly of the "Goss" and "La'mert" style, than the attempt to prescribe for any patient, on the mere detail of symptoms enumerated in a letter. Our advice to Sub. would be to consult some respectable practitioner, and to abide by his directions.

To our applicant from "Castleblayney," we have to answer, that we know nothing of the matter he enquires on. The advertisement was sent to our office, unaccompanied by any private information.

Dr. Costello on Lithotomy.—By a strange blunder of our printer, which escaped the correcting reader's notice, Dr. Costello's contribution, last week, was prefixed by the words "Surgeon-Lithotomist, &c." On enquiry, we have ascertained that Dr. Costello sent his paper without any heading—it brings, as our readers know, one of a series—and that the compositor supplied one from his memory of the preceding papers.

TREACHERY TO MR. LAWRENCE.

J. H.'s question, "whether any 'gentleman' can hold intercourse with one who has publicly and deliberately divulged, through the press, a confidential communication, publishing even the name of the victim he had inveigled to foolish reliance and congenial dishonour?" surely requires no answer. The person committing so foul an act of betrayal, cannot be met in private society, or communicated with in public life. As a medical journalist, no intercourse can be held with him for an instant without dishonour. His companionship must be confined to his own order of Old Bailey pimps and approvers. We should think that even Mr. Liston must recoil, after such conduct, from touching a hand that had so treacherously played traitor to his colleague. The act creates around the criminal an atmosphere of contamination. But we must restrain ourselves on a transaction no gentleman can ruminate on, without feelings of disgust for the individual, and of humiliation for the profession, inexpressibly painful to dwell on.

Communications have been forwarded for insertion by Dr. Costello, of Golden Square; Dr. I. B. Thompson, of Damascus, Syria; Dr. Orpen, of Birkenhead; Dr. Nottingham, of Liverpool, and Mr. Thomas (late House Surgeon of King's College Hospital). These will be inserted in an early number. Lectures by Pinel, on Insanity; Dr. C. I. B. Williams, F.R.S., on Medicine, and papers by Dr. Rigby and Dr. Pariset (Secretary of the Royal Academy of Medicine), will appear in our next number. A most important case of Ovariectomy, by Dr. Clay, will also appear in our next.

Several communications have been received on the Mesmeric Cases at Bath, which we hope to notice very early.

The clever communication of I. B., Yarmouth, is unavoidably postponed till next week.

Mr. Baker. Mr. Haughton.—The "Cyclopaedia of Surgery" is discontinued, at least for the present, under circumstances which the editor, we understand, cannot controul. No part has been published since No. 12.

X. Y. Z.—All will depend on the Council of Health and Education.

Medicus.—Gentlemen in practice before 1815, will, of course, register as Licentiates of Medicine and Surgery under the New Bill.

THE MEDICAL TIMES.

SATURDAY, FEB. 8, 1845.

THE COLLEGE OF SURGEONS.

WE deeply regret to state that the discussions on the Supplementary Charter terminated last night (Thursday) in what amounts to a virtual refusal of the improvements which, a short time since, we had fair grounds for believing on the point of concession. This result, which is defended on the grounds that Sir James Graham is shortly to bring in his Bill, and that the Associations have not said explicitly what they want, will prove on the whole, perhaps, the best thing for the Medical body. Properly used, it will relieve us from an incubus overlaying the highest interests of Profession. Let a Surgical Association be at once formed: we want a body of men ready to occupy the Council chamber the moment we have persuaded Parliament to do us justice. The future Council must now receive, in any acceptable hypothesis of Reform, at least 25 accessions: if the present gentlemen be not expelled, they must be out-numbered. In the meantime, till a complete Reform come, they should be placed under the Professional ban. The public can place no confidence in the surgical discernment of men who have shewn themselves so blind to the doom impending over them. We must visit them with the responsibilities they have so rashly assumed. If there be any—as there are—who protest against their brethren's infatuation, let them secede to us—or

at all events, follow Mr. Guthrie in disclaiming all share in measures they condemn. At a moment like this we can have no half-measures.—*Medical Times of To-day.*

Nunc aut nunquam!

THE suggestion of Dr. Costello to form an Association of the Surgeons of Great Britain, is one of the very highest importance. Such an Association is a great want of the day; and if erected, would prove an engine of formidable power and of incalculable good. The work before it is enormous: a harvest, ripe almost to rottenness, implores its labour with a thousand voices; and there is, in addition to the opportuneness of the season, this grand circumstance, that to work as a "Surgeon," for Surgeons and Surgery, is not only to do good to others, but to reflect distinction on ourselves. Surgery is the great common ground of nearly the whole Profession, and great bond of unity. On that great division of our Science, the education of all has been much on a par: the titles we have received from our Colleges, identical; and our Professional standing—as members of a learned community—the least invidious, the least equivocal, the least dishonouring. Till lately, caste-ship and subordinate social grades were here unknown. There is here, then, offered medical men the true ground on which they should pitch the battle camp. There is here the spot on which nine-tenths of the Profession can join hand in hand—the distinguished alike with the unknown—the wealthy alike with the less successful—in a spirit of honest, dignified, justice-seeking brotherhood. The Surgeons of England, with those of Ireland and Scotland, have but one common interest. They want equally that every resource that can avail the progress of our Science shall be turned to the utmost account: that all Surgical Institutions, no matter in which division of the empire, shall be governed in a spirit of justice, akin to that which the age calls for: that they shall form homes to the Surgeon in whichever of the three countries he may find himself placed; and that while the whole body of us shall have our position of respectability before the public supported by our College treatment, the Colleges themselves shall be raised in public estimation, and throw increased credit on Science, by having all their offices made so many prizes to superior merit. Irish, English, Scotch Surgeons—whether of Hospitals or not, in Councils or out of them—may unite cordially here; the few, illustrating, honouring, and aiding the many; the many, in turn, raising and supporting the few; and all working in an enlarged spirit of kindly fellowship for the common benefit of the Profession.

We repeat, that Dr. Costello's proposition of a National Society of Surgeons exactly hits the mark. With the exception of a few Physicians, the Doctors of England have no respectable status in society, except as "Surgeons." "General Practitioner" is a "General" whose precise medical rank the public cannot often be made to understand: it is too vague a term to give clear notions to the curious; too common a one to give respectable notions to the fastidious. "A Physician I know," a patient may say, "and a Surgeon I know—but what are you that are neither?" All our strength, indeed, and all our respectability, is, for the present at least, then, in our Surgery. As Surgeons, we claim to have undergone the same studies, the same examinations, as a Guthrie, a Brodie, or a Lawrence: as Surgeons, we stand before the public with the same diploma and the same de-

signation that honoured an Abernethy, a Cline, or an Astley Cooper (our proficiency as Collegiate equals established under their own handwriting): and to relinquish for one moment our term of highest distinction, or merge it in any association of words which implies an Apothecary-humbleness of power, is the impolicy of exactly asking—what never was asked by any man in vain—our own public degradation. In the battle that is coming, it is of infinite consequence that while fighting it, we shall not be placed on low ground. Let our standing-ground be at least as high as we are entitled to. Our wrongs have come from Surgeons, and have been received by us as Surgeons. Let our Surgical Association, then, face their Surgical Council. Let it grapple with them side by side, and demonstrate to them that if it is not worth the Council's while to have us as friends, it is still less worth their while to have us as foes.

The Profession being thus, mainly surgical, the subject we have to labour about is also almost entirely surgical. The great outrage that has roused us to public indignation and vehement associated action is surgical: and it is only by maintaining the surgical equality we possessed two years back, that we can be guaranteed against Parliamentary or Chartered degradation. Why, then, shall we not have our "British Society of Surgeons?"

There is another recommendation. Unlike an Association of Apothecaries, it may not only have the weight of numbers, but the distinction of names. An associated mass of mediocrities, a Society of varyingly respectable, but unvaryingly undistinguished entities,—no claim of pre-eminent intellect, no prestige of fame, no glory of high doing—must sink by its own weight. If oblivion were deep as the Biscayan sea, they would find its bottom. So peculiarly a scientific body as ours, will bend the knee of worship to no deity of obscure reputation. All our homage turns to genius—and the corporate or associated mass uninformed by it, however huge or unwieldy, must perish. Intellect, Genius, Fame—these make us respectable before the public: they are the salt of every Medical Government, without which no Professional body can stand a twelvemonth. Two-thirds of our complaints against the Colleges have been, that they have not had enough of the preserving "particle," and the reforming must not present the ludicrous spectacle of being less capable than those they call the incapable deformed.

There are many—very many—of our first Surgeons, men like our correspondent, well known to European science, who will not separate their lot from ours: shall we reject their aid? They are of us, and will be with us. Shall we allow a low jealousy to separate us? Shall we, for nothing, for worse than nothing, lose the prestige of their names? Why shall not the Lanes, the Fergusons, the Costellos, the Phillips', the Lloyds, the Dermotts, the Hillis', the Macilwains, the Gossetts, the Kingdons, the Lynns, and so many like them, aid us in obtaining a justice which will be as serviceable to them as it is necessary to us? Why shall our jealousy intercept to them, labours that have dignified their lives? With the exception of Arnott, Guthrie, and Keate, consultations have almost ceased to be a subject of income to the unpopular members of the Council: the reaction has tended to force more practice on the Physicians: why shall not all ranks of Surgeons unite against the common calamity, and that union, which is the certain guarantee of our success, be made the source of advantage to the best men that supported us? If we are no use to our friends, how

shall we have respect with the public, or influence with our enemies?

Meantime, we are not indisposed to think, that the Marylebone Association may also have a good action on our future fortunes. There is no reason why the two Associations should not do good, though toiling in different manners, and it may be in different directions. But, in the interest of the cause now at stake, it behoves us to warn this body that they are already on the brink of a serious danger;—it behoves us to tell these Associates and future successors of the Apothecaries' Company that the Profession is already beginning to fancy that they recognise in them the old leaven of corporate unrighteousness. They are not sufficiently plain spoken with their members. Their Committee meetings are as closed to the Profession as are those of the College whose secret proceedings have caused so much suspicion and ill feeling. A Committee of a popular Association, deliberating with sealed doors, is an insult to their Members; and a public intimation of fear, or a worse feeling. If they dread an exhibition of ineptitude—ineptitude is there, and open or secret, failure is foredoomed. If they have ability and would direct it aright, secrecy may delay but cannot prevent the ruin. It is true, the public and the press are allowed the day after the meeting to see a statement (prepared by the Committee) of *something* that was said or done at the Committee's meeting; but we must publicly affirm, that official bulletins of the health and doings of a public Association, drawn up by so interested a party as its Secretary, is a most censurable interference with the rights of public opinion, and palter with the feelings of the Profession in a way not to be borne. If we sanction secret proceedings by our own men in Hanover Square, how shall we decently enter our caveat against the secret proceedings of these in Lincoln's Inn Fields?

It must be owned, also, that the Marylebone Association are extending their favourite obscurity to their principles in a way that must estrange much support. Let us hear from them how far they will go in supporting what is as dear to the Medical Profession as any other principle they have struggled for—the full right of electing their own governing authorities. Sir James Graham complains that after his public request for extreme explicitness from the Apothecaries' Company, the Committee of the Marylebone Institution, addressed him in prayer for a new Incorporation, and left every thing they wanted perfectly unexplained. The Profession is making the same complaint. If the Association be prepared to declare a new Incorporation desirable, they must have considered the principles on which it should be formed, and the men whom it should be constituted, for on these matters depend the wisdom of the Incorporation. Why have they not, then, given their opinions to the world? We advise them not to encourage, for a moment, a delay which must prove mischievous. Let them open their hearts freely to the Profession, if it is for the Profession they labour; and let the Profession do itself the justice of giving it a surgical helpmate for the great work that now lies untouched.

AN ASSOCIATION OF SURGEONS PROPOSED BY DR. COSTELLO.

SIR,—At a time when so many appeals are made to you from all sides, and in the midst of your own most useful and untiring labours, I feel some hesitation in making a claim on the columns

of your journal, and your own attention, although it be for a suggestion, which, I trust, may be of some moment to the surgical branch of the profession at the present crisis. It appears to me that the efforts of the press, by which I mean the *Times*, *Chronicle*, and yourself, to force the College of Surgeons into a full performance of those duties which the present juncture of affairs imposes upon them, are not seconded by anything like what might perhaps be qualified, not improperly, as a professional executive. Condemnation is universal, and the necessity of change, admitted not less universally. Yet we have no body in existence to turn the expression of professional opinion to account, or use those forces for victory, which are at our command. The public sentiment is not represented, not administered. The voice of public opinion receives no echo in action. There is no body, no society, to carry its sentence into execution. Our power for protection, for punishment, and correction, is left undirected, unwielded; almost unused. Mindless, blind, a huge Sampsonian force struggles in the professional body, aimlessly, vainly into action, and produces but chanceful, unrespected, and mutually conflicting, results.

I would suggest then to the surgeons of England, as well as those of Ireland and Scotland, their instantaneous formation into a national society. Let their be no delay, and no divisions. Union, immediate union, is commanded, less by a sense of our own interests, than of those of the science of surgery. We are bound to protect it against the impolity, the infatuated impolity, of those whose positions, and, in some cases, reputations, should have made them its best defenders. Their recent conduct throws a stigma on surgery itself, and if not met, there is not a man who has laboured for the progress of surgery, no matter in what position, who will not be injured by it. It does not follow, that we should meet in any feeling of ill-will, or hostility, to the members of the Council of the College of Surgeons, whose honest, it may be, but ill-advised, policy, has thrown us into our present difficulties. Many of them have done good service in the advancement of surgery, and there can be no doubt, that their scientific standing would have secured them the places they now occupy, with far more credit to themselves, had their election depended on the free suffrages of their brethren. Had such a society as I suggest, been in existence to second your efforts, when the Charter was about to be granted, doubtless these gentlemen would have been spared the injury of collision with the profession, and medical men once so proud of the title of surgeon, would not be hurried by their indignation, to get rid of it, even by welcoming the disgrace of occupying a third social grade in the profession.

The surgery of our country being in the keeping alike of every surgeon, English, Irish, and Scotch, I submit that, if such a society be formed, it should know of no invidious exclusions, or distinctions, founded on the source, if legal, whence the surgical diploma is derived. Each surgeon, to whatever College he may belong, ought, in a proper state of legislation, to be connected with the College of that part of the empire in which he resides. If the contest for surgical reform is to be carried on piece-meal, by divisions of surgeons in each section of the country, it is easy to see that there will be no great aggregate results, no speedy ending our present anarchy.

I am, Sir,

Your obedient servant.

W. B. COSTELLO.

10, Golden Square, Feb. 6, 1845.

PRESENT STATE OF THE MEDICAL PROFESSION.

By G. D. DERMOTT, ESQ.

(To the Editor of the Medical Times.)

SIR,—The New Charters and the proposed Bill, so involve the future prospects of the medical man—his reputation, his bread, and status in society—as well as the welfare of the community, that I think every individual who has thought much upon the matter, is entitled to express his views, and the tolerance which you have hitherto exhibited in allowing opinions, however dissonant, to

be freely canvassed in the pages of your Journal, holds it up in striking contrast with some other contemporaries, and has proved one great cause of its transcendent success. May you never depart from that path.

If some of the observations I now communicate, are slightly at variance with your own opinion, (and I do not think they are in any considerable degree) it must be understood that I advance them without prejudice, and shall always be ready to be convinced of any erroneous conclusions I may form.

I would, Sir, in the first place, throw out a word of caution (and I hope it may prove timely) regarding the very incautious manner in which a large section of the Profession are rashly linking themselves, in the present struggle for Professional emancipation, with the Court of Assistants of Apothecaries' Company, without having a sufficient guarantee from the latter for their future good conduct.

If the Court of Assistants are thoroughly sick of standing aloof from their Professional brethren, and are determined to co-operate with them in establishing a full, fair, and free representative system of Medical Government, then, indeed is the proffered alliance well worthy the greeting of all honest men—but I must confess I have my misgivings.

It must be recollected that, in their prosecutions, they carried on an inveterate war against the regularly-qualified Surgeons and other medical men, not chancing to possess their licence—whilst almost as soon as their Act was construed favourably by our courts of law, for the prosecution of empirics, they desisted from prosecuting altogether. Moreover, it must not be forgotten that the Court of Assistants are a self-elected body. I fear, the cause which induces them to unite with the Licentiates at large, is, that they have not—as the self-elected Court of Assistants—a footing provided for them by Sir James Graham's Bill, in "*The Council of Health and Medical Education*," as have the self-elected, self-perpetuating Council-Boards of the Colleges of Physicians and Surgeons. This is what, I conceive, galls them, and I doubt not that if a corner had been allotted to them in the Council Board of Health and Medical Education, under the auspices of the pending Bill, they would have been as infatuated with the Bill as are the other self-elect and perpetuating bodies.

If, therefore, the members at large link their exertions with the Court of Assistants, and upon that, stake their fate, they must take care not to place themselves in a false position: and they should at once obtain "*a pledge*," and nothing less than a most unconditional pledge, from the Court of Assistants, that they will not oppose our efforts in obtaining a representative System of Medical Government; but will, on the contrary, zealously co-operate with us in our struggles for the same, and in opposing any measure not embodying this only honest form of Medical Government.

Although not a General Practitioner, I must assume the right of expressing myself freely on this point, because any important move or measure implicating one great section of the Profession, must affect all—so intimately are our interests interwoven.

I deeply lament the exclusive system adopted by many of the Associations, in declaring that they are Associations of *General Practitioners only*; forgetting thereby, *in toto*, the unity of the Profession, and that the establishment of Medical Reform—in other words, justice—is a common cause. Are there not many Physicians and Surgeons who have sustained wrongs, and have been quite as severely damaged as the General Practitioner, by the dishonest mis-government of the self-elected cliques, or perhaps more so; and who have as much cause to dread the New Charters and pending Medical Bill; or even greater cause, for this good reason—they have not a private practice, as General Practitioners, to fall back upon? The General Practitioners now complain at feeling a slight gripe from the hand of monopoly—that gripe I have been suffering from during the whole of my professional life.

My opinion is, that all Charters and Acts of

Parliament—unless springing from the members at large—will savour of the same injustice and spirit of dishonesty as the present; and that if the General Practitioners are determined to have a Charter of Incorporation of their own (and which, I think, is still a subject for future consideration); they themselves must look well to its details, or their self-elected heads, the Court of Assistants, will gain permission from Sir James Graham, by ear-wiggling him, to concoct their own measure, will give the mass of Practitioners the slip, and then the latter will find themselves left by the Charter in a false, non-represented position, *when it is too late*.

Do the Profession want *proofs* that all Charters and Bills will be of the same obnoxious type, (whether the Cabinet be Tory, Whig, or Radical) so long as they are formed upon the suggestions of Medical Monopolists' ear-wiggling Ministers, instead of upon the suggestions of the main bulk of the Profession? Look at the present Charter of the College of Surgeons,—at the proposed Bill,—at the Charter of the London University!

All, excepting those engaged and interested in the concoction of the Charter, admit that it is calculated to damage the excluded in the estimation of his patient and the world, holding him up as an animal of an inferior grade (by means of the public registration as provided by the Bill) to the gaze of the world;—that as such it precludes the possibility of his ever becoming Member of the Council, or, as a matter of course, of the Examining Board;—and that it as good as excludes him altogether from public appointments, inasmuch as non-medical electors will naturally act under the false impression that those of the higher grade have been tested, as being professionally most competent; and inasmuch, moreover, as "Fellows" in all elections will support "Fellows," in order to make the chasm between themselves and members the wider, and the supposed inferiority the more glaring before the public; besides the same species of favouritism, or private patronage, which constituted the Fellows, Fellows, will infallibly secure for them the monopoly of appointments.

We have the 19th and 26th clauses of the Bill fully carrying out these immoral and dishonest objects. The 19th clause provides that the Council of Health and Education shall consist of a Secretary of State, six persons nominated by the Crown, and a delegate from each of the Council Boards of the Colleges and Universities; in short, to represent the monopolists already constituting the self-elected corporations. Whilst the 26th clause gives to the Council of Health and Medical Education supreme power, as commissioners, to exclude from medical appointments whom they please; to specify what appointments and institutions are to be considered as public ones; and to determine whether Associates (that are to be) of the College of Physicians, Fellows of the College of Surgeons, or mere Members of the latter, or General Practitioners, shall be eligible to the various offices, and even holders of present appointments will be at their mercy.

The Council of the College have been accused by the Profession generally of having exercised partiality and injustice in their selection of Fellows, and of having converted the power conferred upon them by the Crown for public good and for the encouragement of science, into an instrumental means of party and personal persecution, raising a vast many to the Fellowship without regard to age, ability, or professional standing, and thereby dishonestly degrading others who were as much or more entitled to that honour.

In addition to this, the Charter of the College of Surgeons, with the Medical Bill combined, will fall peculiarly hard upon teachers excluded from the Fellowship—non-medical persons not being so likely to enter themselves, their sons, or their wards, to those stigmatized with the public hodge of inferiority, as to those favoured by the College in being placed in the upper grade of Fellows; and I think I can assert, without fear of disproof, that my unjust exclusion was calculated by the exclusionists to act in a peculiar way to my disparagement. I have been for upwards of twenty-two years a consulting surgeon as well

as a teacher on anatomy and surgery, recognised by all the medical boards; have supplied the army, navy, and civil department with as many medical men as most teachers—a vast number of them having been favoured with the grade of Fellowship; and I believe I am the only anatomical teacher who has had the grade of Fellowship withheld from him—when, according to their own morbid views, I was, from my position, peculiarly eligible, inasmuch as they make it a *sine qua non* that those to be hereafter elected Councilmen from amongst the Fellows, shall not have practised midwifery or pharmacy for five years preceding their election,—and when, moreover, they state in their own Manifesto: "That there are in London several practitioners in surgery, who, though not connected with hospitals, were considered eligible to the Council under the former Charter, and the Council therefore thought that they ought to be admitted to the Fellowship." Again, they say: "other names have been inserted for special reasons, *being principally those of teachers who have been recognised by former acts of the Council*," &c. It must be recollected that whilst I am deprived of my status in the Profession as a co-equal with my rival teachers, I have not a general private practice, as general practitioners have, to rely upon. I demanded, by letter, to know the reason of my exclusion. Sir Ben. Brodie called upon me in reply, and told me he knew not the cause, that he was President and had no vote on the occasion, but he must refer it to the Council and they must answer for themselves; he, for his part, wished he could wash his hands of the Charter altogether. I then again and again repeated my demand, until at last I was informed, by letter, that the Council declined entering into any explanation. Have any public corporation a right to assume such a garb of irresponsibility? Is a man to be morally assassinated; the assassins to be held faultless, and to quietly turn round and decline giving any reason for having committed the assassination; and is this conduct to be tolerated by Her Gracious Majesty in form of Royal Charter?

I dare them to produce proof of justifiable cause for my exclusion; to prove, as a pretext, that I give false certificates; on the contrary, I pledge myself to prove that I have been ten times more scrupulous than they themselves have been. I dare them to say that my lectures are inferior to their own, or that my school is worse conducted.—should a system of publicly testing the talent of teachers for public institutions be established, I would not hesitate competing with them, and they know it. I dare them to say that they find anything objectionable upon the score of my *private* courses of instruction to practitioners and pupils—for not a single individual attends me publicly or privately, without being instructed *practically* in surgery and anatomy; in fact, without receiving that which is of service to him throughout life. In short, I will engage to show proof of quite as guiltless a career as themselves. Will they stand the test of documents and evidence? I doubt it, if it should come to trial.

Was my exclusion, I would ask them, because I was the humble instrumental means of obtaining an equitable distribution of bodies, when they, the monopolists, had monopolised the whole of them for their own schools? Or is it because I have always advocated medical reform, this too when it was not so popular as it is now? The Charter makers, and Bill makers are now venting their spleen upon the private teachers (this is now the cue of the monopolists), whom they designate indiscriminately and collectively under the name of *Grinders*; and they say the inadequate proficiency of the pupils, and all the present evils, are to be traced to them. But what, Sir, is the real state of the case? Why we not only have private tuition, a recognised means of education, at Oxford and Cambridge, but we absolutely have *grinders* in the worst sense of the expression;—absolute *crammers* attached to most of our public medical schools, patronised, fed, and fattened, by the very Charter-makers themselves.

Does one of the Examiners, I would ask, recollect his having spoke to me respecting private instruction, preparatory to his becoming Examiner, in

order to be qualified for that office? Or does his memory fail? If so, I may have occasion to assist him upon that point at some future time.

The real fact of the case is this: the whole polity of our Medical Corporations—*alias* monopolists—has been directed towards the destruction of the private schools, and to monopolise the teaching; when this is perfected, woe be to the public. We read this in their attempts (favoured by the Anatomy Act) to monopolise the bodies for dissection; in their absurd subdivision of some of the branches of teaching under the plea of "extending" the curriculum, into two or more branches, but the *real* object of which is to occasion medical teaching, not to be followed as an object of bread, or means of living, but universally as an object of amusement on the part of the family-patronage-men of the Profession. The public teachers now teach for amusement, the private for their bread; *ergo*, the pupils get from the private teachers what they cannot get from the public—attention: this is why many come hungry and empty, from them to us, in order to be filled. We read it, also, in the lying and lihelous assertion made on the part of some of those connected with the public schools, that the courses of lectures delivered in the private schools are inferior; *because*, forsooth, the fees are lower: and one individual had the foolish temerity, in his introductory lecture (which he afterwards had the vanity to publish), to state that one of the first objects of "the Board of Health and Education" would be to equalize the fees throughout all the schools; as well may he have talked about the equalization of the price of goods and eatables in a weekly market. Nay, so long ago as 1833, it was proposed by a public hospital teacher, now one of the Council (and who, by the bye, previously to the Anatomy Act coming into operation, raised the price of bodies to twenty guineas, giving the resurrection-men that sum, on condition that they would not supply the private schools)—this same individual proposed, in 1833, to the monthly meeting of teachers, that if the monopoly of subjects were given up, there should be an equalization of fees enforced. Here, then, it is "where the shoe pinches." I answer—let the public teachers give up their patronage, and let public appointments be honestly thrown open to public competition of talent, and then I have no objection to equalization of fees. As the matter stands now, it is low fees and hard working of private teachers *v.* local, parochial, hospital, professional, collegiate, State influence of public teachers.

It has been stated that excluded members have their remedy, for they can present themselves for examination of fellowship if they choose. Now, I would ask any reasonable being, is it likely that any member at all prominent in the Profession, and upon whose unjust exclusion the Council are bent, would entrust his reputation, fate, and bread with the same Council, at a *private* examination; more particularly after they have so grossly abused their power; and as the Council can alter their bye laws under any emergency, to suit their caprice, with regard to any individual case? I maintain that this private mode of conducting an examination, on which so much importance and distinction rests, and with which the lives of the community are so deeply and universally involved, is a power and privilege which should not have been ceded to any corporate body.

I, for my part, would not give twopence for the moral character of all the self-elected corporations in the United Kingdom.

As it is, the examinations for the fellowship are most unequal; we have invitations passed to some "to come up" for the fellowship, as though it were an invitation to a private card-party; whilst others have it politely hinted to them that they are "not friendly with the College,"—and one, not receiving the hint, was rejected. Reducing, by this means, a corporate College to a mere club of favouritism,—Sir, there is ten times more corruption stirring since the granting of the Charter, than before.

As I told Sir B. Brodie at a personal interview, so I state again, if the fellowship were proffered to me now, after having sustained as much insult

and damage as I can sustain, I would not accept it; nor would I have accepted it if I had been included in the second batch of Fellows. I will come in with the main body of members, or not at all; *unless* they will consent to this: give me a public examination, but let the examination be reciprocal—slap for slap. Will they accept the challenge?

So much, then, for the Charter and the Bill (Tory gifts);

3dly. What says the Charter of the London University (Whig gift)—Warburton's own? Why, that the Chancellor, Vice-Chancellor, and all the Council, shall be appointed by the Crown; and that they shall elect their successors.

What inferences should we draw from all these facts? I answer: that all Charters, not emanating, in their leading features, from the body of the Profession—the aggrieved—but instigated by the monopolists, are, and necessarily must be, bad; and this, too, whether the Cabinet is Tory, Whig, or Radical;—that the Medical Profession should take a leaf out of the book of the monopolists, *talk less and act more*. Let them do as the monopolists do, ear-wig the Ministers. The exertion on the part of the Profession must be great and unanimous; and, to have their work well done, they must do it themselves. But, Mr. Editor, what has been hitherto done? Nothing—or rather, worse than nothing.

When we first commenced the Medical Protection Association, under another name, about a year ago, and before it was sold over by means of treachery to a party, we were organizing our committee into DEPUTATIONS, with the view of waiting upon every Member of Parliament who had an ostensible residence in London; and were, moreover, on the eve of recommending the adoption of a similar line of action to the provincial committees, with regard to their provincial representatives. A party was, however, let into the camp, schisms were produced, and practical purposes blown to the winds. Since which, not a single Member of the House of Commons has, to my knowledge, been communicated with.

Long ere this, all the Members of Parliament should have been waited upon by deputations from the various medical committees, with a distinct printed statement of grievances, combined with a series of definite propositions explanatory of the changes most desired. Only last week I heard it stated by a medical man, that in one regiment of the Guards, two Members of Parliament were expressing themselves as not knowing how to vote on the Bill, because completely uninformed respecting the matter. The profession will begin with their deputations much too late, it will consequently, be very partially done, and many Members of the House will consider themselves slighted.

I positively deny that the main bulk of the Profession are not sufficiently united to reduce their proposed changes to paper; they are all sufficiently agreed upon the *essential thing*, the *foundation of all Medical Reform*, viz., the *enfranchisement of the Profession on a full and fair representative system of Medical Government*. This is the *sine qua non*: other things will work their own way, and form the superstructure. Delegates should have been appointed; say one from each committee of Medical Reform Associations (as I urgently advised a year ago), in order to form a committee for the purpose of reducing the desired fundamental changes in medical polity under the form of a few distinct propositions in black and white, in order that they should have been submitted by deputation to the individual Members of Parliament; and 2ndly, that they may be brought forward as AMENDMENTS to Sir James Graham's Bill, or be formed, if necessary, into a NEW BILL. *In other words, the Profession should have had, before now, the rough draft of a Bill ready to meet an emergency.*

I do not make so sure as some, that if the Bill comes to a division in the House, it will be rejected, or that Sir James Graham will readily abandon his measure at the instigation of the members of the Profession. If Sir James Graham chooses to say to Parliament, "This is my Bill, and the Cabinet desire it carried; we are opposed to a representative system of Medical Govern-

ment," there is no doubt that he could command a sufficient majority in the House to carry it. My firm conviction is, that the Profession will have to make a firm, decided, and unanimous stand against Sir James Graham, for the franchise. Here's the rub; for Ministers have been so ear-wigged by the monopolists, that they will be opposed to the general enfranchisement.

If the Profession succeed in getting Sir James Graham's Bill thrown out, or prevent its re-introduction, they *must be ready to bring forward a measure of their own*. Sir James Graham will naturally say, "Well, you object to my Bill; what do you propose instead?" It will not do, at that juncture, for the Profession to appear unagreed; not to have duly considered the subject; and to have no definite propositions ready.

What has been the upshot of the Warburtonian Committee of Inquiry, 1834? I answer the statements of the monopolists: (who were the cause of all the evils and mis-government—and who should have been arraigned as culprits before the bar of public opinion) were made to constitute the bulk of the evidence, their opinions were courted, and eventually have been embodied into the Charter and the Bill? And who are to blame for all this? I answer, the Medical Reformers—but principally those in the House of Commons, who have done worse, much worse, than nothing, because they have given the common enemies of the Profession time to work on steadily and quietly in concocting, maturing, and introducing their own evil measures; in short, for a time at least, to gain this ascendancy over the Profession. Had the professedly-pledged Parliamentary Reformers performed their duty, neither the Charter nor Sir James Graham's Bill would ever have been heard of; nor would other Charters, equally obnoxious, be now anticipated. Did they want a House of Commons zealous for corporate reforms? They had it to work with. Did they want equal mixture, Rad-Whigs and Tories? They had it. Did they want a Tory House? They have got it. When you, Sir, instigated this great movement, what was Wakley doing? In a deep slumber—either really or feignedly—as he had for years preceeding: instead of acts and deeds from him, we have only had weekly sixpen'orths of abusive verbal trash.

Thus, then, the matter stands:—DEPUTATIONS not formed—DOCUMENTS FOR MEMBERS OF PARLIAMENT not ready—AMENDMENTS to propose, or BILL to introduce, not thought of.

The profession will commence doing something when it is too late, and just when they should have been leaving off.

I am Sir,

Your obedient servant,

G. D. DERMOTT.

Charlotte Street School of Medicine,
Jan. 27th, 1845.

[Mr. Dermott, in a postscript, adduces opinions from the *Times*, in favour of his views; and further appeals to the demands of Sir James Graham for explicitness from the General Practitioners.—Ed.]

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. VI.

Evidence of Dr. Neil Arnott concluded.

In our last number we gave an abstract of that part of Dr. Arnott's evidence, which relates to fever: we now proceed to notice his remarks on ventilation, and the means of effecting it.

We shall first display, by examples, taken from Dr. Arnott's evidence, the ill-effects which follow a neglect of ventilation, and the beneficial results of a free supply of pure air. The first example in point has long been before the public. "When I visited Glasgow, with Mr. Chadwick, there was described to us one vast lodging-house, in connection with a manufactory there, in which, formerly, fever constantly prevailed; but where, by making an opening from the top of each room, through a

channel of communication to an air pump, common to all the channels, the disease disappeared altogether. The supply of pure air obtained by this mode of ventilation, was sufficient to dilute the cause of the disease, so that it became powerless.

Here is another illustration from the Zoological Gardens:—"A new house was built to receive the monkeys, and no expense was spared, which in the opinion of those entrusted with the management, could ensure to those natives of a warmer climate all attainable comfort and safety. Unhappily, however, it was believed that the object would be best secured by making the new room nearly what an English gentleman's drawing room is. For warming it, two ordinary drawing room grates were put in as close to the floor as possible, and with low chimney-openings, that the heated air in the room should not escape by the chimneys, while the windows and other openings in the walls above were made as close as possible. Some additional warm air was admitted through openings in the floor from around hot water-pipes placed beneath it. For ventilation in cold weather openings were made in the skirting of the room close to the floor, with the erroneous idea that the carbonic acid, produced in the respiration of the animals, because heavier than the other air in the room, would separate from this, and escape below. When all this was done, about sixty healthy monkeys, many of which had already borne several winters in England, were put into the room. A month afterwards more than fifty of them were dead, and the few remaining ones were dying. This room, open only below, was as true an extinguisher to the living monkeys, as an inverted coffee-cup, held over and around the flame of a candle, is an extinguisher of the candle. Not only the warmth from the fires, and the warm air that was allowed to enter by the openings in the floor, but the hot breath, and all the impure exhalations from the bodies of the monkeys, ascended, first to the upper part of the room, and be completely incorporated with the atmosphere there, and by no possibility could escape, except as a part of that impure atmosphere, gradually passing away by the chimneys and the openings in the skirting. Therefore, from the time the monkeys went into the room until they died, they could not have had a single breath of fresh air. It was necessary only to open, in the winter, part of the ventilating apertures near the ceiling, which had been prepared for the summer, and the room became at once salubrious."

Dr. Arnott might have added that the disease which the monkeys so treated die, is pulmonary consumption—the disease, *par excellence*, of the tailor, the compositor, the clerk, who are forced to breathe an air more impure than that of the monkey-house, inasmuch as with no openings for the admission of air they have stoves instead of open fire-places, and gas-lights into the bargain.

Take another example, in the shape of a school on the plan of this monkey-house:—"The day after I saw the monkey-house just mentioned was sent for to visit a young gentleman at a respectable school in the neighbourhood of London where there were about forty boys. The boy who went to see was thought to be falling into consumption, and I learned that others of the boys also were ill. On examination, I found the cause to be only a less degree of the error which had destroyed the monkeys." "A new school-room had been built at the back of the dwelling-house in which room the forty boys spent much of the time, and there was no opening by which the breath could escape from the room, except through the low fire-place. There was, indeed, a sky-light above with sashes, which might be opened; but the schoolmaster told me that he took care never to open them when the boys were present, because having done it once, a boy got severe inflammation of the lungs, in consequence of the cold air rushing in upon him. This gentleman had gone to great expense, to secure, as he thought, the health and comfort of his scholars; but, from want of knowledge on the subject, had missed his aim, just as had happened in the case of the monkey-house."

The following passage embodies the last example we shall quote in answer to the question

"Do not you find that there is considerable difficulty in getting persons, suffering from deficient ventilation, to take the trouble that is necessary to understand the subject?" Dr. Arnott says, "Yes, they may tell their medical man, when he makes any representation to them on the subject, 'that ventilation is a hobby of his, and that hitherto people have got on very well without attending to it.' If they hear of such occurrences as that in the first American war, of 2000 British seamen dying in one fleet, from fever and want of ventilation, it is not their case, and they cannot understand it. Then, also, a few years ago, when in the great charity-school at Norwood, containing 700 children, the greater part of them fell into ill health, and many died, really from imperfect ventilation of the house, it was believed by the public, that the children were dying from want of food, and there was, consequently, a great outcry against the well-meaning man at the head of the establishment, for not feeding the children properly. In truth, he was feeding them better than the other proprietors of schools of the same class around London, but he shared the common ignorance of the subject of ventilation, and having so great a number of children in his establishment, the ill effects became more evident. The children recovered their health when the fault in respect of ventilation was pointed out and remedied. There were two or three medical men who commenced the outcry, showing that among medical men there were some who had not studied the subject sufficiently." Some! Perhaps the architects have saved them the trouble. Let us hear what the Report says of the knowledge existing among architects on this subject. Dr. Arnott is asked, "Was not that monkey-house constructed, as it was believed, with the aid of the best available knowledge on the subject?" He replies, "It was; persons were employed whose special profession it was to manage such matters." Again, in reply to the question "Are you not aware that here are Encyclopædias of Architecture and Building in which the topic of warming and ventilating does not occur?" he says, "I know that the subject has been very little understood by those whose business it was to study it fully." If it had been properly attended to by the architect, we should not now witness the strange anomaly of a Palace of Westminster built by one man, and warmed and ventilated by another. Eie upon thee, Mr. Barry, if left to thy own devices thou wouldst perchance have treated our legislators as a brother architect of thine did the monkeys.

Let us now turn to Dr. Arnott for that information which architects do not possess, and books on Architecture and Building do not convey. The first point upon which he insists is "that there should be near the upper part of each room an opening, to be used on proper occasions, to allow the hot breath and other impure air, which rises to the ceiling, to escape there. It is impossible to ventilate aright a room containing a number of persons, except through an opening near the top of the room, and the great defects of all our arrangements now is the want of such an opening." This opening near the ceiling, Dr. Arnott would make compulsory. "I think," he says, "there should be no room without an opening in or near the ceiling, to be used when needed. All rooms should have the upper window-sashes made to be drawn down; and, in certain cases, an opening might exist into the chimney, or through the ceiling. Knowledge of the subject, however, is required for the right use of any of these means, as with an open fire the first and last mentioned might become inlets of cold air, passing toward the fire, instead of being outlets for the impure air leaving the room."

For might read must, and the last sentence conveys a very important truth, of which architects and builders are constantly betraying a lamentable ignorance, that in all rooms with open fire-places, whether they have a fire in the grate or not, the chimney is the source of draught, and the true exit for foul air, and that, make your openings where you will, air will be drawn in through these unless you apply some counteracting force to prevent it. Nay, even if there be an open fire-place, cold air will come in through the holes in and near the ceiling as it will through openings in other parts

of the room. The openings in or near the ceiling, then, will not answer. In the case of the school, the inflammation of the lungs if it was due to cold at all, was caught by an opening in the ceiling. As to the opening in the chimney we believe that too, to be a mistake. It will only tend to diminish the draught through the lower opening, and will not convey away one particle more of air. Why should not the open chimney be the vent for the foul air in all cases, and the fresh air be admitted at or towards the upper part of the room by any arrangement that may be found most effectual to prevent draught?

Dr. Arnott intimates that he has in store for us a cheap apparatus for ventilation, consisting of "a very simple air-pump or bellows, of suitable size, and free from an error of construction, which, in those made hitherto, has rendered the labour of working from fifty to one hundred times greater than it needed to be." The principal features of this invention, and those which distinguish it from the bellows of Dr. Stephen Hales are the large size of the openings for the entrance and exit of air, and the light materials of which it is to be made. We follow Dr. Arnott's example in abstaining from any further discussion of the merits of his invention for the present.

Dr. Arnott strongly insists on the importance of the simple principles of ventilation being made known to the public at large by cheap publications, and on the subject being comprised in the studies of the medical man and of the architect. Though he attaches much importance to knowledge thus acquired and communicated, he thinks that legislative means should not be neglected, and specifies particularly, as places which ought to be placed under such restrictions, schools, workshops, public buildings, hospitals, the courts of law, &c. We have not space to notice some ingenious suggestions, in respect to ventilation, which will well pay the trouble of perusing the report, but we must hasten to notice the remaining points of Dr. Arnott's evidence.

We shall notice very briefly the reference made to the stove. We start with the strongest expression of opinion that all stoves are intolerable nuisances, economising coal at the expense of health, and substituting an unwholesome and disagreeable closeness for the pure air of a chimney-ventilated room. Dr. Arnott's stove is one of the best of these mischievous inventions. It displays much ingenuity and some science, so that we trust it may still be exhibited as a philosophical toy. We know that the stoves that go by Dr. Arnott's name, in nine cases out of ten are anything but Dr. Arnott's stoves; and this has happened because, from a misplaced feeling of delicacy, the inventor did not take out a patent. By doing so he would have secured to himself what is more important than profit, the superintendence and direction of his own invention. For our own parts, however, we congratulate the public that this simple and reasonable precaution was not taken, for the imperfect way in which the stove has been manufactured under the influence of open competition, has exaggerated the discredit which we are happy to find attaches to all stoves. Good, bad, or indifferent, they are amongst the most mischievous inventions of the day. After this, the less we say about Dr. Arnott's stove the better. The only praise we can award it, is that of being one of the cheapest, best, and most ingenious obstacles ever offered to ventilation.

The remainder of Dr. Arnott's evidence consists of replies which are little more than affirmatives of questions put by the Commissioners, as to the importance to all large towns of abundant supplies of pure water, efficient drainage, and open spaces for exercise and recreation, and the injurious effects of the many impurities with which the air is loaded. The objection to burial-grounds is urged, with some reservation; and the waste of animal matter, from the prevalent system of slaughtering cattle in the centre of the metropolis, is animadverted upon. In answer to the question, "Do you think the humbler classes stand in need of some strenuous exertion, to be made through the medium of the proper authorities, for the improvement of the drainage, and of the structure of their dwellings, and cleansing, and various other

matters relating to their health?" Dr. Arnott says, "I have always believed that nearly half of the accidental illnesses, that is, of illnesses not resulting from old age, that occur among the lower classes, might be prevented by proper public management." When further questioned as to which of certain specified necessities for sustaining health—air, temperature, aliment, exercise—come "within the province of public administrative regulation," he replies, "I believe the air does. If you allow sources of aerial impurity to exist in or around dwellings, you are poisoning the people; and while many may die at early ages of fevers and other acute diseases, the remainder will have their health impaired and their lives shortened. An unhealthy race will have arisen, in consequence of the great defect."

You are poisoning the people. Yes, that is the phrase—that is the deliberate opinion of a physician who may be supposed to know something of the matter, and to be influenced in what he says by no party or political motives. It is no after-dinner or public-meeting ebullition, but a deliberate statement, made in presence of sober Commissioners, in a quiet room in Gwydyr House. If you allow sources of aerial impurity to exist in or around dwellings, you are poisoning the people. That such sources of aerial impurity are allowed to exist, in every part of the metropolis, every page of this report proves. Punderson's Gardens and Lamb's Fields are a standing proof, not only that the poison exists, but that it is allowed to exist, and has been suffered to exist for years, in spite of the representations of Dr. Southwood Smith and a former Commission of Inquiry. We thank Dr. Arnott for this strong phrase, with which we cannot do better than conclude this notice of his evidence.

YOU ARE POISONING THE PEOPLE.

[Since writing the above, the Queen has opened Parliament with a speech from the throne which, we fervently hope, will not be suffered to remain a dead letter. Two entire paragraphs are given to the Public Health, and an expectation is held out of speedy legislation on the basis of the Report of the Commissioners. Had this been done, as it most assuredly ought to have been done, years ago, how many thousand lives, and how many millions of money, would have been saved! The boon comes late, and as yet takes no very definite shape, but there is at length some ground for hope that the reign of Commissions and blue-books is to come to an end, and that of wise, comprehensive, Christian legislation to begin. We shall watch the proceedings of Parliament in reference to this subject with intense interest, and in the meantime shall continue them our labours, in the hope that we may be able to contribute somewhat to enlighten the ignorant and stimulate the indifferent; happy if our earnest exertions in this sacred cause should be crowned with the smallest measure of success.]

PENCILINGS OF BYGONE MEDICAL MEN.

DR. INGLEBY.

Tu secunda marmora
Locas sub ipsum funus: et sepulchri
Immemor struis domos.

It was our melancholy duty, last week, to record the death of Dr. Ingleby, of Birmingham, one of the most eminent authors and practitioners in midwifery, of the present day.

Under any circumstances, the inroad which death makes upon the ties of acquaintance and friendship is a painful visitation; but the agony is heightened when a sudden and unexpected summons removes from us one, whose place we have no reasonable hope of being able to supply. Such is the bereavement of all who, in the person of Dr. Ingleby, have lost a relative, a friend, or a physician.

Little did we think, a fortnight ago, when treating in these pages upon the destructive influence of undue devotion to study or business, that our text would so soon find an illustration in the biography of an esteemed fellow-practitioner. Little did we think that Dr. Ingleby, in life's vigorous age, in the pride of a splendid practice,

in the very zenith of popularity, surrounded by friends and fortune, and the smiles of favour, in a few short days would be a mournful example of the vanity of human hopes, and the uncertainty of all worldly possessions. And little did he think how soon it would be said of him—

Linquenda tellus, et domus, et placens
Uxor: neque harum, quas colis, arhorum
Te, preter invisas cupressos
Ulla brevem dominum sequetur.

These reflections, and their gloom, force themselves upon the author's mind, for he hears, in the fate of his friend, a warning of the instability of his own life. There is a moral in these things, and the wisest of mankind are they, who apply its wholesome truths in all faithfulness to themselves. And there is a hope in them also, which tells us, that beyond the grave there are privileges and possessions whose anticipation should wean us from the grosser allurements and pursuits of this life. Death is not only a blessing to those whom it removes from this world to a better, but, in its mission of bereavement, it leaves a legacy from the departed worthy the inheritance of all who are spared to improve it. A voice from the tomb is an oracle of hereafter—it bears a threat or a promise—and only in the follies and vanities of the world is that voice disdained or disregarded. Its visitation is mournful, but withal merciful, to such as are obedient to its warnings—it checks our earthlier purposes—it gives us a foretaste of diviner things, and leads us to look and hope for a life to come.

But they, not wise enough to scan
Their best concerns aright,
Would gladly stretch life's little span
To ages, if they might.

There is every reason to believe, that the sudden and untimely termination of Dr. Ingleby's distinguished career, was mainly owing to the injury his constitution received from his incessant and laborious attention to the duties of his extensive practice. He was passionately devoted to his profession, and his patients were in no less degree devoted to him—to these combined sources of harassing anxiety his life was a sacrifice. Those who knew him best, and were most frequently in his society, remarked, during the past two or three years, that his health was slowly but certainly giving way under the pressure of habitual fatigue. Nor was he insensible to the melancholy fact, and yet, his own convictions, and the suggestions and entreaties of those who knew and loved him, did not suffice to induce him to even a temporary rest, until the last summons of mortality came, and commanded that his rest should be eternal. But not until the mischief was beyond a remedy, did he see how fatally he had trifled with his life. Then came—alas! it was too late—a conviction, which, if forced earlier upon him, would have now cheered a home with the kindest of husbands and fathers, and graced society with one of the best of men.

For six weeks prior to his death, Dr. Ingleby suffered from occasional visitations of atonic gout, clearly the consequence of his extreme abstemiousness and over-toil. He consulted the writer of this memoir, at the house of a mutual friend, and was advised to rest, to take more nourishment, and undergo a course of mildly tonic and alterative treatment. This advice, though consistent with own opinions, was utterly disregarded. Six days subsequently, he was seized with headache, nausea, and shivering, which compelled him to desist from practice. He was ordered a little aperient, and alkaline, saline medicine, and a hot bath. His unpleasant symptoms were in some measure relieved by this plan, but early on the following morning, Friday, January 24th, he was seized with intense pain on the right side of his back, extending from the occiput to the hip, and over the whole of the right side of his chest. The pain was of the most agonising kind, and even full doses of opium failed to relieve it. Dr. Evans, who saw him at this time, predicted that pleuritis would follow, and his opinion was verified after the lapse of a few hours. Inflammation of the pleura set in with extreme severity, and the *frattement* was so loud that the poor patient could hear it himself. He was bled to the amount of a pint, from the arm, leeches were applied to his side, followed by a

blister, a cathartic of colocynth was given at once, and small doses of calomel were prescribed at short intervals. The inflammation ran on to effusion, when its severity subsided, leaving its subject in an exhausted, and as himself thought, dying state. His pulse, naturally feeble and intermittent, was now peculiarly so, and to those who were not familiar with his constitution, the irregular and weakened action of his heart presented a dismal foreboding. He expressed an apprehension of approaching death, but he spoke of it with the faith and fortitude of a Christian. He conversed like a dying man, but also as one not fearful of his fate. He was calm, confident, and happy, in the prospect of entering upon a new and a better state of existence.

In a short time his physical energies revived, and all his symptoms were promises of further improvement. During the afternoon, and the early part of the evening, of Sunday, the 26th, he was considerably better; he breathed easily, and almost without pain, his pulse was down to 90, per minute, and was full and soft, the cutaneous and other secretions were acting kindly, he was cheerful and intelligent, talked about his practice, told some anecdotes, and inspired all around him with a joyous hope of his speedy restoration to health. These hopes were, unhappily, delusive. Before Sunday night had passed over, he was attacked with intense pain in the head, which in a short time frenzied him; immediately on the accession of this pain, he begged, as if conscious of its nature and import, that they would pour cold water upon his head, and placed himself in a position favourable for cold affusion. Whilst this was being practised, his medical attendants were hastily summoned, who ordered leeches to each side of his head, and such other remedies as the crisis of his case seemed to require. But it was now painfully evident that the life of this great and good man was in the extremest peril. His pulse was small, sharp, and scarcely to be counted; pupil contracted, eye glaring and wandering, head hot, and tossing to and fro, excessive irritability, impetuosity, and wild delirium. With the exception of a temporary and partial return of intelligence, these symptoms continued with slowly decreasing intensity until two o'clock in the morning of Tuesday the 28th, when their fatal mission was completed.

The *post-mortem* discovered a deep stratum of lymph coating the pulmonary and costal pleuræ on the right side, with a small quantity of intermediate fluid; the heart was healthy, except that its mitral valves were thicker and more opaque than natural; the left side of the chest was free from disease; the cerebrum was congested, and a thick layer of lymph, and more fluid effusion, were found between the arachnoid and pia mater. The other vital organs were normal.

The pathology of this case may be summed up in few words. Dr. Ingleby's incessant anxiety and bodily fatigue so reduced his natural energies and stamina, as to leave his system liable to the invasion of any hereditary or chance disease. Atonic gout attacked him. But, unlike the gout of indulgence, it attacked him slowly, and steadily, and waited its opportunity of mischief. It wandered about, and merely troubled him, until an occurrence of common cold gave it an impulse, and whilst his system was excited by fever, it seized upon the occasion, and settled in his foot. Suddenly, it left that spot, and in an altered form visited his back, and side, as rheumatism, with excessive nervous sensibility, and then settled in his side as confirmed pleurisy. Had he been in a better state of health, the treatment he received would probably have banished the disease, not only from his side, but from his system. As it was, no sooner was it expelled from one lurking-place than it found another. Its last visitation was to the brain, and there, as meningitis, it completed its work of destruction. From beginning, to end, the case was clearly one of metastatic gout, altering its features with the several organs it visited, but uniformly distinguishing itself by the characteristics of specific inflammation.

Thus perished, and prematurely, one of the brightest ornaments of our profession, and one of the most amiable, useful, and esteemed members

of society.

Dr. Ingleby completed his 50th year shortly before his death. This is an early age for his family, whose members are for the most part healthy and long-lived. Himself, as we have said, fell a victim to an undue devotion to study, and to the duties of his immense practice.

Dr. Ingleby was born at Cheadle, in Staffordshire, on the 7th March, 1794. After a good preliminary education, he was apprenticed to Mr. Bourne, a respectable surgeon at Cheadle. After a probation of five years, he repaired to London, and subsequently to Edinburgh, and finally, having passed the necessary examinations, he came to Birmingham as a general practitioner of medicine, in May, 1816. The fact is curious, that Dr. Ingleby, and Dr. Eccles, the present able and erudite professor of medicine in the Queen's College, Birmingham, after having been fellow-students in Edinburgh, each unknowing of the other's destination, both came finally to Birmingham, as adventurers in practice, on the same day, and on the same coach. Dr. Ingleby's career as a student presents nothing remarkable. When he settled as a practitioner, his leading care was, and he never lost sight of it, to prosecute to its utmost the scheme which lay before him. In viewing its success, and its consequences, we are constrained to say he laboured "not wisely, but too well." Whatever might be the impediment—trial or temptation—he suffered nothing to interfere with his practice. By night, and by day, in sickness and in health, it was one of the great objects of his ambition, and he pursued it with the enthusiasm and fate of a martyr. He never tired of it, and if the flesh failed him, hope took fresh courage, and expectation buoyed him up. He would have sunk long before, but that his earnest, anxious spirit supported him when feebler energies were gone! It is not to be wondered, that, with such a mind, such a man was soon successful in his profession. It was not long ere he commenced a career, which, at its termination, had few equals in brilliancy. Less sudden than many, it was surer than most, and finally raised its author above the rivalry of the provinces.

Dr. Ingleby's first public appointment in Birmingham was to the General Dispensary, in which he succeeded Mr. Grainger, on the 12th, of August, 1816. He resigned his surgeoncy on the 25th of January, 1840, having held it nearly twenty-four years. In 1828 he was inaugurated Lecturer on Midwifery to the School of Medicine, and he retained the situation until his death. In 1839, he associated with himself, as joint Lecturer, Mr. Berry, the present distinguished Professor of Midwifery in the Queen's College. In 1829 he became Surgeon to the Magdalen Asylum, and on his resignation, in 1843, was succeeded by Mr. Berry.

In stature, Dr. Ingleby was about the middle height and of spare build. He had a peculiar and somewhat awkward gait, using his arms and legs with a strange swing, which those who knew him would recognize, as far off as he was visible. His face, without any pretensions to being handsome, was nevertheless pleasing, especially when he smiled, for it then assumed a remarkable look of benignity. His eye was small, and restless in its movements, but there was nothing uncommon in it, except when he became excited in conversation, especially in detailing a case, and this frequently occurred, when it became lighted with a rare expression of brightness and intelligence. His hair was dark grey, and his general appearance indicated a greater age than he had attained. He was a remarkably nervous and excitable man. This infirmity was constitutional, and he was a victim to it. When in Edinburgh, he once consulted, the celebrated Gregory, who, without feeling his pulse or looking at his tongue, immediately discovered the source of his fancied ailment, and told him to take plenty of exercise and a purge of aloes and soap, and that he ought to be ashamed at his age of being a hypochondriac. In after life this nervous excitability was frequently manifested not in his own case, but for his family and for those who had been entrusted to his professional guardianship. He had both a moral and a medical interest in his patients, and numerous as these were, all had

their full share of his most conscientious attention. A case of unusual severity would spoil, as long as it lasted, both his slumbers and his appetite. Five weeks before his death, he was called up by the writer of this memoir, to conduct the accouchment of his wife. He was rather longer than usual in visiting his patient, but explained the circumstance to her husband, by informing him, that having the day before seen a scarlet fever case, he had taken the precaution to wash himself with extra care, and to put on another suit of clothes. Though he had to every possible extent guarded against the chances of infection, it was not until both mother and child had left the lying-in room, that his mind was relieved of a constant and painful apprehension for their safety.

As an obstetric practitioner, Dr. Ingleby, in reputation, stood alone in the provinces. During the last few years of his life, his practice was first rate, both in extent and importance. He almost might be said to live at the bed-side, and in his carriage. He neither courted rest, nor relaxation, and it was a marvel to those who knew him, how his constitution endured the incessant fatigue to which he exposed it. His practice was eminently successful, and yet with his vast experience, and his conscious skill, he was a timid man at the bed-side. A dangerous case would actually agitate him, and one of even less severity would fill his mind with torturing excitement. Still, though his confidence was so easily shaken, nothing could utterly disarm him of it, and whether in acute or chronic cases, his diagnosis and treatment were rarely exceptionable.

Besides being summoned long distances of eighty, or a hundred miles, in consultation, patients were often in the habit of visiting him from remote places. The fact is familiar to the author, that more than one eminent metropolitan practitioner has sent patients from London to Birmingham expressly for Dr. Ingleby's opinion. In his management of a case, he was simple, straightforward, and free from all the arts and devices of quackery. In consultation, he was unassuming, and deferential almost to a fault. He contrasted strangely with the rude swagger which too often obtrudes itself into the sick-room. He was a man of no display, and was careful to a degree not to place a junior practitioner in any difficulty. And at any time, by night or by day, without fee or reward, he was willing to assist whomsoever might chance to require his services.

As a lecturer, Dr. Ingleby had no pretensions either to eloquence or fluency. Yet he was always in earnest with his subject, and treated it with the skill of a master. He never talked learnedly, but used good Saxon words with a taste and precision which rivetted the attention of his class. His *forte* was description and detail, in which few men could excel him. He was in all respects an accomplished teacher, and not a little of the reputation of Queen's College, at Birmingham, is due to his occupancy of its midwifery chair.

As an author in midwifery, Dr. Ingleby was without a provincial rival. His chiefs works were, on obstetric medicine, and on uterine hæmorrhage. The former of these obtained for him a European reputation, and the latter was acknowledged to be the most complete and comprehensive essay upon the subject, extant. Through these he obtained the medical degree of the University of Heidelberg, and the fellowship of the Royal College of Physicians of Edinburgh. He published an excellent course of clinical lectures in the *Lancet*, in the session of 1842-3, and at the time of his death, he was arranging for the press a valuable accumulation of facts, and cases, illustrative of fibrous tumours of the uterus. This was a subject to which he paid much attention. He believed that fibrous tumours of the uterus are much more common than is generally supposed, and that they are a very frequent source of dysmenorrhœa and irritable uterus.

The private life of Dr. Ingleby might almost be said to have been blameless. His temper was singularly amiable, and those who knew him best, and especially his servants, affirm that he was never known to be angry. He was a remarkable

exception to the mass of our profession in the fact, that he was never heard to speak with discourtesy or disparagement, of any fellow-practitioner. His goodness, and gentleness were such, that even his competitors were taught to love him too well to envy his superiority. And the very few, destined to crawl beneath the shadow of his fame, who, would gladly have stolen a ray of the honour which encircled him, he treated with habitual kindness, and complacency. Only a few weeks before his death, having received an anonymous letter which was soon traced to an impudent, and obscure, pretender to his rivalry, he showed it to the writer of this memoir, and spoke of the unhappy man who would fain have done him much harm, with the meek condescension of pity, and the hope that his presumptuous jealousy would shortly find an exchange in a better feeling.

Dr. Ingleby was an orthodox churchman. His piety was unaffected, fervent, solemn, and sincere. His death-bed, during the moments of rest, or of reason that were permitted him, afforded a striking illustration of the service which religion can render us in the last agony of our nature. This fact is an inexpressible consolation to those who loved, and are now lamenting him. His was an instance how resignedly a Christian can die. For this solemn change his previous life had been a constant state of preparation. He was a great reader of his Bible, and it was his daily habit

—to talk with his past hours,

And ask them what report they bore to Heaven.

With him, every day brought its duties, and he never neglected them. He valued his moments, as privileges, for which he was accountable, and he used them with a serious apprehension of responsibility. He never lost any time—he was always employing it to some end—and in his memory, at least, he kept a faithful record of it. His great pleasure consisted in

Reviewing, life's eventful page,
And noting, ere they fade away,
The little lines of yesterday.

This biography of a friend and a fellow-practitioner, has afforded its author, so to speak, a painful pleasure. It has grieved him to record the loss of that public and private worth, which was most appreciated by those who best knew its source—but he is not without a hope, that this brief history of a distinguished character may exert a salutary influence upon those who ought to profit by its example.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY,
Jan. 28, 1845. Mr. Stanley, President, in the Chair.

Brief notices of the variolous epidemic of 1844, by George Gregory, M. D., Physician to the Small-Pox and Vaccination Hospital. After noticing the remarkable freedom from small-pox, which the metropolis enjoyed during the years 1842 and 1843, the author adverted to the rise of the present epidemic, which he dates from the 21st of March 1844, when the weekly deaths by small-pox suddenly rose from 20 to 30, and have continued (with some irregularities) progressing from that period to the present. The admissions into the Small-Pox hospital in 1844 amounted to 647, exceeding by one the admissions in the great epidemic of 1781, and being with the exception of 1838, (when the epidemic raged throughout the entire year) the greatest number ever received into the hospital since its foundation in 1746. The character of the disease was severe. The deaths amounted to 151, being at the rate of 23½ per cent. In 1781, when the same number of patients was admitted, the deaths were 257, being at the rate of forty per cent. Of the total admitted, 312 were reported to have been vaccinated, and had cognisable cicatrices, 22 professed to have been vaccinated, but no scars were detected. Two alleged, but on very unsatisfactory grounds, that they had been inoculated for small-pox in early life. Among the 312 vaccinated, more than 100 had the disease in the very mild form usually called the varioloid:—in a certain number no

mitigation was observed. Of the whole number, twenty-four died, being at the rate of nearly eight per cent, on this section of the admissions. Many of the cases received during the year displayed features of additional interest. Several of these are stated in detail.

A remarkable feature in the history of the past year, was the increasing desire on the part of the public for re-vaccination.

Founding his views on the now indisputable fact, that small-pox spreads as widely without as with accompanying inoculation, and on the now equally established fact, that small-pox after vaccination proves fatal at the rate of seven per cent, when inoculated small-pox is fatal only at the rate of one fifth, or one in 500—the author proceeded to argue, that it is unwise to prevent variolous inoculation in toto. Persons verging on puberty might he said, with great prospect of advantage, be inoculated *after vaccination in early life*. If, as happened in the case of his own son, the inoculation failed to produce constitutional symptoms, the security of the party was fully established; on the other hand, if febrile symptoms followed, the disease would probably be mild, and at all events would be undergone under the watchful eye and care of parents. As it is, the disease is often received at a period of life, the most distressing—as by young women on the eve of marriage, by mothers in confinement, or by young men just embarking for India. The author instanced a variety of other important objects which might be gained by a repeal of that part of the "Vaccination Extension Act" of 1840, which prohibits qualified Medical Practitioners from inoculating in England and Ireland, and he concluded by recommending to the legislature such a measure, and to the medical profession (when such permission may be granted) the establishment of a system of infantile vaccination, strengthened and made doubly sure by adult inoculation. The practice of inoculation might usefully be restricted to the period of life extending from the age of ten to twenty.

Dr. Webster observed that the communication which had just been received was a very able one, and he had been much gratified with the facts and statistical details it contained. There was, however, a question, which he was desirous of asking. It was stated in the paper, that at the Small-Pox Hospital, there had been more re-vaccination during the past year than usual, and he was desirous of learning whether small-pox had ever occurred after re-vaccination, because if no such instance had occurred, it was already a strong proof in favour of vaccination. He had not understood from the paper whether any cases of secondary small-pox after re-vaccination had been met with. He (Dr. Webster) had at one time seen a great deal of vaccination, when physician to a large vaccine institution in the metropolis, for, although the duty of vaccinating had been principally performed by the other medical officer, still many instances had come under his own notice. There was one other fact which he wished to mention, and it had reference to the outbreak of small-pox in Bethlem Hospital, a very large institution, in which, as the society knew, there were upwards of seven hundred residents, including the officers, lunatics, and the boys and girls of the neighbouring house of occupations. Last March, a male lunatic in the criminal wing, who had been confined in the hospital for upwards of two years was attacked with small-pox, and no cause from without could be traced for its invasion. He had not had communication with any one without the walls personally, although it was right to state, he had received a letter from a distant part of the Country; but this was not likely to have communicated the infection, and it was not known that the disease prevailed in the district nor could there be ascertained any mode in which she could have been exposed to the contagion of the disease. The complaint proved mild in this case, but it spread from him to one or two other criminals, and subsequently several other individuals, patients in the hospital. Every effort was then used by the committee and resident officers, to prevent its further extension, and this they perfectly succeeded. The only person of those attacked who died, had not been vaccinated, while all the others who had, as far as he

knew, been vaccinated, recovered. This case, he (Dr. Webster) thought, was strongly in favour of vaccination. Dr. Gregory deserved great credit for the facts which he had brought forward, and especially, for mooted the important question respecting inoculation, but although, he, (Dr. Webster) did not agree with him, as to the inefficacy of cow-pox; as a preventive of variola,—while with all due respect for Parliament, he did not think the Legislature acted quite wisely in seeking to regulate by that means, difficult and disputed points in medical practice. The only apparent way in which small-pox could have been introduced into Bethlem Hospital, might be thus explained, notwithstanding some may consider the reasoning hypothetical, the disease was at that time very severe in South Lambeth, and a westerly wind was prevailing for several days prior to the attacks. Now, he wished to ask Dr. Gregory, if it were possible the disease could have been introduced into the hospital in that manner?

Dr. Gregory observed with respect to Dr. Webster's first query, whether any instance had occurred at the Small-Pox hospital of a patient being affected with small pox after having undergone re-vaccination, that it was difficult to catch all the points of a paper even when read with care and attention which had been given by the secretary (Dr. Cursham), but he should have thought that the remarkable case of a young woman of the name of Eagle, which had been purposely narrated to illustrate that point, would have attracted Dr. Webster's attention. Her case tended directly to shew that re-vaccination was not a safeguard against the disease. She had been vaccinated in early life in Suffolk; and afterwards most carefully and properly re-vaccinated by a medical practitioner in the same town, and yet she was attacked by small pox, and became an inmate of the hospital. Such cases were very common. It might perhaps be alleged against the value of such cases, that either the vaccination or the re-vaccination had not been properly performed, and such arguments were easily brought forwards, for, *de non existentibus, et non apparentibus, eadem est ratio*. With regard to the introduction of the small-pox into Bethlem Hospital, by the westerly wind passing in through the barred windows, after traversing an infected district, he would not question its possibility, although he very much doubted its probability: Mr. Davies (of Hampstead) observed that in 1788? he was ordered to inoculate every soldier, who did not present any unequivocal marks of small-pox on his person. Two of the men, however, remarked to him that it would be of no use inoculating them, as they had been employed as cow-boys in Yorkshire, and had had the cow-pock. He inoculated one of the men thirteen times, but he did not take the disease, it was the same with the other man. He had subsequently vaccinated a great many other persons, and he believed that instances of failure were caused either by the careless manner in which it is done, or else by the neglect of parents in not bringing the child to have the success of the operation verified. He had been consulted by a woman from Portsmouth, who was suckling a child, at the time she was seized with small-pox. He immediately vaccinated the infant, and was fortunately successful in time, for although the mother continued to suckle the child, it did not take the disease. The mother died from the severity of the attack. There was a family in Hampstead, of the name of Dale, several members of which he vaccinated in the usual way, and re-vaccinated four or five days afterwards—a practice which he thought to be very conducive to safety from this disease. Other members of the family he was requested to vaccinate from a particular arm, but not approving of the pock, he declined doing so, and another practitioner was had recourse to, by whom the operation was performed. He was exceedingly anxious to watch these cases, and made special enquiries when small-pox broke out in the Vale, and he learned that those persons who had been vaccinated by him resisted the contagion, while the others were all attacked by the disease. These, he thought, were important points with respect to vaccination.

Dr. Maclaughlan enquired whether Dr. Gregory

had observed from his reading or other sources of education, the occurrence of any difficulties with respect to the arrest of small-pox on the continent, in India, and elsewhere, where the powers of the Act of Parliament prohibiting inoculation did not extend.

Dr. Gregory would be very glad to give any information in his power. He had reason to know that difficulties of a like kind to those which he had brought before the society that evening had been encountered, both on the Continent and in India. The Neapolitan Government especially had experienced such difficulties, and had taken into consideration the measures that should be adopted to meet them. As the original lymph had been obtained by Jenner from cows in Gloucestershire, and had proved decidedly efficient, as no failures had occurred for the first thirteen or fourteen years, they had concluded that the best course for them to adopt, was to go back to the Gloucestershire lymph, which they were determined to obtain at any expense, and that Government had now agents in this country occupied in collecting the lymph from the cows in Gloucestershire to send to Naples. Equal difficulties had been experienced in India, and he had that afternoon received from Calcutta an octavo volume,* (detailing the events of the epidemic of 1844 in Calcutta, and the measures recommended to be adopted by the government there. As he had reason to believe that very few copies of the book were at present in London, he would read some extracts from it, in illustration of his observations, such extracts as he had marked in a cursory examination of its contents.

"Reviewing the whole history of vaccination in Bengal, I fear it must be owned that its progress has been slow, that its operations have been but partially successful, and that its present state and prospects are unsatisfactory and discouraging. Neither can it be denied that public opinion has been unsettled regarding its advantages, and public confidence shaken in its efficacy and permanence as an antidote to small-pox—a feeling which is not confined to the common people, but prevails more perceptibly among the better-informed and reflecting classes of the community, and is not without participants among the profession itself. Under these circumstances, it appears most desirable that a commissioned body of medical men, with a few associates from the general community, should undertake to investigate anew the nature and causes of this state of things in Bengal, and to devise for the consideration of Government some new plan, or modification of the present system, which being founded upon definite and established principles, may afford some reasonable hope of greater success. The necessity for such renewed enquiry will be deemed the more urgent, when it is observed that far from diminishing in number, the invasions of small-pox have of late become frequent and destructive in many towns and provinces of Bengal."

On further reference to this subject, the evidence of Mr. Dalrymple was adduced.

Mr. Surgeon Dalrymple, of the 9th Light Cavalry, writes, in 1839, that "he was sorry to say there had been too much cause for the natives distrusting the benefit held out by vaccination;" for, he adds, "the number of cases of small-pox amongst the European officers at Nusserebad, during the last two years, had been probably as great in proportion of their numbers, as amongst the natives."

Mr. Atkinson writes thus:—

"So many instances of failure occurring, say two in three, their confidence is shaken or destroyed, for they cannot comprehend or appreciate the value of the chance which even that proportion affords, of escape from the small-pox, but disregard the whole, because the result is not always absolutely certain. Such appears to be the general feeling on the subject of vaccination among the natives in this quarter."

The last paragraph which he would read was from the statements of Mr. Tweedie, superintending surgeon of the Presidency.

* Report on Small-pox in Calcutta, by Dr. Stewart.

"The natives of India are quite satisfied with the variolous inoculation which has been in use from time immemorial, and they do not see that a preference should be placed on a new European mode, which they have found most uncertain."

These were merely specimens of the experience of different medical men in our great Indian empire, and there is no doubt but that the commission which has been proposed there to investigate the nature of these difficulties, and the means of remedying them, might be advantageously had recourse to in this country. He himself had indeed proposed to Sir James Graham the formation of such a commission, during the past October.

Dr. C. J. B. Williams enquired of Dr. Gregory, if some of the difficulties met with in India were not attributable to the failure of the lymph. He should himself expect to find greater success nearer home.

Dr. Gregory had hastily examined the volume in his hand with a view to ascertain that point. Although he had previously possessed considerable information respecting it, he had obtained more from the Report, which he would be happy to bring before the Society. In India, vaccination is wholly impracticable during one-third of the year, and during the remaining eight months it is found exceedingly difficult to vaccinate, partly from the indisposition of the natives to innovation, and partly from their satisfaction with the apparent advantages of inoculation, for they are keen enough to be aware of the different rates of mortality attending natural and inoculated small-pox, and also the probability of an attack in after-life, after vaccination.

When young ladies, on the point of marriage, are liable to an attack of small-pox, by which their beauty may be injured, and their eye-sight destroyed, it is time to take into consideration the propriety of combining inoculation with vaccination. He did not look upon inoculation as the best measure in every instance, but he would regard it with a philosophical eye, and was satisfied that no more advantageous measure could be adopted by the directors of the East India Company, than placing inoculation under the care of the government, and directing its performance by medical men. That process does not appear to be influenced by the hot months. A modification of this plan, might he thought, be usefully introduced into this country.

Dr. C. J. B. Williams observed that Dr. Gregory's answer was rather more strengthening to the views he entertained than he expected, and he would draw from it the inference, that anything respecting vaccination in India, and observations founded thereon, were not applicable to this country, as the natives are, during part of the year, not subject to its influence, and their prejudices lead them to oppose its employment on an extended scale. Dr. Gregory's paper, being of a statistical nature, although it had been exceedingly well read by the secretary, required, in order to understand it properly, to be carefully examined and studied; and he (Dr. C. J. B. Williams) wished it to be fully understood, that he made this reservation, with respect to the observations he was about to offer. He had certainly not heard sufficient to shake his confidence in vaccination as a safeguard against small-pox, and he required statistical details to disprove the value of re-vaccination. Instances have occurred of persons being seized with small-pox after inoculation, and even of their having had two or three attacks of it, after natural small-pox. He had indeed, heard from a practitioner, of a man who had had it four times, but he would not vouch for the truth of that statement. The question before the society was, whether vaccination was a sufficient safeguard against small-pox? The most natural view to take of the matter, in his opinion, is, that natural small-pox, inoculated small-pox, and vaccine, are all one and the same disease, differing only in the degree of intensity, and will consequently produce different effects on the human frame, varying according to their morbid power, the least intense, by possibility, failing in some instances to pervade the frame, and then necessarily failing to protect it from a future attack. With reference to this point, however, it must be borne in mind

that the least intense agent will cause the least severe disease, and although he would allow that in some instances inoculation, as recommended by Dr. Gregory, might be advantageous, it must also be recollected that every such case would constitute a focus for the further propagation of the natural disease, which vaccination does not offer. The form of disease produced by vaccination is mild, and cannot do any harm to others.

Mr. Streeter enquired of Dr. Gregory whether he had met with cases of small-pox occurring after vaccination during pregnancy, either at the Small-pox Hospital or in private practice, or was otherwise cognizant of this occurrence? He had himself met with such a case in 1838, and had seen another instance during the present epidemic. The patient was about six months advanced in pregnancy, and she recovered from the attack. He intended by-and-bye to perform some experiments, to ascertain whether the child could be influenced by the vaccine lymph.

Dr. Gregory had not seen any instance during the present epidemic, but had met with such cases on former occasions more than once. He remarked that in consequence of the practice of vaccination, the violence of the disease now fell on parents and adults generally, instead of on children, as was formerly the case. The observation made by Dr. Williams that natural and inocular small-pox, and vaccinia were the same disease, different only in intensity, he could not agree with. He thought Dr. Williams had committed two fundamental mistakes in his pathology. Natural and inoculated small-pox were in no degree different in their intensity, as had over and over again been observed in cases of consecutive small-pox after the natural or inoculated disease. He could not admit, that small-pox and vaccinia were the same disease. He believed otherwise; there was only an approach to identity; which, however, was not real; about as much as there is between measles and scarlet fever, but not more. He had been recently in professional attendance upon a young lady in Albany Street, who was seized with confluent small-pox, from which she recovered, but with the loss of beauty. Her aged parents, in their anxiety for their own safety caused themselves to be vaccinated, although they had been inoculated in early life, and perfect vaccine pustules were produced on their arms. If vaccination be thus successful at the age of sixty, after previous inoculation, Dr. Gregory thought that it went far to prove the non-identity of small-pox and vaccinia, of which he said, a multitude of proofs could be advanced.

Dr. C. J. B. Williams thought the experiments of Mr. Cely were conclusive of the identity of small-pox and vaccinia, nor could he admit that the cases mentioned by Dr. Gregory were sufficient to disprove it; any more than the occurrence of small-pox after vaccination would.

Dr. Webster thought the case just mentioned by Dr. Gregory confirmatory of the value of vaccination, and he wished to enquire whether persons who had been inoculated, were perfectly protected against small-pox.

Dr. A. P. Stewart referred to a series of cases which had lately fallen under his observation in the north western portion of the parish of St. Pancras, as proving the complete efficacy of vaccination when properly administered, and as leading to the suspicion, that in many cases where it appeared to have failed, it had not been so applied. He referred, in confirmation of this view, to the report in the papers of last week, of the proceedings at the Annual Meeting of the Royal Jennerian Institution. His own experience, during a two years residence in the Glasgow Royal Infirmary, enabled him to confirm a statement made by the late Dr. Cowan, in his valuable pamphlet on the "Statistics of Fever and Small Pox in Glasgow, in the years 1835-36," viz., that small pox is perpetuated in that city chiefly by the unvaccinated, or imperfectly vaccinated Highland population. M. Chomel, in the course of his numerous prelections on this, with him, very favourite subject, often made the striking remark, "You cannot ask more of vaccination than small pox itself," for, in a pretty large number of cases, small pox, in its

worst form, had attacked the same individual a second, and even a third time, and had sometimes terminated fatally.

Dr. Gregory, to prevent misapprehension, summed up the principal features of his plan, and observed, that if it were adopted in its entire extent, still nearly one half of mankind would remain under the protection of Jenner and his discovery, for it appears, that of every thousand children born in Liverpool, about one half die before the period of puberty, and of every thousand children born in London, about three hundred perish before the occurrence of the same period, so that the remaining portion alone would be subjected to the test of inoculation.

DOCTOR VERSUS DOCTOR.

[The following vigorous article—the product evidently of a very conscientious feeling and high toned honour, appears in a late number of the *Young England*. General newspapers, devoting to the service of the Profession such high ability and good principle, deserve, even on the low ground of policy, its support: and we promise them that they will always receive from our Journal a favourable, nay grateful, notice of their very useful contributions.]

The indifference, parsimony, and cruelty of society at large towards the profession of physic; the taunts, jokes, and buffoonery with which those who rust in health are accustomed to salute the doctor, or the mean chandler's-shop advertisements of huxtering boards of guardians, and water-gruel-gauging Poor-law Commissioners, have never reduced the profession in public estimation, or their own, so much as their reckless and suicidal competition with each other.

This competition, and its subsequent bitterness, jealousies, quarrels, and cabals, is of two kinds; competition for practice, and competition for honours. And, first, of the competition for practice.

Every body who knows any thing of the profession, must have admired the amazing willingness of its members to work for nothing, or if less were possible, for less. Not only do they fill the advertising columns of newspapers with appeals to governors of hospitals, dispensaries, workhouses, lying-in and all other medical institutions; they sneak, hat in hand, from house to house, bowing, beseeching, and imploring you to read their characters, or, as they are pleased to call them, testimonials; of which every man in the profession knows that they are obtained, in most cases, as matters of course, and, as a matter of course, are not worth obtaining. All their friends and their friends' wives are set to work to move every other friend and friend's wife to get votes for this eleemosynary medical "thank you for nothing;" he gets up his name, as boys do a kite, by tacking to it a long tail of capital letters; he takes this opportunity of advertising the books he may have written, and the lectures he may have read; thus, not merely making himself known, but saving; advertisement duty; hawking himself from house to house, canvassing for votes, he has an opportunity of exhibiting his talent for bowing, scraping, tuft-hunting, capling, on which, much more than on his professional attainments, he prudently relies, all the arts of electoral corruption are as thoroughly known to him as to a parliamentary agent: he loves to head all his advertisements with "May it please your Royal Highness"—"Ladies"—"My Lords and Gentlemen!"

We have not the remotest hope of inducing any change of conduct in these professional volunteers—these thank-you-for-nothings of the healing art; men, who, if an Act of Parliament were passed prohibiting physicians from prescribing for less than half-a-crown, would find a way of doing business for fourpence; men who, while degrading their profession in the eyes of the public, and cruelly abridging the means of life of their brothers, have the effrontery to talk of "God-like charity," and sometimes soaring to the sublime of profane-

ness, liken themselves unto "Him who went about doing good, without money and without price."

How can responsibility be secured over men who pretend to work for nothing? What hold have you upon a gentleman who calls himself an *honorary* surgeon or *honorary* physician? How ridiculous and impotent is the position of the benevolent with regard to them! If they well and conscientiously discharge their "miserable attendance upon peevishness and pain," you do them injustice by not paying them; if they make tools of you, and practice-blocks of the poor, you cannot do yourselves or the poor justice, because you have not paid them; you have been charitable, but not just; you have given no equivalent, and secured no responsibility.

As usual there are faults on both sides; the public will be generous rather than just; there are men who give away thousands in charity, who would not give away a penny to do an act of justice; the "Honoraries," as they call themselves, know that nothing disguises self-interest so thoroughly, as the appearance of being disinterested, and, talking of "God-like charity," win the hearts of stupid, benevolent, old women of both sexes.

It may be inquired, why should not society accept the gratuitous services of medical men, if medical men rush forward with eager vivacity, and strain every nerve in active competition to have their gratuitous services accepted? We answer, that you have no right to do wrong without necessity, because the necessity of others prevents their doing right. For, we argue no inherent meanness in the bulk of a profession which demands for its exercise, extent and variety of knowledge second to none, while for intrinsic usefulness it may rank with the noblest; but necessity is the parent of many meannesses:

"Nil habet paupertas in se durior ipso.
Quam quod facit homines ridiculos."

Society supports the clergy in their emoluments and dignities, and will not suffer the indecency of competition to minister for nothing in spiritual things; though the necessities of individual clergymen are often urgent, they will not be suffered, either by their Ordinary, or mankind, to pretend to officiate for nothing, paying themselves indirectly in some circuitous way.

If a barrister is known to solicit business, or is anxious to work for nothing, the profession cuts the offender to a man—refuses to consult with him in chambers, or to plead with him in court; if he offers his services for less than the remuneration sanctioned by custom, he is without the slightest ceremony turned out of his profession. Have we honorary judges, honorary ministers of state, honorary bishops, honorary admirals, generals, colonels, captains? Have we honorary clerks in public departments, honorary tax-gatherers, honorary excisemen?

There may be, but we are not aware of it. Yet we doubt not that many noblemen and gentlemen would command regiments of guards, not only for nothing, but very willingly pay large sums for that honour, only they will not be permitted graciously to be pleased to do work badly for nothing. Mute inglorious lawyers might possibly be glad to take a turn on the woollack now and then, and handle a chancery suit, for the same reason that a "thankee for nothing" doctor takes a dispensary—for the practice. But tampering with the property of the rich, is a totally different thing from tampering with the sufferings and lives of the poor and instead of sitting on the woollack for nothing, Lawyer Greenhorn must promenade the Hall at the same price, while Doctor Greenhorn, his brother, becomes an "honorary" in the only profession encumbered with such honours. We should not wish for a heartier laugh than that which society would raise against the snug Tractarian curate, who should offer to do the duties of his Grace, the Archbishop of Canterbury, for coals, candles, and the run of the archiepiscopal kitchen! From the banker's clerk to the bishop—from the chancery clerk to the chancellor—from the corporal to the commander-in-chief, the condition of service is responsibility, and the equivalent of responsibility is pay.

MEDICAL PROTECTION ASSEMBLY.

EXETER HALL, Monday, Jan. 27.—Mr. HUNTER in the Chair.

The Chairman opened the proceedings by observing that they were met to express their opinion in reference to the proposed Incorporation of General Practitioners. He, for his part, preferred the College of Surgeons being converted into a College of Medicine and Surgery, but would not subject himself to insult by another application to the Council.

Mr. Ross commented upon the rumour of the Council of the College having applied to Government for a Supplemental Charter, stating that such application was for their own benefit, not for the Profession.

Mr. BULLEN strongly advocated a Council of Medicine and Surgery, based upon the College of Surgeons.

Mr. M'OANN reiterated his opinion in favour of the College.

After some observations from Mr. Clarke, Dr. Purvis, Mr. Curtis, and Dr. Jones,—Mr. WAKLEY protested against these consultations or discussions, they led to no practical results. They ought to conclude with a motion. He would move that they should end. They did no good. He entered into a defence of the Marylebone Association. There were many things which they had done had better been left alone. He counselled them otherwise, and he agreed in the propriety of keeping the Assembly distinct from them, to watch and to control them. They ought to join them in their individual capacities, so as to make them move in the right direction. He hoped that Dr. Lynch would make a motion which they might affirm or reject.

DR. LYNCH declined the suggestion of Mr. Wakley: as a deliberative body, it was their duty to ascertain the free and unbiassed sentiments of those whose interests were committed to their care and protection. It was not their intention to affirm either proposition at present. To do so in a committee would be an absurdity. He was surprised that Mr. Wakley was so opposed to a free discussion. He had made several ineffectual attempts to stifle it. The time had arrived when they would dare to think and act for themselves. The medical journalists* should obey, not lead, the profession. It would be more manly and ingenuous to meet the discussion in a proper spirit, and to enter into this important inquiry with a view to elicit the opinions of their brethren, than night after night to try to defeat it by mere technical objections. The panegyrics on the Marylebone Association were beside the question. They had committed themselves to a third college, which the profession would never sanction. There were too many grades already. General practitioners would be termed pot and pestle men—mere transmogrified apothecaries. The Marylebone Association elected each other, and their sittings were private; clique-ism prevailed there. They ought to have called public meetings, before assuming the title "national" without any authority. It was a species of empiricism on the part of the association to arrogate to themselves high sounding appellations, without the sanction of the profession. Their conduct was suspicious; they seemed to be intriguers for place. They wanted to make bye-laws, and to form themselves into a council. All this was done privately. They were not the men to govern the profession. The unintellectual exhibition that took place at Hanover Square, satisfied all that such men could never fill the rôle or chairs of professors or lecturers. If we had the age of iron now, it would be the age of lead then. By amalgamating a few of the best men, of the Hall, with the Council of the College of Surgeons, the interests of the profession would be best consulted, and every end answered. Instead of sub-

mitting a motion, he would move the adjournment of the discussion.

Mr. RUGG seconded it.

Mr. WAKLEY and Mr. COOPER moved an amendment, but the adjournment was carried by a large majority.

Mr. M'CAON was opposed to the formation of a third college. He would strive to the utmost to obtain a reformed charter of the College, with representative principles, and doubted not it would be granted if pressed. No person felt disposed, who held a diploma of the College, to sink into a College of Apothecaries, under a new fangled name.

After some further notices of motion, the meeting adjourned.—[A meeting was held on Monday last, of very piquant interest: we shall give the report in our next number.]

STATE OF PROFESSIONAL FEELING.

On Thursday evening, at 8 o'clock, a meeting of the General Practitioners of the City was held, agreeably to notice, in the large room at Radley's, Blackfriar's-Road.

The attendance of the members of that class of the Medical Profession, for whom the Meeting was especially convened, was not very numerous—comprising, at the very outside, only about 90 gentlemen. The chair was taken by Mr. J. S. Smith—the office of Secretary was also filled by another gentleman of that very abundant name. The principal speakers of the evening were Messrs. Roberts, Read, Sparke, D. Edwards, and Miles Beale—the speech of the latter gentleman did every thing that a speech could in support of a bad cause, and to a person unacquainted with the actual state of the Medical Constitution, would have afforded "proof strong as holy writ," that the Apothecaries' Company, and the General Practitioners are, by the projected Bill of the Home Secretary, about to be made some of the most badly treated persons in existence. A series of resolutions (six) was passed strongly condemnatory of "the Bill" from beginning to end—on the grounds of its injustice and unfairness, and from the fact of its not being necessary in the present advanced state of medical knowledge. The last resolution was one of thanks to the Editor of the Times, and to the Medical press in general, for the zeal and ability evinced by them in denouncing and exposing this *obnoxious* measure.

After the usual compliments to the Chairman and Secretary, the meeting separated.

A rather numerous meeting of Mr. Dermott's friends was held at his residence on Monday evening last, to take into consideration the opinion of counsel respecting the legality of the charter recently granted to the College of Surgeons, and also to support him in petitioning the Crown to rescind the Charter. Dr. Collier occupied the chair. The gentlemen present afterwards resolved themselves into a permanent committee, and also constituted themselves a deputation to wait on Sir James Graham on the subject.

HOUSE OF COMMONS, Wednesday.—Mr. Wakley begged to ask the right hon. baronet whether he intended to bring forward the bill relating to medical reform?—Sir J. Graham said that he would bring forward his motion for leave to bring in the bill on Tuesday week.—Mr. Wakley asked whether the right hon. baronet intended to propose any, and what alterations?—Sir J. Graham said that he did intend to propose some alterations in the measure of last year, and, as he had stated in answer to a similar question yesterday, he would state his intended alterations, and the grounds of them, when he should bring on his motion for leave to bring in the Bill. [It is said that after this short conversation, Sir James Graham trusted Mr. Wakley with a private interview, on closing which the Home Secretary is reported to have said, "May I hope that this is confidential? I mean, not published in —? You know Lawrence, I believe?" The gossip is after all, perhaps, not well-founded.]

The Association of General Practitioners, in

Hanover-square, have sent the Home Secretary the heads of their Charter. No further details are yet forthcoming to the Profession.

VALVULAR DISEASE OF THE HEART.—At a meeting of the Sheffield Medical Society, Dr. Favell exhibited the heart, a portion of the descending aorta, and a portion of the liver, taken from one patient. The heart was larger than natural, but the thickness of the parietes was not increased. The right auriculo-ventricular opening was so much dilated, that there seemed to be no division between the two cavities. The valve was healthy, but would not nearly close the opening. The mitral opening was of nominal size, but a ring of bony matter existed at the insertion of the valve. The aortic valves were slightly indurated. The pericardium was throughout closely adherent to the heart, and the whole of its anterior surface was ossified. The aorta showed the incipient stage of atheromatous deposit; the liver was large, and its veins were much enlarged; the white tissue of the liver also was hypertrophied, and the whole mass firmer than natural. There was some effusion into the abdomen.

CRANIAL TUMOUR.—At a meeting of the Sheffield Medical Society, Mr. Chesman exhibited the head of a child, aged three years and a half, of the following dimensions:—From the naso-frontal suture to the posterior margin of the foramen magnum, twenty inches; from one meatus auditorius over the head to the other, seventeen inches and a quarter; circumference of the head, twenty-three inches and a half. Over the left frontal protuberance was a tumour of the size of a large orange, membranous, but having in its centre a small portion of thin bone. This membrane arose from a projecting portion of bone, almost circular, whose diameter was three inches and a half, and contained about half a pound of serum; when this was evacuated, it appeared as if there was a shell of bone below, which was not complete, as the fluid ran from this cell into the cavity of the skull. The roof of the orbit was nearly convex. On puncturing the right side of the anterior fontanelle, about five pints of serum were drawn off. The body was of a rickety appearance, and much emaciated, and there was spina bifida of the size of a hen's egg in the lumbar region. The child had possessed all its faculties until a day or two previous to its death, but generally lay on a sofa with its head raised. Until five months of age the head had been normal, but then increased. The right hemisphere of the brain was low down on the base of the skull, but the left appeared to be attached to the left side of the skull, although collapsed.

ENLARGEMENT OF THE BREASTS IN A MALE, AND ATROPHY OF THE GENITAL ORGANS.—A man, aged 55, originally a quarryman at Rochester, but afterwards one of the British Legion in Spain, was presented to the Sheffield Medical Society, he having a remarkable development of the breasts. He stated that he had been very healthy, had three children, the eldest 25, the youngest would have been between 8 and 9 years of age; that in an engagement in Spain, he tried to jump over a trench, but, being laden with his knapsack, failed, and fell with his chest against the opposite margin. He received a blow on the lower part of the spine, and falling some depth, received a violent blow on the occiput, which rendered him insensible. He was under the care of Mr. R. Alcock for some time. Since that period the mammae have gradually increased in size, his voice has diminished in power, his beard has diminished, the right testicle has diminished to a very small size, and the left is still diminishing, and he has had no sexual desire since. He is partially paralysed on the right side, and moves about very much bent. Skin fair and soft; beard very thin and soft; voice weak; mammae pendulous; nipples rather prominent; the glands very large and distinct: penis small, and shrivelled; right testicle having the feeling of condensed membrane: left of a moderate size, but not firm, and tender on pressure; the pelvic region round, more like that of a woman, not presenting the angular appearance of the male. He denies having ever had venereal disease, or taken any quantity of mercury.

* The medical journalist has nothing to do with leading or following. He should be able enough to have correct ideas, and honest enough to express them. If he be in concurrence, so much the better for him; if not, so much the worse for his readers.—ED.

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SUMMARY.

FEB. 15.

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

I was speaking yesterday of the presence of phosphate of lime, magnesia, and ammonia, in connexion with an alkaline state of, and deficiency of acid in the urine. This condition of the urine is generally connected with chronic disease of the bladder; it appears to arise from the mucus secreted in the bladder becoming alkaline. There exists, no doubt, a sort of ferment, causing a decomposition of the urine by which this alkaline state is produced; this occurs in cachectic persons, in combination with atonic dyspepsia, ensuing after low fever; it occurs, among other causes, from the decrepitude of old age, and appears to be an index of decay of the system. The phosphate of lime is drawn from the osseous textures, and seems to be precipitated in the urine in excess; it is found sometimes, not only as a neutral salt, but also in the state of biphosphate. This very condition may alternate with the lithic acid diathesis, or lithuria; I have found urinary deposits, consisting of alternating layers of triple salt, and lithic acid, these forms of deposit are the result of severe injuries, blows or strains of the back or diseases of the spine. We have already glanced at the reason why the phosphate should be deposited: the principal being, that owing to the absence of the acid quality of the urine, this secretion becomes alkaline; this absence of acid may arise sometimes from deficient formation of lithic acid, or of super lithate of ammonia, which partakes somewhat of the quality of that acid: but sometimes it seems to arise from an alkalescence of the serum of the blood, in which cases the urine is found albuminous. In chronic nephritis the urine is alkaline, with a tendency likewise to a deposition of phosphate of lime; this, perhaps, is owing to an alkaline character of the blood, passing into a state in which there is a deficiency of uric acid, and the secretion becomes more alkaline than the blood itself. I should mention, that such a cause seems equivalent enough to produce an alkaline state in weak or nervous persons, without a vast excess of the phosphate of lime; in persons, however, in whom there is going on some disease, or in whom from age there is a more abundant deposition of lime, this must be referred to the decay of the bony textures: their earthy matter is absorbed and deposited in the urine. We have traced the deposition of the phosphate, in some cases, to the agency of carbonate of ammonia; the urea is readily converted into carbonate of ammonia, and this appears to take place not only in the bladder, but it is even seen in the urine. Dr. Graves gives a case of fever, in which the urine was passed in an alkaline state, containing a considerable quantity of carbonate of ammonia. Disease of the bladder and prostate may give rise to decomposition of the urine, and to a tendency to a deposition of the phosphates, the mucus of the bladder, appearing to act as a ferment, (whether there is alkali or not), promotes the spontaneous decomposition and conversion of the urea into carbonate of ammonia. In all these

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different cases there may be white sand deposited, and phosphates of various kinds in combination or alternation with other deposits; fibrous and mucous matter in an inspissated state are likewise found where these deposits take place. Now, in this description of phosphatic diathesis, the treatment generally applicable is of the tonic, invigorating kind, such as is calculated to restore the tone of the whole system—to excite the kidneys to a more vigorous action, and, likewise, to prevent the alkaline deposit, and preserve the acidity of the urine. The tonic treatment, including the mineral acids, such as the muriatic, and nitric acids, is preferable to any other mode of treatment. The tonics that may be required, vary in different cases: in some cases, steel, quinine, with mineral acids, and bark, or something of the kind, is found the best. But, remembering that the disease is sometimes connected with rapid decay, and connecting such decay with the activity of the chemical processes, which take place in connection with respiration, we are led to expect that narcotics may be of use in counteracting the activity of these processes, and diminishing the waste caused by the respiration. Of these, opium is most useful in diminishing the alkaline quality of the urine, and restoring its acidity, and in preventing the deposit of earthy phosphates; but it rarely, if ever, succeeds in restoring its specific gravity. Opium is often advantageously combined with mineral acids. In cases where this condition of the urine is connected with atonic dyspepsia, we shall find the measures already recommended for such a complication useful. The diet should be nourishing, with as much meat as the appetite of the patient will enable him to relish, or as the stomach will digest. Fermented liquors may be allowed in moderation. It is necessary to keep up the action of the bowels by medicines which act upon the lower bowels. Here we must avoid antiphlogistic measures. Mercury, salines, and alkalies, are injurious, partly because they increase the alkaline state of the urine. The phosphatic diathesis may be combined with actual disease of the kidneys, or chronic nephritis. Other deposits arise from certain changes which take place, in the decomposition of urea: as when it is converted into uric acid, uric oxide, or cystic oxide, the latter of which comes under the head of lithuria, or into purpate of ammonia, which, according to Dr. Prout, is a deposit from the albumen in the urine, and is produced in the body in the same way as in the laboratory, namely, by the action of nitric upon lithic acid. These transmutations are much too hypothetical for us to occupy much time in dwelling upon. Then again, there is the oxaluria, or oxalic acid diathesis, which may depend on a change in the decomposition of the lithic acid, and which Dr. Prout thinks may be secreted by the kidneys from the blood. This may be true, or it may be derived from the ingesta, or from oxalic acid in the urine and feces. It is very probable that it may arise from salts of oxalic acid, from vegetable acids, and from sorrel. Calculi have often been found which may be clearly traced to the free use of sorrel. This form of calculus excites violent inflammatory symptoms, and requires all remedial

measures applicable to the occasion—antiphlogistics, narcotics, and demulcents. Where this calculus exists, there is excessive renal irritation, and it is often useful to give alkalis, because the urine is apt to become acid. Where there is irritation of the kidney, carbonated alkalies are useful. It does not appear that acid medicines are capable of dissolving the oxalate of lime, but it is found that certain waters, those of Vichy, for instance, tend to disintegrate it. It appears also that the solidity and compactness of the calculus are due, not merely to the aggregation of crystallization, but partly to the agency of mucous, solid, and other matters, that are not soluble in diluted alkaline solutions; and those, though they cannot dissolve the oxalate of lime, may succeed in disintegrating and reducing it to a smaller size. You may, by these means, prevent the further increase of such a calculus. This treatment has a further advantage; it prevents the deposition of lithic acid, which is apt to take place upon that of oxalate of lime. It is very surprising how a stone of considerable size may be dissolved, by persisting for a considerable time in the use of alkaline bicarbonates. Their mode of administration is not confined to that *per orem*, as they are sometimes with great advantage injected into the bladder. This latter mode of using alkalies is particularly applicable to the treatment of lithic acid calculi. Diabetes, which has been called dipsacus, polyuria, and hydrouria, is of four kinds: first, watery diabetes; secondly, urial diabetes; thirdly, chylous diabetes; and fourthly, saccharine, or diabetes mellitus. The first, watery or diabetes insipidus, or hydro-uria, is a discharge of a very large quantity of pale urine, of specific gravity, 1.005, taking the specific gravity of water at 1.000. This affection is not uncommon in nervous subjects, and during the occurrence of spasmodic diseases. I think it is to be accounted for on the principle of increased determination to the kidneys, as well as to the other internal organs, thus producing an increased flow through them. You find it occurring in cases of excitement where perspiration has been checked, those arising from cold, or the use of a cold bath, or from habitual indulgence to excess in the use of spirituous liquors. Sometimes it results from morbid thirst, being accompanied by a dry state of the skin, and a weak circulation. When this disease does really exist, it is accompanied by a troublesome desire to make water, which is of the character I have described. In treating this disease, it is necessary to reduce the excitement which has caused it; this may be readily effected by opium. Ipecacuanha answers well; and Dover's powder is a good remedy in all such cases. It is likewise necessary to improve the digestive organs; and, if a morbid thirst is present, which seems to be the chief cause of hydro-uria, then by keeping a little liquid in the mouth, without swallowing it, or by using gum, or other demulcents, which soften the mouth, and take away the parched and dry feeling; or else by using tartar emetic, in almost nauseating doses; the thirst will be effectually stopped. In nervous persons, where hydro-uria appears to be connected with a tendency to palpitation, tonics, particularly steel, are very useful. The next variety is urial diabetes, or as it has been called by Dr.

Willis, acid, uria, and which has also received the name of diabetes insipidus, a term which has been applied, indiscriminately, to all the forms of this disease. In this form, the urine is very high coloured, and the specific gravity is also high, varying from 1.018 to 1.028. The abundance of urea is manifest by its forming when cool, even without being evaporated, crystals of nitrate of urea, on the addition of nitric acid. Urine, generally speaking, will not yield nitrate of urea, until it has been concentrated by some amount of evaporation, but where there is an excess of urea, it does so without any previous concentration. This form of disease occurs in connexion with congested states of the internal organs, and an excess of urea may occur without an increased quantity of urine, or independently of any organic disease of the kidney, produced by excess or exercise. It is merely an indication of a deficiency of water. Aciduria is an excess of urea in the urine, where the urine is of the ordinary specific gravity, and the quantity of urine voided is larger than natural. The largest quantity that can be made consistently with a state of health, is between two and three pints in twenty-four hours. This may be said to be the general rule. When the urine is in excess, it may be that the quantity discharged is from five to ten pints, and if the specific gravity is not reduced in proportion, you must have an excess of azote, and the disease I am speaking of must be present. The natural quantity of urea discharged in the twenty-four hours averages 430 grains, but in the excess of urine which I have been speaking of, the quantity amounts to 1,000 grains. Now, where such a state occurs, there sometimes will be a loss of strength, and a gnawing pain at the stomach. The patient thinks he is ill, has an anxious expression of countenance, and his features are often pallid. In addition to these, you have a languid state of the circulation, and other proofs of weakness. The causes that seem to induce this affection are excesses of various kinds, particularly immoderate drinking. Sometimes it occurs in children from very slight causes, and it is met in connexion with inflammatory diseases of the peritoneum, particularly in low fevers. This excess of urea is present also in the sugary form of diabetes. From many observations it appears that there is a tendency in urial diabetes to pass ultimately into the sugary diabetes. The pathology of the disease is involved in some obscurity. There is obviously an increased activity in that process on which the production of urea depends, an activity which is probably connected with a decay of the textures; and the presence of that decay in connexion with this disease seems to confirm that view. There ought to be at the same time an increased activity of the lungs, according to the views that have been taken of this disease, for urea cannot be produced either from the textures or the blood itself, without lowering the excess of carbon which must be carried away either by the lungs or by the liver. But, we must consider this affection as something like a flux from the kidneys, by which the system becomes impoverished. Whatever be the pathology of the disease, the most effectual treatment seems to be that which tends to lower the activity of the organic functions generally; opium and narcotics in such doses as to diminish the quantity of urine. These are to be used at the same time that remedies to increase the general strength of the frame are adopted, such as chalybeate waters and tonics. Where there is tenderness and uneasiness in the loins, cupping is often useful to relieve the determination of blood, or the congested state which exists and which keeps up the determination of blood to those parts. There is a disease not uncommon in the West India islands, particularly among the negroes, and occurring very seldom in this country, called diabetes chylosus. In persons affected with this disease, the urine that is passed, contains a quantity of chyle, which, for some reason or other, instead of being absorbed, is excreted by the kidneys, and does not undergo its proper change. This disease may exist to a considerable extent, and may materially impair the health. We know little about the treatment of this affection, but from what we do know, we

may say that tonics and astringents are the most proper remedies.

Diabetes mellitus, or saccharinus, or as Dr. Willis calls it, melituria is not an important disease. It prevails in Scotland, and is not uncommon in this country. The chief character of this disease is that there is an excessive quantity of saccharine impregnation in the urine, which, naturally, contains no saccharine matter at all. In most cases, this disease is not attended to until it is much advanced, and the quantity of the urine is often much increased before it attracts attention. Thus from observation, we find in many cases that diabetes mellitus exists without the quantity of urine being much increased. Thirst is the first symptom that attracts attention; this is soon followed by various symptoms of uneasiness connected with disturbed digestion: there may be cructations of wind, and a feeling of burning in the epigastrium, and a peculiar craving for food and drink. This craving becomes greater, and notwithstanding the quantity of food eaten, or the quantity of liquid drunk, there is a progressive waste of the flesh, accompanied by a remarkable pallidity. There is a distended state of the blood vessels, together with a shrinking of the texture of the muscular and fatty parts; the veins appear remarkably prominent and tortuous; the eyes are often red and inflamed; the lips are frequently parched and chapped; and the skin is sometimes uncommonly dry. This is different from the emaciation of other diseases; the skin is not wrinkled, as in carcinoma; nor is it so perfectly tight as in phthisis, but in a sort of intermediate state between tightness and looseness. The excretion of an increased quantity of urine, is accompanied by various symptoms referable to the urinary organs. The urine is copious, varying from forty to fifty pints in twenty-four hours, and is usually of a pale greenish colour; it has a faintish smell, and a very sweet taste. Its specific gravity varies from 1.020 to 1.060, and this increased specific gravity is chiefly, but not entirely, due to the impregnation of sugar which it contains, for it sometimes contains urea in excess, which is prevented from crystallisation with nitric acid, by the presence of the sugar. When the urine is evaporated, it gives out vapours of carbonate of ammonia; uric acid is still found to be present. One pint of urine of the specific gravity of 1.038, contains one ounce and a half of solid matter. In addition to the saccharine matter, the urine contains albumen, and sometimes the constituents of chyle. The quantity of urine discharged is enormous, and it often exceeds the quantity of liquid drunk. This is not very extraordinary, for in some states, the quantity passed is much greater than the amount of the ingesta. The urine collected in this state of disease, has been found to possess the property of fermentation, and McGregor has actually extracted sugar from it.

REPORTS ON DISEASES OF FEMALES,

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

The following case of oophoritis complicated with dysmenorrhœa and menorrhagia, will, I hope, prove not altogether uninteresting. Strictly speaking, I ought to call it a case of dysmenorrhœa followed by oophoritis and menorrhagia, for it was in this order that the above-mentioned affections presented themselves.

Mrs. L., æt. 50, married between four and five months; never pregnant.

December 20, 1843.—Pale, blanched, emaciated. Has profuse discharges of blood from the uterus, coming on occasionally; and during the intervals of these attacks, has a watery, aerid, yellow discharge. Complains of pain in the left hypogastrium on pressure, or standing erect; at times it lacerates severely. Intolerable suffering during sexual intercourse. Much irritability about the bladder, with frequent and urgent desire to pass water, and disposition to strangury. Pain in

evacuating the fæces, which becomes very acute when there is a slight degree of constipation, attended with severe straining and bearing down. Bowels natural; tongue pale.

Examinatio per Vaginam.—Os uteri short; not painful; very small, with one or two little bead-like prominences upon it, which the speculum showed to be produced by a varicose vessel; uterus less moveable than usual.

Examinatio per Rectum.—Left ovary very much enlarged, and very painful; pressure on the left hypogastrium moves it against the finger in the rectum, and produces pain there.

Has been delicate all her life, and has suffered severely from dysmenorrhœa ever since the menses appeared. They were not attended with exsudations; discharge was always scanty. Previous to each appearance of the catamenia, she invariably experienced intense pain, coming on in paroxysms, for 24 hours, which her mother used to compare to the sufferings of a woman in labour; and when these pains (uterine contractions) had reached a certain pitch of severity, a sudden but scanty discharge of thick black-coloured fluid made its appearance, and instantly relieved her.

Her dysmenorrhœal sufferings continued without interruption until the age of 42 (eight years ago), when the catamenia became irregular in their mode of appearance; viz., coming on at shorter intervals than usual, and the periods themselves lasting too long, but without the pain she had hitherto experienced. This disposition to menorrhagia increased, and in about two years afterwards, she had three very severe attacks of menorrhagia. The first lasting three months, the second more than six months, and the third about two months, by which she was reduced to a most alarming degree of exhaustion, and left in such a state of anemia as to be almost bordering on insanity, since which she has been continually liable to a recurrence of menorrhagia from any exertion or excitement of mind or body. In the spring of the present year (1843), she missed one catamenial period; and since her marriage, in August last, she has twice gone as long as six weeks, from one period to another. For the two last years she has had a thin, yellowish, watery discharge during the intervals, not offensive unless when retained, but very acrid, excoriating the parts it touched, producing much heat and itching of the vulva. As regards the state of the rectum, she has suffered considerably from fulness and throbbing in this part for the last four years, which has increased of late. Last year (1842) she was examined by a medical gentleman, who considered that she had a stricture of the rectum, which he treated with bougies. She certainly describes all the symptoms and sensations of something pressing upon the rectum, and thus diminishing the calibre of the intestine, the fæces having been for some time flattened when passed.

She refers the symptoms of oophoritis very distinctly back to about 5 years ago; she describes them as having been at first of an acute character, but gradually assumed a subacute or chronic form. The pain is still lancinating, and is much increased at the menstrual periods.

R. Extracti lupuli, gr. x.; ft. Pil. ij. o.n.s.
R. Acidi hydrochlor. dil. acidi. nitrici. dil. a.a. ʒij.

Syrupi aurantii ʒj.; aquæ cinnamoni ʒiss., M. ft. mist: Cujus sumat-cochl. minimum ter die ex aquâ.

Infricetur unguent. Antim. potass. tart. hypogast. sinistro. manè et nocte.

December 30.—The ointment has brought out, but a moderate eruption in the groin, but she has felt better, and for two days described herself as being "quite well," having lost the unpleasant irritation of the vulva of which she before complained—it returned slightly last night.

Examinatio per Vaginam.—After some little difficulty, the uterine sound passed the os uteri with a jerk—the uterus was not at all painful; but evidently displaced somewhat by the large ovary.

Examinatio per Rectum.—The inferior and posterior edge of the left ovary is felt very distinctly, the lower part pulsating with a vessel apparently of some little size. As stated in the last report

the fæces have been for some time observed to be flattened when passed. Pressure *per rectum* causes pain in the left hypogastrium, and so does the passage of solid fæces; pressure on the left hypogastrium also causes pain in the rectum.

Repet. Pilulæ, mistura et unguentum.

Jan. 10, 1844.—She applied the ointment so effectually as to bring the system under the influence of the tartar emetic, producing slight sickness, and a good deal of irritable diarrhœa which weakened her considerably.

As the liver was rather torpid, I gave her a few doses of hydrargyrum c. creta and Dover's powder morning and night, which soon brought the evacuations back to a healthy state. The catamenia appeared on the 7th, preceded by no darting pain in the left ovary, and attended with very little uneasiness in the uterus. The discharge was moderate, and is now declining. She has not passed so easy a period for a long while; indeed, she scarcely recollects ever having experienced one so free from pain. The bowels are rather confined. The upper part of the ovary evidently presses on the bowel just below the sigmoid flexure, where flatulence and scybala seem to accumulate. Let her take a scidlitz powder immediately.

R. Pilulæ hydrargyri, grs. viij., extracti lupuli, grs. xij.—M. Ft. pil. iv, sumat. ij, hora somni. Pergat inusu misturæ.

Feb. 2.—Since last report I have leeches the ovary twice through the rectum—the first time she did not lose much blood; but, at the second, the bleeding was more profuse, and produced great relief. The sensation of an internal swelling pressing between the left hypogastrium and rectum has greatly diminished, and is nearly gone. On examining *per rectum*, the ovary is felt softer, smaller, and much less tender; the pulsation in it has almost entirely subsided; the symptoms of irritation about the bladder and rectum have disappeared. There is still slight pain on pressing the left hypogastrium. She is slowly gaining strength.

As the os uteri is very small, I dilated it gently.

I advise her to take more nourishment, and to keep up a gentle action with the antimonial ointment. Rp. tr. Mistura.

9th.—Catamenia appeared upon the 4th, they continued moderate until the day before yesterday (7th), when they increased considerably and are still present. Tbi discharge has been rather thin, and without coagula.

Repet. mist. acidi nitro-muriatici.

After the cessation of the period she remained in town for a few days, and feeling strong enough to travel, she returned for a while to her residence in the North of England.

March 22nd.—Has returned to London in good health and spirits, having decidedly gained flesh. The catamenia have not appeared since last report. Keeps up a slight action with the antimonial ointment. Returned home.

May 13th.—Writes word that her health is excellent. She states that she experienced no inconvenience from missing a catamenial period, and that in the following month the menses appeared in moderate quantity.

Complains of nausea and sickness from the antimonial ointment. Let her paint the skin of the part with croton oil.

Nov. 16th. (By letter).—Three days before the last appearance of the catamenia (Nov. 7.) was attacked with an eruption, like nettle-rash, over the body, but especially about the inside of the thighs and vulva, with severe aching, intense fiery tingling, and considerable swelling; the swelling of the vulva comes on suddenly, and then the sensation of burning in the part is almost intolerable. The vagina appears swollen at these times. Tongue foul, bowels not sufficiently open, evacuations very offensive.

Speaking of her general health she says: "I have had less discharge this year than for eight years previously. I have been only six times unwell. I was so the last week in August, and have not been so since, until November 7th."

R. Pil. hydrarg. chloridi comp. extracti colocynth. co. aa. ʒss. M. ft. pil. xij., sumat ij omni nocte.

R. Liquoris potassæ fl. ʒiv., potassii iodid gr. xvj., decocti sarzæ comp. ʒviii. M. ft. mist. cujus sumat. cochl. magn. ij. bis die.

R. Sodæ potassio-tart. ʒi. omni mane ex aqua. Dec. 2nd.—Much better in every respect. The medicine purged and griped her smartly. Omitt. pilulæ.

R. Pil. hydrarg. chloridi co., extracti coloc. co. extracti hyosc. aa. ʒi. M. Ft. pil. xij. sumat ij. omni nocte. Rep. alia.

In reviewing the details of this lengthy, but I hope not altogether uninteresting, case, I shall perhaps render them more intelligible to my readers if I add a copy of the letter which I wrote to her medical man when she left town, in March, 1844.

"Ever since the first commencement of menstruation, Mrs. L. has suffered from severe dysmenorrhœa, produced by a long closed state of the os uteri; the result of which has been accumulation of menstrual fluid in the uterus at these periods, which was only able to expel it after severe and painful contractions. For nearly thirty years of her life, has this source of suffering and severe uterine irritation continued, until the left ovary has ultimately become inflamed and enlarged. It thus formed a considerable mass, pressing upon the uterus and rectum, and thereby obstructing a free return of blood from these organs; the consequence of which has been menorrhagia to a most severe extent for the last few years, seriously breaking up the general health.

"There are no traces of uterine disease.

"By the use of antimonial ointment to the left groin, and by leeches to that part of the rectum against which the swollen ovary projects, I have succeeded in diminishing the lancinating pains in the left groin, the sense of distension and pressure in the pelvis, particularly upon the rectum, and the profuseness of the menstrual discharge, the last appearance of which was without coagula.

"The ovary, as felt *per rectum*, is less painful, softer, smaller, and less throbbing.

"Previous to the last menstrual period, I gently dilated the os uteri, in order to facilitate the discharge of the catamenia.

"The system is very irritable; slight opiates and purgatives are apt to produce over-effects.

"My practice has been simply to regulate and improve the general health, and to keep up a gentle action by antimonial ointment upon the left side."

Within the last few weeks I have had again an opportunity of seeing my patient, during a short visit to London. Her appearance is remarkably altered for the better. She has grown robust; has a good colour; is able to take active exercise, and is enjoying a state of health to which, for a large portion of her life, she had been an entire stranger. She has lost all former symptoms, even the pain in the left hypogastrium. There has been no return of menorrhagia, and the catamenia are evidently leaving her.

This is another instance of dysmenorrhœa, unattended with exsudations, where the inflammation of the ovary was not the primary disease, but consequent upon long-continued uterine irritation.

The attack of nettle-rash was evidently connected with a disordered state of the primæ viæ, and was relieved by the appropriate remedies.

OVARIOTOMY.

CASE OF SUCCESSFUL EXTIRPATION OF A DISEASED LEFT OVARY, 53LBS WEIGHT, BY THE LARGE INCISION.

By CHAS. CLAY, M.D., &c., Piccadilly, Manchester.

I have been induced to forward this case to your excellent journal (though a little out of the order of precedence) at the request of my patient, who was desirous to see it recorded as early as possible; otherwise, it would have occupied the proper place in my work which is now preparing for the press, and which will contain the result of all the cases that have fallen under my care, without the slightest reserve, together with observations on the diagnosis, as well as subsequent treatment, deduced from upwards of one hundred and fifty

cases of ovarian and uterine diseases. That I have not done this earlier is not for want of inclination, but simply to be enabled to record as many facts as possible; also to notice to the fullest extent, the observations that have from time to time fallen from others on this most interesting and all-important question, which has engaged the attention of so many professional men, either in the spirit of fair and impartial inquiry, or with the view of condemning, without due investigation, a subject evidently beyond their comprehension. It is, however, some consolation to know that many of the brightest ornaments of the profession, have expressed their most decided opinion on the legitimacy and propriety (in well selected cases) of ovarian extirpation by the large incision. I am in possession of numerous documentary proofs which do honour to the heads and hearts of those eminent individuals, who are above the petty fry of scribblers who, at so much per line, venture to write in gall and wormwood against everything that soars in the least above their clouded and inexperienced understandings. I trust I shall also be enabled to shew, in their proper light, the absurdities and mean partialities of a certain Quixotic reviewer, who, with unblushing effrontery, styles himself the quarterly leader of medical opinion. Miserable, indeed, must be a profession of thirty or forty thousand individuals, that would be led by the nose by the opinion of one man, who, though no philosopher, at Chichester yclept himself one, when he aimed to make the British and Foreign stand in the same relation to the medical profession, as the *Satirist* newspaper stood to the public at large. The spirit of unfairness and misrepresentation is but too general on all subjects; but the British and Foreign is the grand reservoir of that commodity for the medical profession; but, Heaven be thanked! such books are like newspapers, used for a moment to make the foolish laugh, and the wise grieve, and then are thrown by as so much waste paper, scarcely ever to be taken up again. Old newspapers are sold at so much per pound, and old British and Foreign parts are bundled off, at one shilling each, to fill up the hitherto vacant top shelves of some book-case, where they linger in a sort of unknown and useless existence. It is scarcely possible to particularise all the misrepresentations on ovariectomy. The British and Foreign Editor intimates that "Dr. Clay is a young man wishing to cut himself into notoriety." Now, Dr. Clay is not a young man, but has had more years of practical experience than the oracle from Chichester; and as for the propensity to cutting, if that had been as the reviewer states, is it not remarkable that out of so many cases presented to his notice, he should only have operated on fifteen?—which, though three or four times the number of any other person living, is nothing to what he might have operated upon, had he been so inclined. Another modern lecturer on midwifery declares the operation the simplest in the world. "You have only," says he, "to make an incision in the parietes, when out tumbles the tumour; secure the pedicle and separate it, and all is right." What folly! How much it proves that he never had the heavy responsibilities and uncertainties of this formidable operation to contend with, or such an expression would never have fallen from him. Yet this very person once tried his hand; his diagnosis was wrong; he still persevered in the case; and though it never had the uncertain adhesions of an ovarian case, yet he found it not so easy, and the case terminated fatally in a few hours.

Another eminent surgeon, in performing this operation, when closing the abdominal walls, included a portion of omentum in the suture, but this happened in London, where every step is deemed perfect; the patient died. The *Metropolitans* never for a moment supposed that this accident alone caused death, but attributed it to the general character of the operation; had some Provincial done such miserably bad surgery, the *Metropolitans* would have rung the changes from Land's End to John O'Groat's against him; what a fortune it is to have the surname of a great man, dead or living. Another *Metropolitan* writer just emerged from the press, treats largely on ovarian diseases, speaks with great confidence on his own

plans of medical treatment, yet all his cited cases have fatal terminations. He speaks of the secretion in the sacs being suspended for weeks by the external application of caustic to the skin, and knows not what glorious results may arise from this fact. What absurd views! He might as well have stated a much greater improbability, and it would only have met with the same unbelief. It is, or ought to be, known to that author, that occasional cessation of secretion often takes place in ovarian sacs for many months together, but which action is again resumed, and often with a redoubled force. This author occupies a large portion of the third part of his work with ovarian diseases, and dilates extensively on one or two cases in the metropolis, whilst those who had been most extensively employed in the operation are scarcely ever mentioned. Why such partiality?

Another Metropolitan concludes from a few cases that he has had, that there is seldom any solid matter, or adhesions to contend with, and therefore rides his hobby of a small incision through which he drags the sac; there is but little doubt he will some day find himself very much mistaken. There are some few others who avoid with horror any operation whatever, and favour the world with cases of cures of ovarian dropsy by medicine only. There can be no doubt of the cures they speak of, as regards dropsy, supposed by them to be ovarian, but there is a much greater probability, that in those recorded cases, no diseased ovaries ever existed.

I have seen many cases that the profession have supposed ovarian disease which were not; but I would ask any reflective character, how (or by what process in medicine) to get quit of a solid mass of 37lb weight, as in one case, the tumour now in my possession, or in two others also in my possession, composed of solid and fluid materials to the enormous extent of 53lbs. and 73lbs? Is it not absurd to suppose, that such masses could ever be dispersed by the exhibition of any medicine whatever? I will not here pursue these statements further; I shall soon, I hope, have an opportunity of doing it more effectually by the exhibition of facts, numerous and interesting: at the same time proving, that the profession ought not to condemn new things hastily, but calmly and dispassionately enquire into facts, and reason fairly and impartially upon them; to do the contrary, is to put a stop to all improvements in the healing art. When time has advanced, when the diagnosis is more clear, when the facts are more numerous, this operation, like every one of any magnitude, will be attended with more and more success, until the whole profession will acknowledge, that such cases ought not to be allowed to die without some effort to save, even by the knife.

I cannot but feel gratified, that so many valuable lives have been saved by me and others by this operation, and, though some have been lost, I have a confident hope, that the unsuccessful cases will be diminished as we progress in experience, and thereby establish its position as a saving operation; nor can I allow this opportunity to pass without stating that the majority of the cases in which I have been engaged, have been of the worst possible character for size, extent of adhesions, and long duration of disease. I have also had examples of different ages, as young as 22, and as old as 60, where the disease has been alone and also where it has been complicated with other diseases, in all of which I can quote successful cases.

Case.—In November last a lady, Miss —, of R—n, Wales, came to Manchester to consult me respecting her case; she had been tapped six times, and had consulted a variety of practitioners, none of which advised more than tapping and attention to the stomach and bowels. This lady was 35 years of age, fair complexion, tall, flat chested, and troubled with an asthmatic cough of long standing, with copious expectoration of a muco-purulent character. She was extremely anxious that I should consider her case a favourable one for extirpation. I found her larger than any female at the full period of utero-gestation; the abdominal cavity was so tensely filled that it was impossible to give any decided opinion as to the probability of adhesions, but I was inclined to

believe it pretty free; my principal object, however, at this time was to ascertain if there was any derangement of the uterine structure, I therefore instituted a careful examination *per vaginam*, and gave it as my opinion, that that organ was perfectly healthy. On comparing the facts of this case with its past history, I advised the lady to return home, to lead as quiet a life as possible, pay proper attention to her bowels, and put off the next tapping as long as she possibly could, but that when that operation took place I wished to be present. I felt pretty confident that the prospects of the case were good, yet I desired to see it immediately after tapping, to confirm more satisfactorily the views I had formed upon it. With some few instructions as to the mode of proceeding, she returned home; I occasionally heard from her, and latterly expressing her determination to come again to Manchester to be tapped by me, and, if necessary, to undergo the operation as soon as I thought it prudent; she accordingly arrived in Manchester the second time, Jan. 16th, and I proposed to empty the sac on the following day.

(To be continued.)

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c. &c.

(Continued from page 378.)

It is admitted by the best pathologists of the present day, that tubercle is not an *effete* amorphous mass, thrown off from the blood as a foreign or poisonous material, but that its formation has something in it analogous to healthy nutritive function, of which it is believed to be an "error." Mr. Addison says that "tubercles of the lungs consist of matter accumulated by colourless blood cells." (1) To this opinion I am not prepared to subscribe. Elementary granules may, by their aggregation and subsequent development, form colourless blood corpuscles, pus globules, or vesicular tubercles; but these are not convertible into each other; they are specific structures, and cannot be transformed into any analogous structure; they can only advance or retrograde. Hence, it may happen to the colourless corpuscles to form healthy tissue, whilst pus and tubercle, in every succeeding change, become more blighted and disorganized. A colourless blood corpuscle can no more form a pus globule, or a vesicular tubercle, than can either of the latter form a blood corpuscle. These bodies are as distinct in their microscopical appearances, as they are in the circumstances of their formation, or in the final purposes which they serve, or effects which they produce, in the animal economy.

The extreme states of primitive tubercle, are granules and vesicles;—the former are elemental of the tubercle; the latter are the perfection of its primitive stage. In so far, we see a certain correspondence between the generation of tubercle and the production of normal tissue.

Tubercle commences with an aggregation of granules; their number may be few or many. These granules, like those which form colourless blood corpuscles and pus globules, have a tendency to develop themselves into a higher structure and to form cells. From some imperfection, however, either in themselves alone, or aided by a morbid action in the parts wherein they are being deposited, (2) they either remain

stationary as granules, (3) or proceed only to an imperfect cell, viz.: the corpuscule or vesicle already described. In passing to this vesicular state, the granules, if their number were originally few, are appropriated and expended in the developing of the tubercle, which is consequently seen to possess neither central nor peripheral molecules; when the granules aggregate more numerous, some of them are elevated into a vesicle enclosing the remainder, which appear to subsequently aid the further spontaneous actions of the tubercle,—viz. those of its maturation. Vesicular tubercles which contain no granules, mature much more slowly than those which are nucleated. In examining the lung of a phthisical subject, the number of the former variety of tubercles is seen to be much greater than that of the latter—these have chiefly passed into the matured form. Laennec observes: "the miliary tubercles, moreover, whether semi-transparent or opaque, have a black point in their centre, which usually disappears as they enlarge." (4) This "black point" as seen by the naked eye, is a collection of elementary granules when viewed under the microscope. (5)

We see, then, the correspondence between the cell development which precedes the formation of normal tissue—the elaboration of tubercular matter—and the production of pus. The cells, which by apposition or super-imposition, in contact with a living body, become themselves converted into a similar body, for the most part originate in nuclei or cytoblasts, which are formed of an aggregate of minute granules. These cells possess nuclei, which like the parent granules, are invested with a cell-forming property, and (*ceteris paribus*) when it is required of them, pass likewise into a higher grade of structure. Thus simply is an animal organism commenced, and thus is it perpetuated and repaired.

The radical of the development of pus, as I have before stated, is identical with that of the development of a normal cell, and these bodies ultimately differ, only in that, the one wanting the adventitious agency of contact with living tissue, fails to be completed, and retrogrades into pus. It has,

some of them, prone to the morbid action alluded to, and undergo this action externally to the blood-vessels. Hence they are in some degree influenced by the condition and action of the organ wherein they are being developed. If the organ be unduly vascular, from congestion or effusion, the tubercles will generally be of a pink or a deep red colour; if bile be present, they will be stained yellow; if melanotic matter, they will become blackish, greyish, or dotted; if the contiguous parts be gangrenous, the tubercles will acquire a dirty-brown or olive hue.

According to the state of health of the organ also, will the tubercles speedily mature and soften, or remain imperfectly developed and firm for years.

(3) Few lungs, whether of persons who have died of phthisis, or of those who have fallen victims to any other disease, are entirely free from elementary tubercular granules. They are only to be recognised by a good microscope, and in fine sections of the lung. It is sometimes requisite to macerate the portions of lung for two or three days in water, prior to examining them. (Addison.) These granules, unless their number be considerable, in which case they generally proceed to the more perfect stage of primitive tubercle, are productive of no uneasiness to the patient; they offer no impediment to the proper function of the lungs; nor are they recognisable by the most delicate auscultation or percussion.

(4) On Diseases of the Chest, Trans. by Forbes. 2nd edition, p. 276.

(5) We unfortunately cannot watch the process of the formation of tubercle, as we can that of the reparation of tissue, production of pus, &c. But in fine sections of a partially tuberculated lung, the different stages of tuberculization, from single granules, aggregated granules, incipient and fully formed vesicles, commencing and completed maturation, up to softening and disintegration, may generally be recognized by the aid of delicate lenses.

(1) Prov. Med. and Surg. Journal, June 5th, 1844, p. 137.

(2) It is sometimes requisite to distinguish between the formation and the deposition of tubercle. As I have before said, this substance owes its origin to the blood, in which it may be generated and matured and thence be subsequently thrown into any organ or upon any surface. But it more commonly happens that those elementary granules which pass from the blood for the purpose of reparation or growth of parts, are,

up to a certain point, all the capacity for further development which belongs to a colourless blood corpuscle, and like a germinal cell, possesses granules from which other cells might arise, but these granules, with their envelope, become inert and powerless, through the absence of that extraneous vitalizing action which is necessary to their perfection.

The granules which form tubercular matter, are not to such an extent capable of being influenced by the functions of the tissue with which they may be in contact. They aggregate and develop themselves into a spurious cell, which advances no further, under any circumstances, towards a resemblance of natural structure. The ultimate cause, then, of the formation of tubercle, would appear to consist in an altered action of those granules which are the elements of every structure, both healthy and morbid.

This primitive tuberculous substance, though incapable of any direct approach to organization, is not, strictly speaking, an inert body; it is semi-organized,⁽⁶⁾ and retains some portion of that low vitality with which it was impressed in its rise and progress from a few aggregated granules. In this consists its dangerous and destructive tendency. As I have before said, the elements of tubercle (granules) may remain in the lungs *ad infinitum*, and neither the patients suffer from them, nor physical diagnosis be able to detect their presence; and frequently, indeed, the vesicular tubercles will continue stationary for years, and though obstructing respiration in the portion of lung containing them, may not excite in it any inflammatory action, nor themselves undergo any further change.⁽⁷⁾ Too often, however, these semi-organized bodies, with their low vitality, perpetuate the action to which they were indebted for their origin, and in consequence pass on to an alteration both of structure and composition, and become matured tubercles, at which stage all vitality and all organic power leaves them.^(8.)

This maturative action is, for the most part, performed by the constituents of the tubercle, *per se*, though it is in some measure no doubt dependent upon the connexion of the tubercle with a living body. It never takes place in the dead subject, nor, if vesicular tubercle be removed from its site, can any artificial process induce in it the action which is essential to maturation. I have subjected this tubercle, both in its solid and fluid state, to every variety of spontaneous and chemical destruction, without having in any one instance observed an approach to that action, or to the result of it, which in the living body is the necessary forerunner of tubercular softening. Primitive tuberculous matter, in its solid state, undergoes decomposition out of the body with singular tardiness. Often, indeed, it will scarcely decom-

pose at all. I have specimens by me at this moment, which are perfectly sound and free from change, though they have been kept without any precaution for nearly five months. Even when *in situ*, it is not uncommon to see the pulmonary tissue of a dead subject sinking into putrescence around these tubercles, themselves either being unaffected, or only commencing to decay. I have frequently seen the more solid varieties of primitive tubercle, floating unchanged in the liquid products of decomposition. And when vesicular tubercle does decompose, it undergoes no alteration of composition, or of appearance, beyond that which any simple albuminous matter suffers in the process of decay. But the action of tubercular maturation, in the living body, is a very different thing. From having been simply and entirely albuminous, the tubercle has become more compound in its nature. It now contains a notable, but a variable, proportion of fat; occasionally gelatine; and its albumen, instead of being homogeneous-looking, has acquired an irregularly granular, and massy appearance, and sometimes seems to have made an approach even to a fibrous structure. The action necessary to this change has no analogue in any process of decomposition with which we are acquainted. It is (within certain limits) to all intents and purposes an organic action. It is, perhaps, as low a form of organic action, as we are acquainted with, but it is plainly an offspring of forces, which are beyond those that are merely chemical and physical.⁽⁹⁾

The formation of fat from albumen, in the living body, consists in the separation of twenty-six equivalents of oxygen from the elements of the albumen, for every one hundred and twenty equivalents of carbon deposited as a constituent of the fat.^(10.) This chemical process is, nevertheless, under the controul of vital action, for it is not capable of imitation, with the same results, in the laboratory. This part of the change which tubercle undergoes, in passing from a primitive to a matured state, is not, therefore, *merely* chemical?

The formation of gelatine from albumen (protein), on the contrary, is a process of oxidation—the reverse of the process by which fat is generated from the same source—so that the element *given off* in the one instance, is that which is *appropriated* in the other. We can readily then, imagine both transformations going on at once. But in representing, by appropriate formulæ, the conversion of protein into gelatine, we are obliged at the same time, to admit also, the formation of water, carbonic acid, and ammonia. Were the mutation effected in the laboratory, these must necessarily be the results. But as we have no proof that they occur in the process of the maturation of tubercle, or rather, as we have sufficient proof that they do not occur, we are bound to conclude that the chemical action which converts the albumen of tubercle into gelatine, is, to a certain extent, regulated and controlled by vital forces.

The almost fibrinous appearance, which the albumen of matured tubercle often presents, is a further proof that the process of maturation is, to a certain extent, organic. In the cow, indeed, matured tubercle is often almost entirely composed of concentric fibrinous layers. And it has occurred to me to observe, with scarcely an exception, that the nearest approach to a fibrinous structure in tubercle, is when, in individuals not seriously diseased or emaciated, inflammation of the tissue containing the tubercular deposit has been the

(9) Thus, we often see tubercles, (especially those of the mesentery) completely matured in the centre, whilst their circumference continues solid, entire, and unchanged. And until the process of softening has commenced, we discover no evidence, either in the matured tubercle, or in the contiguous tissue, of any chemical or decomposing action. No liquidity, no disruption of parts, no fetor, ammoniacal or sulphurous; though some, or all, of these signs of decay, are met with in softened tubercle.

(10) It is not improbable that the process which converts the albumen of tubercle into fat, is analogous to that which promotes the fatty degeneration of arteries, &c.

immediate cause of death. On the contrary, in subjects of depraved habits, who die lingeringly of phthisis, matured tubercle displays little or no tendency to a fibrous state.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c., Translated with Notes Illustrative of some important doctrines in Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

(Continued from page 358.)

CASE VII. Marie G—, the mother of several, children had reached her 45th year without experiencing any illness of moment, but two of her children had died of convulsions, thus indicating an unfavourable hereditary nervous predisposition. She was admitted in October 1834, into the *Hôtel-Dieu* for an attack of inflammation of the lungs. At the end of 16 days she is convalescent, when learning that she had had some losses in business, she becomes thoughtful, agitated, and can get no sleep. Her ideas are confused. Next day her delirium breaks forth; it presents a curious jumble of the gay and the melancholy; at one moment she fancies herself in the midst of dead bodies and serpents, at another that she is walking in delightful gardens, &c. She was sent to the Salpêtrière on the 7th Nov.

Her delirium and agitation are so violent that it is necessary to keep on the waistcoat continually. The strong revulsives, and sanguineous depletions indicated by the high state of congestion of the face produce no effect till towards the 7th day, when some intervals of quiet occur, and the delirium seems somewhat less extravagant. On the 12th day the furor recommences, and the nurses observe that the patient abandons herself to excessive masturbation, which she endeavours to persevere in although her hands are confined. In spite of all remedies, the furor and other symptoms persist with the same intensity for 17 days, and death takes place in the night on the 9th December.

Autopsy.—The skull is white, thin, and uninjected, the dura mater adhering in several places especially near the median line. The arachnoid and pia mater are injected but without adhesion or thickening. On raising them from the convolutions, I find the whole external surface of the brain of one scarlet blush; incising the cortical substance of each convolution, it has a red appearance like muscle; it is firm and the hues are varied in the lateral convolutions with some greyish lines mingled with points of ecchymosis, but elsewhere, it is throughout of a uniform red.

This occurrence is rare, as in all the instances of cerebral inflammation I have witnessed, I have almost always found a variety of shades of colour in the lesions of the cortical substance. The white substance presents traces of an analogous congestion in all its parts; at the superior part of the ventricles, some patches of it are violet colour; its consistence is firmer than usual; its vessels are gorged with blood, which springs up in drops over the incised surfaces. The ventricles and other parts of the brain participate in the general state of injectedness.

Externally the cerebellum is unusually red, and this tinge extends, and is more decided in the *arbor vitæ*. Though usually soft, it is very firm, and seems red and swollen. There are a few bands of adhesion in the thorax between the pleuræ and lungs. The heart and the other viscera are natural.

Reflexions.—We have in this case a striking example of cerebral irritation in the highest state of acuteness terminating in its first stage, and without time being allowed to pass through further stages. We might even say that the case was

(6.) "Tuberculous matter cannot be regarded as an adventitious tissue." Hodgkin's Lectures, vol. 2, p. 156.—Lugol considers tubercle to be an organized matter, and capable of nutrition. Lectures by MM. Bennett and Guet, Medical Gaz., Sept. 24th, 1841.—Dr. Kingston even asserts that they are vascular. Medical Gaz., Nov. 26th 1841.

(7.) Louis met with several instances of death from phthisis in which the tubercles were all found to be in the granular (primitive) stage. I lately examined the body of a female, ætat. 30, who during the last ten years of her life, had suffered from valvular disease of the heart. Throughout that time she had been troubled with a constant cough, and other phthisical symptoms. In the superior portion of each lung, primitive tubercles were found in abundance; in the middle and inferior portions they were scattered more sparingly. But not a single trace of matured or softened tubercle could be met with; there was no cavity in the lungs, nor any sign of inflammatory action, either recent or remote. The *post mortem* was conducted by Mr. Carter, house-surgeon of the General Dispensary in this town.

(8.) "I believe that a crude tubercle owes its solidity to that which, for want of a more definite expression, I shall style a particular, but unexplained mode of vitality, from the loss of which it passes into a grumous or softened state."—Hodgkin's Lectures, vol. 2, p. 158.

one of true inflammation terminating in its period of *crudity*; and hence we find the consistence of the brain augmented, whereas had the disease lasted longer, the period of decomposition would have inevitably arrived.

The character of inflammation in all organs where cellular tissue abounds is the same, and the brain in this particular, is subjected to the same common law.

Another point that deserves remark, is the manifest coincidence of masturbation and the traces of irritation, so strongly marked in the cerebellum—a fact which bears out Gall's ideas in reference to one of the special functions of this portion of the brain.

CASE VIII.—Marie C—, a female servant, of weak constitution, was admitted into the Hôpital de la Pitié, suffering from intestinal inflammation. She was advancing in convalescence, when, without any apparent cause, in the night of 23d August, she became delirious, with great restlessness, vociferations, and complete incoherence of ideas. She was sent next day to the Salpêtrière. She is calm, but morose on admission, and impressed with the idea that she is going to die. Her ideas are wild, and she seems to labour under the extreme of discouragement. This state continues till December, with alternations of returning reason, and concentrated delirium; but her strength is visibly declining.

On the 10th December, she obstinately refused food. She is now fixed on one idea—that of leaving the Hospital. Broth is given, by means of the tube, every morning and evening. On the 20th she is no longer able to stand upon her feet; she is restless, utters cries, and tries to run; but her limbs fail her and she falls. On exploring the chest, it is found to be dull on both sides, but there is no expectoration, no rale, no pain, and the pulse is nearly natural. The debility increases; the broth is vomited invariably after injection; she refuses all sustenance, and dies, during the night, on the 26th December.

Autopsy.—The skull is thick; the diploe, at the back of the head, is of unusual thickness, and filled with blood—a circumstance which, from its rareness, deserves remark.

The meninges seem to be natural; the pia mater is easily detached from the cortical substance. On exposure, the brain manifestly presents a general rosy hue. The convolutions are large and deep, and their anfractuosités, free from any adhesion, contain but little serum.

Examined internally, the cortical substance seems redder, and more bloody; it is tumefied and thickened, and on cutting it, large drops of dark blood ooze out from the divided capillaries. The middle layer of the cortical substance is of a brown hue, and is ecchymosed in certain places, especially in the posterior convolutions of the brain.

The white substance generally is injected with blood, giving to it a clotted, dirty-greyish aspect. In this general state of phlogosis of both the cortical and medullary substances, their consistence is obviously augmented; instead of softening under the touch, as is usually the case, the nervous matter tears off in long slips. This unusual phenomenon is, perhaps, attributable to congelation, as the thermometer was more under the freezing point the night of her death, than it had been during the whole year; the cerebellum participates in this firmness. The ventricles contain but a little serum.

Both the lungs are hepatized; the hepatizations are greyish and spinous at their bases. The heart is small, discoloured, and appears to be empty of blood, as are also the principal arterial trunks. The stomach is shrivelled and contracted; its membranes transparent and almost white. The fasting had been absolute for the last seven days of her life. The rest of the viscera were natural.

Reflections.—There are several very remarkable lesions in this case, but those of the brain are more especially interesting, as regards their relation to the progress of the symptoms observed during life.

First, we find in the brain, a general and peripheric phlogosis of the cortical substance, and a very decided injection of the whole of the white

substance. I consider that the general debility was the cause that prevented these lesions from assuming a real inflammatory form, and on this account must I also regard both the symptoms and cerebral lesions as characterizing a subacute mania. The cerebral hyperæmia was limited to a state of phlegmasia, almost latent from the excitability of the brain, and the strength of the patient not being sufficient to give rise to a vigorous reaction. But the high sanguineous congestion, and especially the tumefaction and sanguineous redness of the interior of the cortical substance, indicate, clearly enough, the traces of the alteration to which we must attribute the symptoms of maniacal delirium.

Secondly, these symptoms and lesions are suddenly interrupted in their progress by the complication of an attack of acute pneumonia, which arose from the patient exposing herself to cold during her excitement. This new disease began to be manifested six days before death, but unaccompanied by external reaction, fever, expectoration, or alteration of the pulse.

Here, again, we find the same causes that rendered the cerebral phlogosis indolent—the anterior weakness and wasting of the patient.

Thirdly, the shrivelled and contracted state of the stomach indicates a profound lesion of that viscus. We may here ask if this state be the cause or the effect of the obstinate refusal of food? can we admit that the stomach was the seat of an irritation, of which the traces disappeared through the effect of the pneumonia? or is the shrivelled condition of the stomach to be attributed rather to the disease of the brain? These opinions might be maintained either way. We incline to explain it by the effect of a cerebritis on the stomach, and perhaps by a lesion of the pneumo-gastric nerve; moreover, the abstinence itself must produce disorder in the walls of the stomach, differing greatly from what would result from sanguineous congestion. These ideas receive some confirmation from the state of vacuity of the heart, and large blood-vessels from the blood.

CASE IX.—A Professor of College, in high repute as a linguist, of feeble constitution, continually occupied in laborious scientific researches, and with a largely developed brain, had, during the space of nine years, experienced three attacks of mania, from which he quickly recovered each time.

In the month of June, 1841, he had a fresh attack of acute mania, presenting all the symptoms of violence and fury, and persisting in the same degree of intensity for a week. On the eighth day, the restlessness is not so great, but symptoms of tetanus and convulsive tremor are observable; he dies during the night.

Autopsy.—The skull is thick, eburnated, and injected; the membranes of the brain are healthy. On exposing the convolutions, they are found to be red, and seem swollen. In the interior, the cortical substance presents a vivid red appearance throughout its middle layer, which, nevertheless, is solid, but thick, and resembling muscle. This inflammatory phlogosis is observed over all the convolutions, and even in the corpora striata. The white substance appears to be healthy; its whiteness and consistence natural. Nothing remarkable in the other cavities.

Reflections.—This case is curious, as presenting a supracute alteration of the white substance, without any other complication. As in the cases already narrated, the cerebral periphery is here the focus of an irritative process of congestion, which betrays itself externally by an explosion of mania. Its progress is so rapid, that it reaches the inflammatory state on the eighth day; after this, the disease puts on a new aspect. A deceitful calm occurs, and then the fatal symptoms, tetanus and convulsive movements, take place. Had the disease not terminated so soon, the cortical substance would have become the seat of inflammatory phlogosis, which at first gives to it a greater degree of consistence, and then passes into the state of decomposition and softening.

It may be presumed, that in the three first attempts, the peripheric irritation of the brain had been dissipated by the treatment, but that the organ retained its fatal predisposition. In the

last attack, the irritation was developed too vividly to be arrested in its progress.

The facts just narrated, and which may be observed at any time, when by a sustained and constant attention, the observer has made himself familiar with the difficulty of investigations of this nature, will suffice for the present to establish the anatomical characters of the cerebral lesions in mania, and their bearings on the production of cerebral derangements.

In each of the two substances composing the brain, the white and the grey, the acute alterations present a different appearance.

ON THE EXPANSION OF VENOUS BLOOD.

(To the Editor of the "Medical Times.")

SIR,—In order to show the importance of exact individual investigation, I will lay the following case before your readers:—On the 8th of last January, Dr. G— was suddenly seized (after great mental excitement) with most violent palpitation of the heart, and congestion towards the head, which might have been easily mistaken for apoplexy. The vinegar fomentations applied to the head, smoked after a few minutes, and were then renewed as often as possible. The bodily and mental weakness and exhaustion being extreme, blood-letting was not performed, but a blister was put on the chest, and the horizontal position, with low diet, was ordered. The digestive organs seemed peculiarly weakened, and greatly disposed to flatulence. The slightest effervescent substance was able to reproduce the above violent vascular irritation. He was, formerly, an habitual smoker, finding no injury from five to six cigars a day, but when he tried now to smoke one light cigar, after a few puffs, he was very nearly fainting. His pulse sometimes fell as low as 66 per minute, and at other times it rose to 80 or 90. It must be observed, that the gentleman is about forty years of age, and suffered great losses of blood about fifteen years ago, when he was unnecessarily, as his medical attendant confessed to him bled twelve times. The question now arose, what treatment was really indicated? that is to say, which was the system primarily affected? He consulted, after a few days, three different friends, and obtained as many different opinions, with respect to the source of his complaint. Being a member of the legal profession, and, in consequence, a sceptic, he would not submit to any treatment, unless its rational method was clearly demonstrated to him, particularly after having had the above mentioned misfortune of once suffering from medical ill-treatment: one opinion was, that thoracic and general plethora was the pre-disposing cause of the evil, and that venesection ought to be employed; the second was, that the evil proceeded from weakness of the digestive organs, because the slightest flatulence reproduced these violent attacks, and that stomachic tonics ought to be applied. The patient, very probably, expressed himself more explicitly to me (being a countryman) than to his former advisers, and, after minute examination, I certainly found a thoracic and general vascular orgasm existing, with great digestive weakness, in accordance with the opinions already given; but I considered these symptoms as secondary only, and declared the expansive and irritated state of the portal system as the sole cause of all the above phenomena. When I told him that I would prescribe no stomachics, no quinquina, he immediately replied, that when, in former similar morbid states, quinquina and bitter remedies were administered to him, quinquina seemed to increase the excitement, and the bitter remedies the gastric symptoms. I must not forget to mention, that he also suffered from great bodily anguish whilst under the influence of these attacks. According to the view I took of his disease, I considered sulphuric acid, in the form of elix. of vitriol, as the fittest remedy to counteract, by its astringent properties, the plethoric venous state: and I prescribed it in the following manner, with some other remedies, tending to tranquillise the secondary nervous erethism, and to promote the function of the

stomach, skin, and kidneys, (for the specific gravity of the urine was below its usual standard, a great quantity of pale urine being discharged):—

R. Rad. valer. 3ij.
Rad. ipecac. grs. viii.
Fiat infus. ad 3vi.
Addc. aq. laurocer
Spir. nitr. æther. aa. 3ij.
Elixir vitriol. 3iss. et
Syr. rhei 3ss. M.

A dessert spoonful to be taken every two hours. Besides this, I ordered general frictions with horse-hair gloves, substantial food in small quantities, and gradually increased exercise in the open air, without regard to weather. The consequence of the above treatment was an unmistakable increase of strength, and a gradually rarer occurrence of the above described attacks; he is now able to walk from his residence in the country to his office in town (a distance of three miles) without feeling any fatigue, and two days ago he risked to eat the cold fat of some meat, after having made a hearty meal of the lean part, and, to his agreeable surprise, he found no inconvenience to arise from it, so that he may now be considered as perfectly recovered: a recurrence of the attacks might be feared, if they had not disappeared by little and little. The favourable result of the sanguineo-tonic treatment shows how injurious the apparently indicated antiphlogistic method would have been, for I ascribe the predisposing cause of his attack to the irreparable loss of vital juice, which he suffered 15 years ago, and seize this opportunity of expatiating on the great importance of the slightly estimated venesection, so often used as a *pont aux âmes*. For every sort of pain is almost sure to diminish momentarily by a venesection (whether indicated or not.) Pain being produced by the re-active power of our organism; by weakening our force, the re-action will, of course, become less perceptible. But does venesection really eradicate any disease except inflammation? Certainly not! In inflammation, the highly agitated blood, with reproductive tendency, must be brought to a collapse; unless we wish a healthy organ to become the seat of abnormal production, and then blood-letting is indispensable; but wherever it is not absolutely necessary, it is highly injurious; for it diminishes the reactive, and thus the healing power of nature. I hope and trust, Sir, that my motive for reporting the above case will not be mistaken. I consider your journal as a sort of general medical society, which makes it the members' duty to mention every interesting fact, tending to prove or disprove certain received notions, or to elicit new practical theories. Nothing, I think, can be more useful to the medical profession and the public at large, than a mutual exchange of observations made at the sick-bed. For notwithstanding the numerous genera and species of diseases already classified, a great many abnormal states occur in the organism, which have no peculiar name, and belong to no peculiar division; their treatment, therefore, must be perfectly special, and cannot be classed under any general principles. Apologizing for having taken up so much valuable space with my imperfectly expressed remarks, I have the honour to remain,

Your most obedient Servant,
SIGISMUND SUTRO, M.D.

3, Great Marlborough Street,

ANEURISM OF THE ASCENDING AORTA.—At a meeting of the Birmingham Pathological Society, Dr. Blakiston exhibited a sacculated aneurism, arising from the right side of the ascending aorta of a female 39 years of age. It had made its appearance at the surface of the chest, to the right of the upper third of the sternum, three years ago; and two years since it had attained a very large size, when it was reduced almost to the level of the chest by cold applications and other suitable treatment. Subsequently, tubercles having been detected in the upper half of the right lung, which had been compressed by the tumour, and ulceration having established an opening which would admit the passage of a crow-quill between the aneurismal sac, and a tubercular cavity, fatal hæmorrhage ensued.—*Provincial Medical Journal*.

PROGRESS OF GERMAN SCIENCE.

(From our Correspondent, Dr. MUSPRATT.)

Liebig's Sixth Lecture.—Benzyle series of Compounds.—Benzoic acid can be procured in a variety of ways, as it is found ready formed in a number of resins, one of which, the benzoin, contains it in considerable quantities. It may be extracted from the benzoin resin, by boiling with potash, and decomposing the benzoate of potash formed by a mineral acid; but the greatest quantity is obtained by heating to ebullition the powdered resin mixed with hydrate of lime—a readily soluble benzoate of the earth is produced; the solution is to be filtered, and after being concentrated, the benzoic acid will precipitate on the addition of muriatic acid. It can also be obtained in beautiful needle crystals from the resin by sublimation, but the quantity yielded by this process is extremely small. It is a very important compound, inasmuch as we know more of its properties than of any other organic acid,—and it is of such a stable nature, that we may pass it through a tube heated to incipient redness, without its undergoing any decomposition. When pure, it is colourless and inodorous, but it gives off, when heated, an empyreumatic smell; it reacts slightly acid to litmus—is scantily soluble in water—but dissolves pretty readily in alcohol and ether. The volatile oil of bitter almonds, (hydruret of benzyle) which is prepared by distilling laurel leaves, or bruised bitter almonds, with water, when allowed to stand exposed to the air, is gradually converted into benzoic acid by the assumption of two atoms of oxygen:—

Hypothetic radicle.
Oil (Wöhler) = $C_{14}H_6O_2$ or $(C_{14}H_5O_2) + H$
Acid..... = $C_{14}H_6O_2 + O_2$

This change is very singular, when we consider that it is volatile oil yielding an organic acid. The hydruret of benzyle, obtained by distillation, always contains portions of hydrocyanic acid; but this does not belong to its constitution, as it may be abstracted by re-distilling with water, perchloride of iron, and lime. When the oil is treated with chlorine, hydrochloric acid is formed, but only one-sixth of the hydrogen is taken away, even when submitted to the action of this gas for a long time. The resulting compound is chloride of benzyle:

Hydruret of benzyle.. $C_{14}H_5O_2 + H$
Chloride of benzyle .. $C_{14}H_5O_2 + Cl$

The hydrogen may, in like manner, be replaced by cyanogen, bromine, iodine, sulphur, &c., giving compounds of an hypothetical radical with these electro-negative bodies. We may also consider such compounds as anhydrous benzoic acid, in which oxygen is substituted by different equivalents of chlorine, cyanogen, &c.

Thus:—

Benzoic acid (anhydrous) = $C_{14}H_5O_2 + O$
Chloride of benzyle „ $C_{14}H_5O_2 + Cl$
Cyanide of benzyle !.... „ $C_{14}H_5O_2 + Cy$
Bromide of benzyle „ $C_{14}H_5O_2 + Br$
Iodide of benzyle „ $C_{14}H_5O_2 + I$
Sulphuret of benzyle.... „ $C_{14}H_5O_2 + S$

But, if this be the case, the chlorine, cyanogen, &c., must be capable of being replaced by oxygen, and this really takes place when the chloride of benzyle is distilled with potash,—chloride of potassium and benzoate of potash being formed.

Now, if $C_{14}H_5O_2$ be a true organic radicle, it may also be combined with other bodies, and this we find to ensue when the chloride of benzyle is saturated with ammoniacal gas.

$C_{14}H_5O_2 + cl. + NH_3 =$

Chloride of benz.
 $C_{14}H_5O_2 + NH_2 + HCl$

'Amide of benzyle,

Amygdaline is a principle contained in the bitter almond, and may be obtained according to the following process:—Take blanched bitter almonds, and press them with force between warm iron plates, in order to remove the fixed oil; then, by treating the residue successively with portions of alcohol and ether, and then evaporating at a moderate heat, the amygdaline presents itself in crystals.

This body, when treated with the white matter from sweet almonds, gives rise to hydrocyanic acid, sugar, formic acid, and oil of bitter almonds. When, however, a large quantity of amygdaline is dissolved in thirty parts of water, and the emulsion from sweet almonds added, a fermentation is induced; but, on examining the liquor, half the amygdaline only is found decomposed,—that is, only so much oil of bitter almonds is formed as the water is capable of dissolving:

$C_{40}H_{27}O_{22}$

Amygdaline.

I shall now remark, that in all cases where a nitrogenous body is decomposed into two others, one of which is ammonia, the nitrogen must be replaced by oxygen; e. g., in the case of the conversion of amygdaline into amygdalic acid by the action of alkalis.

$C_{40}H_{27}O_{22} + 3HO = C_{40}H_{27}O_{25} + NH_3$

Amygdaline.

Amygdalic acid.

Benzine, which is an exceedingly interesting substance, on account of the numerous components which it is capable of forming, was obtained first, by Faraday, from the condensed fluid of compressed oil gas, and described under the name of tricarburetted hydrogen; but, subsequently, Mitscherlich found that it was formed in considerable quantities by distilling benzoic acid with hydrate of lime.* He gave it the name benzine:—

Decomposition.

1 eq. benzoic acid .. $C_{14}H_6O_4$
Minus 2 eq. carbonic acid } C_2O_4 { which combines with 2 eq. of lime

Gives.... $C_{12}H_6$ Benzine.

It is a mobile liquid, possessing a very agreeable odour, insoluble in water, but copiously dissolved by alcohol and ether. When treated with sulphuric acid, it forms sulpho-benzide, which falls as a yellowish oil on the addition of a large quantity of water:—

$C_{12}H_6 + SO_3$ gives $C_{12}H_5SO_2 + HO$

With fuming sulphuric acid it gives a second compound, which crystallizes and resists a very high temperature; this is the benzo-sulphuric acid, which, with barytes and copper, gives beautiful and well-defined crystalline salts. Its formula is:

$C_{12}H_5 + S_2O_5$

or, it may be regarded as a compound of sulpho-benzide with sulphuric acid,

$(C_{12}H_5SO_2) + SO_3$

Nitrogenide is formed, when benzine is added drop by drop to fuming nitric acid; a very brisk action takes place, and on diluting the mixture with a large quantity of water, an oily fluid of a golden yellow colour separates. This body possesses a sweet taste and an agreeable odour, somewhat resembling cinnamon. The nitro-benzide is not so stable as the sulpho-benzide. It is decomposed by distillation,—is nearly insoluble in water, but dissolves copiously in alcohol and ether. Zinin found, that when it was dissolved in an ammoniacal alcoholic solution, and treated for some time with sulphuretted hydrogen, that Anilene was formed. The following equation represents this decomposition:—

$C_{12}H_5NO_4 + 6HS = C_{12}H_7N + 4HO + 6S$

Nitro-benzide

Anilene

Chloride of benzide, or chloride of benzole, was obtained by Mitscherlich in a crystalline state by allowing chlorine to act upon benzine in the sun. It is somewhat singular, no decomposition taking place in this treatment, as will be understood by glancing at the formula,—6 atoms of the chlorine uniting directly with the benzole:

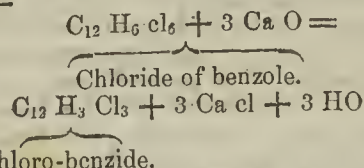
$C_{12}H_6Cl_6$

Chloride of benzole.

Chloro-benzide, an oily fluid, passes over, when

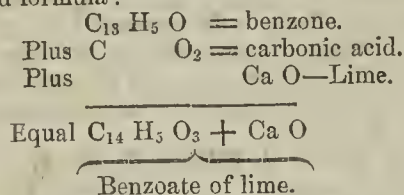
* I very recently distilled two pounds of benzoic acid with six pounds of hydrate of lime, and obtained a nearly colourless fluid, which, on being re-distilled, yielded fifteen ounces of benzine. (Liebig's benzole).—Dr. M.

the former compound is distilled over hydrate of lime,—

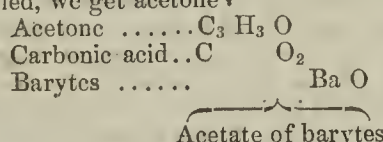


You will find, on studying the equation, that the chloride of benzoic, with lime, is resolved into chloro-benzide, chloride of calcium, and water.

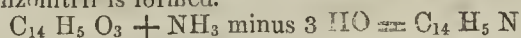
Peligot found, on distilling the benzoate of lime, that an oily compound passed over, possessing the annexed formula:—



Margerone, stearone, &c., are obtained in a similar manner; and when the acetate of barytes is distilled, we get acetone:

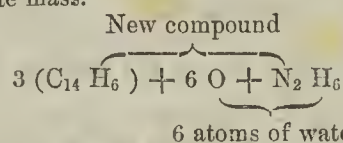


When benzoate of ammonia is distilled by itself, benzonitril is formed.



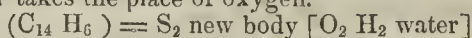
Benzoate of ammonia Benzonitril
which, when treated with alkalis, assumes again three atoms of water—becoming benzoate of ammonia.

The pure oil of bitter almonds gives immediately, when brought in contact with ammonia, a solid white mass.



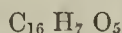
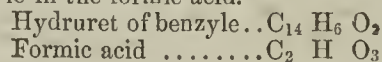
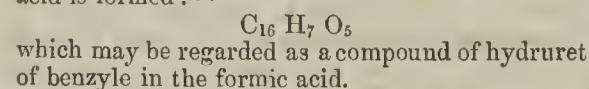
which is not altered by the fixed alkalis; but when the new compound is mixed with an acid, the oil of bitter almonds reappears.

Laurent discovered a new compound by dissolving the hydruret of benzylic (oil of bitter almonds) in absolute alcohol, and treating with sulphuretted hydrogen. In this experiment, sulphur takes the place of oxygen.

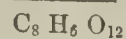
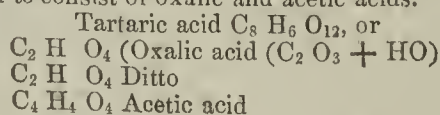


Zinin discovered a body, consisting of the elements of oil of bitter almonds and prussic acid. He obtained it by mixing the hydruret of benzylic with strong hydrocyanic acid, and dissolving in potash-alcohol.

When the official oil of bitter almonds is saturated with hydrochloric acid, the following acid is formed:—



We may infer from the above, that acids possessing high atomic weights may be formed from the combination of one or more acids of a lower atomic weight; e. g., tartaric acid may be supposed to consist of oxalic and acetic acids.



Tartaric acid

Giessen Laboratory, Jan. 24th, 1845.

By SIGISMUND SUTRO, M. D.

Hydrophobia Occasioned by the Bite of a Healthy Horse.—A strong hostler, ætat. 30, never bitten by a dog; but three years ago a healthy horse, to which he was giving fodder, bit him on the left forearm, but the wound healed by itself without

any perceptible scar. Now, after a restless night, the patient was found labouring under all the symptoms of hydrophobia. He did not complain of particular pains, but of inexpressible anguish, by which he was forced to throw himself about constantly, to move the limbs violently, and to scream out incessantly. His consciousness was unaffected, he showed no tendency to bite, and could controul himself sufficiently. The conjunctiva was highly congested; the pupils contracted; respiration accelerated, and difficult; the skin moderately warm and moist. The patient spat frequently, and expectorated a tough, scanty mucus, the pituitous membrane of the mouth being very red and dry. During the whole disease neither stool nor urine was discharged. The pulse was small and irregular; and a bright light increased the patient's anguish considerably. No attempt was made to make him drink, because he asserted his inability of swallowing any fluid. Venesection was not possible on account of the patient's restlessness. He was dead in nine hours after the commencement of the attack. All the organs were found healthy, but somewhat congested; the muscles had a cherry-brown colour.—(*Dr. Floegel in Oesterr. Medic. Wochenschrift.*)

Description of an Easy and Safe Treatment of Intermittent Fever.—The author administered for the last seven or eight months, without any preparation, a single powder (consisting of 3-5 grains of quinine, seven gr. of sulphur. stib. aur. and ten gr. of oleosaccharum cinnamom.) at the commencement of the sweating stage of intermittent fever. In cases in which no perspiration ensues, he administers the remedy when the heat begins to diminish. He was led to adopt this treatment by the conviction, that the disease always terminates with every paroxysm. He considers intermittent fever as a purely dynamical disease of the ganglionic nervous plexus, whilst organic changes, with which it may be complicated at a later period, are only to be considered as consequences. His mode of treatment was successful also in two cases of disguised intermittent fever, appearing as pleuritic pains and headache. The author considers the ganglionic system to be overcharged with vital electric fluid, of which it is discharged by means of the febrile paroxysm through the great isolating apparatus of the anterior branches of the intervertebral nerves. He calls those "isolating apparatus," because they enter into a *ganglion intervertebrale*, thus isolating the organs from the influence of the will and from the cerebral system. The discharge of this surplus electricity, known by the attack of the cold stage, is, therefore, perceived first at those parts of the spinal marrow, from which it is spread over all the body. Heat is the sign of wakened reaction, and perspiration the end of the disease. If, then, the remedy be given at that period, the disease is not thereby suppressed, but its recurrence prevented. The author also employed pepper in some cases with success against intermittent fever. The author does not take notice of gastric, bilious, or rheumatic phenomena before the fever be removed. Only when the tongue is strongly furred, and sickness present, he administers an emetic before the quinine. The above powder is proper for a child eight years old: under that age smaller doses; but never less than two grains. Whether from four to five grains of hydrocyanate of iron ought to be preferred here (*Zollkofer*) to quinine, he cannot judge, having never tried this preparation. A young lady who had been seized for a long time with a fever paroxysm every 21st day, when menstruation always ensued with the commencement of the hot stage, was cured among others with a single dose of the above powder, after having uselessly taken a great many other remedies. From the 20th December, 1843, till the middle of January, 1844, the author again cured, with this remedy, 15 patients suffering under quartan fever.—(*Dr. Wehrmann in Medic. Zeitung Russland's.*)

Observations on Sea-sickness.—Since neither vomiting, nor nausea, are constant symptoms of sea-sickness, the author proposes to substitute the name of "morbus maritimus" for that of "vomitus maritimus." He considers the complaint as a *somatic neurosis*, because it always shows

a topical tendency. The usual symptoms are, nausea, vomiting, and subsequently weakness and nervousness. Children are either not attacked at all, or only very slightly. Men of dark colour and rigid fibre suffer less than youths of dark skin and hair. Those are most subject to the disease who are fair, of lax fibre, and venous constitution. Persons weakened by previous diseases are by no means predisposed to the disease, as Adanson asserts. Short-sightedness does not protect against sea-sickness. Dogs, swine, and sheep are also occasionally seized by it. The heaving of the boat is the cause of the complaint. This heaving is exactly analogous to turning round, intoxication, or pressure on the brain; the n. vagus is, therefore, chiefly affected. In moist and cold weather, the complaint is more obstinate than in dry and warm weather. First, heaviness of the head appears, dejection, melancholy; then the head turns hot, the face reddens, nausea appears, then vomiting, after which relief is felt. Obstruction is a constant symptom, and even with a quantity of different purgatives, the author could not produce any stool for eight days, till the cessation of sea-sickness, when evacuations ensued spontaneously. If no vomiting takes place, obstruction is more obstinate, and likewise all the other symptoms. In the torpid form, the head is more affected, and the nausea remains almost without intermission. Chilliness, cold, suppressed function of the skin, and exhaustion accompany this form. The appetite is not impaired; on the contrary, some relief is felt during meals. But, with the process of digestion, suffering recommences. Horizontal position operates beneficially, particularly if the functions of the skin can be promoted. The urine is generally dark, but sometimes clear, milky or yellowish-white; particularly if the patient feels pain in the renal region from a continuance of the recumbent position. Pulse is generally slow and weak. As prophylactic remedies, the author recommends purgatives or clysters. He advises to indulge the tendency to sleep, (which generally appears at the beginning) in a cool place. He found the following very beneficial against violent vomiting. R. Empl. arom. Ph. B. 3j, camph. pulv. 3ss., op. pur. 3ss. ol. menth. pip. gutt. xii. M ft. emplastr., to be applied to the stomach: or friction, with ol. hyos. coct. 3ii. op. pur. 3j., ol. menth. pip. 3ss. bals. nuc. mosch. 3ss.: or repeated sinapisms, and internally, tinct. thebaica with aromatic water: against strong headache he recommends bandages round the forehead, and fomentations of vinegar or dripping of spir. vin. rectific. on the head. The advantageous results of sea-sickness are, that complaints of the chest are sometimes removed or ameliorated; disadvantageous; digestive weakness occasionally remaining, emaciation and tendency to plethora.—(*Dr. Coppenhagen, ibidem.*)

On the apparent Combinations of Hydrogen, with Iron, Bismuth, and Sulphuret of Arsenic; by Dr. Schlossberger and Dr. Fresenius.—Dupasquier has described a hydruret of iron, and Meurer a hydruret of bismuth. The authors found that both combinations did not exist. If great care be used in washing the gas, developed by the action of acids upon iron, bismuth, or zinc, no trace of iron or bismuth is obtained either by combustion of the gas, or by passing it through various astringent decoctions. But iron sometimes yields hydrogen gas, containing phosphuretted or sulphuretted hydrogen and hydruret of carbon. The phosphuretted hydrogen, under certain circumstances, when lighted, may impart spots to porcelain, which yield sulphuric or phosphoric acids when boiled with nitro-muriatic acid. The phosphuretted hydrogen is almost invariably mixed with sulphuretted hydrogen: on this account if the hydrogen procured from iron, be passed through a solution of bichloride of mercury, a precipitate is obtained, consisting of sulphuret and phosphuret of mercury, with a chloride of that metal. The supposed combination of bismuth and hydrogen, seems to have been a hydruret of antimony. Meurer's assertion—that sulphuret of antimony and sulphuret of arsenic are soluble in hydrogen gas, is also corrected by the authors. They found, that in the case described by Meurer, sulphuret of antimony and sulphuretted hydrogen

are simultaneously developed, and that during combustion, the sulphur, separated during cooling, combines anew with the separated antimony to form sulphuret of antimony. Thus, if the gases are passed through a heated tube, a yellowish-white colouring of sulphur is obtained first, and when the temperature is raised, a black colouring of antimony. If still greater heat be employed, sulphuret of antimony appears as a secondary product, in consequence of the sulphuretted hydrogen acting on the deposited antimony. If the mixed gases are passed through caustic potash, sulphuretted hydrogen remains in it, and pure hydruret of antimony leaves the washing bottle; the spots which the latter yielded, when lighted, were purely black without a trace of sulphur, the latter being entirely absorbed by the potash. To attain undoubted certainty, the authors also proceeded in a synthetical method. They passed sulphuretted hydrogen (developed in a particular apparatus) and hydrogen charged with hydruret of antimony, through different tubes into a three-necked phial, and caused the mixed gases to stream from the tube which was adapted to the third opening. When lighted, they deposited on porcelain the most beautiful orange-coloured spots of sulphuret of antimony of different degrees of colour, according as the gas consumed, was sulphuretted or, stibiuretted hydrogen. The authors obtained perfectly analogous results as regards sulphuret of arsenic.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 30th, 1845.

Academy of Medicine—Sitting of the 28th of Jan. M. Caventou in the Chair.—The Chairman informed the Academy that two members, Drs. Ribes and Virey were ill, and commissioned Dr. Réveillé Parise, to call and enquire, in the name of the members of the Academy, concerning the health of these two colleagues.

Dr. Capuron read a report on a memoir on the obesity of the funis, by Dr. Hamel de Lannion. Thanks were voted to the author, and his name inscribed on the list of correspondents.

On the Inutility of Sanatory Measures against the Plague. By Dr. Rochoux, M.A.M.—“M. Hamont, in a memoir lately read, stated that our sanatory laws ought to be modified, not abolished; but in my opinion it would be far better to suppress them altogether. Contagious diseases are of two kinds. First: those which, like variola, syphilis, hydrophobia, glanders, vaccine, pustula maligna, &c., are propagated by a virus, so active that the slightest portion of the deleterious agent develops the disease, with as much certainty as when a great quantity is made to act at the same time; and secondly: those, like typhus, which, though capable of being communicated by the medium of the morbid principle they develop, have, nevertheless, their origin in miasmata, or, in other words, infection. In this class may be placed the plague, nosocomial, and camp fevers, &c.; for wherever they exist, infection reigns. Two months ago, M. Hamont placed this beyond a doubt as to the Delta of Egypt, and at a later period as to Tanta. He showed likewise with what facility the miasmata exhaled from pestiferous persons are dispersed in the air; and proved, by numerous examples, that *post-mortem* examinations of individuals who died of the plague, may be performed with impunity in the open air, whereas this certainly could not be done with variola, if the operator was disposed to contract that disease. The principle which produces typhus—and this fact must be repeated loudly and repeatedly, since a deaf ear is turned to the subject, whose power has been erroneously exaggerated, acquires an increased activity by concentrating, by uniting several sick persons in the same spot; and, on the contrary, is easily destroyed by dispersing them, and having recourse to free air, great cleanliness, and ventilation. At all events, its action, far different from that of a virus, is in proportion to its dose. This was seen in 1814 and 1815 in Paris, and upwards of twenty or thirty times in

different parts of Europe, during the wars of the republic and the empire. Now, since nothing indicates that the plague is more contagious than typhus, there is no reason why sanatory measures should be employed against one rather than the other, especially when M. Hamont, confirming the remarks of Pugnet (1) mentions that it is limited to certain localities, absolutely like the different species of typhus, for instance that which reigned in Barcelona in 1821, or in Spain, or the United States. But it may be said, the plague was brought to Marseilles by the vessel commanded by Captain Cartaud. To this it may be replied, without respecting the dream of his Sardinian Majesty, that from the report of Didier, the plague was in Marseilles previous to the arrival of the said vessel. (2) At Barcelona, where the typhus amarilla reigned in 1803, (3) and in 1804; (4) its re-appearance preceded four months, the arrival of the convoy from Havannah. (5) Concluding from these as to the validity of its importation in the other cases, but little importance need be given to the minor details of anecdotal etiology, by which M. Hamont endeavours to prove that, contrary to the opinion of Dr. Aubert Roche, (6) the plague could be developed after eight days incubation. This gossiping, too long by far, and whose insignificance, scientifically speaking, equals, at least, the quarantines imposed on the pupils of Abouzabel, and voluntarily performed by the Franks (7) ought to be considered of less importance than facts which, as will presently be shown, from their authenticity and worth, are deserving of our serious attention.

“M. Hamont, notwithstanding his dislike for all generalities and every thing resembling them, does not always refuse to employ them; thus he states that the plague reigns in Egypt every tenth year: now this period will, ere long, arrive, so as to verify or refute this fact. In the mean time, it may be stated that the medical committee stated on the Barcelona epidemic, “That people ought to dread a scourge which has ravaged a portion of Spain, and which will always remain there.” (8) Now what has experience taught us? That for the last twenty three years, the disease, as if to prove my assertion correct, (9) has maliciously respected Barcelona and all Spain. In general, contagionists are not fortunate, either in their assertions or their predictions. Thus when, by their advice, Government established lazarettos on the summits of the Pyrenees, to prevent the propagation of the yellow fever; the English Government, adopted the same plan as I announced at that period, (10) and ever since, England has persevered in the same line of conduct.

“In France, the partisans of quarantines, consider that the non-appearance of the plague at Constantinople, is to be attributed to the observance of sanatory measures (11), which, had they been better informed, they would have been aware were never observed. (12) We saw the worthy rivals of the Dutch ship-owner, who said, “I

would go with my ship to hell to trade, were it not that I am afraid of burning my sails,” purchase, in 1835, when the plague was at its height, all the cotton of the vice-roy of Egypt, in order to profit by a diminution in the price. At this period, several of the public papers proposed seriously to establish a quarantine on goods coming from England, in order to prevent the propagation of the plague in Europe. (13) They were, however, not listened to, and the public health was none the worse for it. But this is not all. England has reduced her quarantine to fifteen days, voyage included: (14) now what is the result of this measure? Two passengers leave Alexandria on the same day; one *via* England, can, sixteen or seventeen days after sailing, be present at a ball at the Tuilleries; the other, on the contrary, and merely because he embarked on a French packet, would, at that time, according to the present regulations, have to remain fifteen or twenty days longer in the, far from agreeable, lazaretto of Marseilles. In such a state of things, quarantine in Provence, is a complete mystification; it is as if an individual barricades his window, while he leaves his door wide open. What, then, ought government to do? Why, suppress all the would-be sanatory measures, and endeavour to make Egypt healthier by strenuously recommending appropriate hygienic measures. But with the wish to reconcile all things, I have only considered our sanatory regulations useless. Justice and truth might have made me follow Chervin's example, (15) and declare that they are also irrational, absurd, and disastrous to the public health, setting aside the injury done to commerce. But to support this opinion, it would have been requisite to have devoted to it, time which more important affairs have laid claim to. However, I cannot refrain from quoting in favour of Chervin's opinion, the following fact: that the injurious effects of quarantine on board ship, (16) have been recognised and signalled by several distinguished writers, whose opinions have been adopted by M. Hamont himself, since he proposes to suppress quarantines. These remarks would have been read two months ago, had I been permitted. Since then, several articles have appeared in the political journals, speaking of our sanatory laws in words which might lead some persons to suppose that I had taken my arguments from that source, were it not more than ten years ago since I spoke as they do now. (17) Be this as it may, on reading the article published on the 2nd of last December, in the *Journal des Debats*, one would suppose he heard the knell of all quarantine, and, therefore, all serious discussion may be considered as extinct within these walls.

The speaker, after quoting several passages from M. Hamont's memoirs, and refuting them successively, terminated thus: “I cannot but express how much I regret having been obliged to point out the numerous errors contained in M. Hamont's memoir, but minor considerations must yield when duty calls, and the quarantine question is such at present. It is evident that I defend the interests of my country, when it is apparent from official documents, that our sanatory laws cause an annual loss of upwards of £528,000 and that a difference of more than £364,000 between the importations and exportations from countries whose produce is subjected to quarantine, is owing to this system. Finally, the Academy, in consideration of the importance of the subject, will not be surprised at my perseverance, in insisting upon the necessity of reformation in our sanatory laws.”

The Academy was then formed into *Comité Secret*. And now a word or two on the object of this *Comité Secret* which has now lasted upwards of a month, occupying four sittings of the learned Assembly. But before stating what rumour says

(1) Hist. de la Contag. Peste de Damiette, p. 175.

(2) Lassis *Causes des Maladies epid.* p. 242.

(3) Salva, *Segundo año del real*, &c., p. 68. Steva, *Observaciones, medicos y dictamen*, &c., tabla quarta.

(4) Steva, *Op. Citato*, p. 48.

(5) *Manifeste touchant l'origine*, &c., p. 9, Note.

(6) *De la reforme des quarantaines*, p. 85.

(7) Lachèse, *Note sur la Peste, et Bull. de l'Acad.* vol. 1. p. 359.

(8) *Rapport au ministere de l'interieur*, by Drs. Bally, François, and Pariset, p. 2, de l'avertissement.

(9) *Manifeste touchant l'origine &c., de l'Epidemie de Barcelone*, p. 35.

(10) *Journal de Physiologie*, vol. vi., p. 296. *Lettre à M. Raymond*, p. 7. *Arch. de Med.*, vol. xv., p. 353.

(11) *Gazette des Hôpitaux*, 28th Nov., 1843, p. 551.

(12) Bullard, commissioned by the Sultan to organise the sanatory laws in Turkey, informed me that he could never make the persons under his orders observe, even in a tolerable manner, the rules which govern our lazarettos. In this respect, I must confess, they were right.

(13) *Courier Français*, 18th April, 1835.

(14) *Courier Français*, 25th October, 1844.

(15) *Gazette des Hôpitaux*, 6th August, 1842, p. 438.

(16) *Rapport fait à l'Acad. des Sciences*, p. 41.

(17) *Debats*, 13th Nov., 1844. *National*, 19th Nov., 1844.

relative to the discussion, it may not be amiss to mention what gave rise to it. Some time ago, a patient after having been a long while in the lunatic wards of Charenton Hospital, was affected with a disease needing the assistance of a Surgeon, and was consequently taken into the Surgical wards. The case proved fatal, notwithstanding the skill of the surgeon under whose care he was placed, and on his demise, both the Physician and Surgeon claimed the body; the former because the patient had been in his wards a considerable length of time, and had entered the surgical wards but accidentally; the latter because the disease which had proved fatal was surgical, and because death had taken place while the individual was in his wards. Unable to come to a right understanding, a petition was addressed to the minister on the subject, and the Academy was requested to give its opinion. But it appears that the discussion instead of clearing up the question, has complicated it, since it is rumoured, that the physicians of the Academy seek to obtain a vote by which surgeons will be considered as inferior to physicians. This as may be supposed, meets with strenuous opposition from the surgeons, and how it will end it is difficult to say, but it is sad to see persons placed at the head of the profession, instead of living in harmony as they ought, squabbling about such trifles: and supposing a similar case—which perhaps may never occur—at some future time, could not both physician and surgeon be present at the *post mortem* examination, so as to ascertain the precise pathological lesions which caused the diseases?

Paris, Feb. 6th, 1845.

On the Diagnosis and Treatment of Polypi of the Nose.—Mr. H. Damoiseau, one of Dr. Lisfranc's house-surgeons at the *Pitié*, has just published the following remarks, by that eminent surgeon, on this subject. Of the various polypi which affect the nostrils, the mucous are far more frequent than the fibrous, and the errors which may be made in establishing their diagnosis, (not so easy as generally supposed,) may be comprised under three heads. 1^o In some patients, the *septum narium* inclines towards one of the nostrils, so as to form a semi-spherical eminence, red, and easily made to bleed; the mucous membrane is thickened. To discover this peculiarity, the little finger must be introduced into the opposite nostril, when a depression, corresponding to the eminence, will be felt. 2^o A patient suffers from considerable difficulty of breathing through the nostrils, which is supposed to be produced by chronic coryza: this opinion is erroneous, for were it so, why should the coryza exist one day and not the next? Why should it affect in the morning the nostril, which, during the night, was undermost, and disappear two hours after? When ever did coryza disappear two or three times in the course of four-and-twenty hours? Surely, no inflammation would ever present such variability. It is, therefore, rather a sanguineous congestion in which the mucous membrane of the nostrils increases and decreases in size, in a mode somewhat similar to what may be remarked on the cheeks of females at the cessation of the catamenial flux. The effect is a turgidity of the part, of a red colour, with more or less difficulty in breathing, and the voice becoming nasal; this, after lasting an hour or two, disappears. The treatment consists in reproducing any habitual flux, which has ceased, or in restoring it to its ordinary quantity whenever it is less than normal: at the same time refrigerants and astringents must be employed locally. Sometimes a slight cauterization (not of the whole surface), but of about one-third may be very useful. Finally, if it be owing to a constitutional defect, internal remedies may be requisite. In scrophulous children, the same appearance may be caused by a slight sub-mucous œdema, of the parts; this may be combated advantageously by the iodide of potassium, bitters, tonics, and a good diet; slight cauterization here may, also, be useful. 3^o The mucous membrane, opposite to the anterior part of the nasal process of the os maxillare superius, may present an elevation of about two lines, red, bleeding from the slightest cause, and even producing frequent epistaxis. This tumour, very similar to a polypus, is, in all probability, nothing

more than a thickening of the mucous membrane, or of the sub-mucous cellular tissue, produced by an increased accumulation of liquids in the part, since a slight cauterization is sufficient to effect a cure, and that without the formation of an eschar. These remarks are applicable to a species of cherry-like tumour, formed by the mucous membrane of the urethra in females, and which has been more than once taken for polypus of that part; and, likewise, for those of the ear, as the following case is a proof. The son of a cutler had suffered for some time from a disease in the ear, supposed to be polypus. On examination, a red tumour of the size of a nut was discovered at the orifice of the meatus auditorius externus; the attempted extirpation was postponed from the want of an appropriate instrument. The trial, however, caused the tumour to bleed freely, and 48 hours after, it had completely disappeared. Might it not be presumed that in such cases, scarification would be preferable to emollients or astringents?

But admitting the existence of the polypus, established beyond a doubt, how ought the operation be performed? It must never be forgotten, that in general the left nostril is narrower than the right, and that in females sometimes these parts are but slightly developed. In such cases, it is impossible to employ the ordinary instrument, for in so doing, not only the conchæ or the septum may be fractured, but what is far more serious, the cribriform plate of the ethmoides may be injured and fatal accidents ensue. A smaller instrument ought, therefore, to be preferred, the more so, as mucous polypi are not so firmly attached as to need considerable force to remove them. When the instrument is introduced, the polypus, if that be fibrous, is easily felt; but if soft, (and this is far more frequent), in order to ascertain whether it really is between the blades of the forceps, a rotatory movement must be given the instrument, and if it be possible, there is nothing: if, on the contrary, it is impracticable, it may be concluded that the polypus has been seized. In acting thus, the pain produced by the repeated introduction of the forceps, is avoided. When the polypus is deep-seated, the finger, as recommended by Dupuytren, must be introduced into the posterior orifice of the nostrils, so as to push it forwards; it must, however, be done in such a way as to make the diameter of the finger and nostrils correspond, that is to say, the hand must be placed in supination. It is possible with these precautions, to penetrate as far as the union of the posterior third with the anterior two-thirds. Sometimes the velum palati is raised so as to close hermetically the orifice. In such cases, the finger must be kept motionless in the mouth, and in a very short time, the velum will be felt re-descending, and the operation can be terminated. Extraction of polypi is not without danger: the cribriform process of the ethmoides may be injured, and fatal meningitis be the result: it is, therefore, useful to prescribe a regimen more or less severe, foot baths, rest, and inhaling by the nostrils, the vapour of the decoctum althææ officinalis; if a congested state of the parts exist, venesection must be had recourse to. Finally, to prevent a relapse, on the fourth or sixth day, when the inflammatory symptoms have subsided, the parts must, for a fortnight, be touched every second or third day, with a hair-pencil dipped in the following mixture: R. Decoct. vinos. rosæ gall.* ʒj., sulph. zinei. ʒj. M. Should the patient be very excitable, the proportion of the sulphate must, at first, be weaker. The result of its application is considerable irritation, lachrymation, sneezing, sometimes to such an extent, that the patient, in spite of the fear of a relapse, refuses to permit its being applied a second time. Care must be taken not to approach too near the cribriform plate, and if inflammation supervenes,

* *Decoct. vinos. Rosæ Gall.* R. Rosæ Gall. ʒij. vin rubr. lb. ij. Place the wine and rose-leaves in a covered vessel, heat the mixture to near the boiling point, withdraw it from the fire, and allow it to infuse for an hour; finally, filter with expression. Sometimes ʒiiss.—ʒiiss. of alcohol may be added.

appropriate remedies must be prescribed.—*Gaz. des Hôp.*

On the Union of an Oleo-Calcareous Liniment with Carded Cotton in the Treatment of Burns: by Dr. Payan, Surgeon to the Hospital of Aix, Bouches du Rhone.—In September, 1842, the author published in the *Revue Médicale*, two successful cases of burn, treated by this method, since which Drs. Miguel and Espezel have recorded, in the *Bulletin de Therapeutique*, cases proving its utility. In the present article, the author relates four cases. The first, of a child, five months old, cured in eleven days, burn at the second stage. The second, a child, æt. 3½, burn at the second stage, on both feet; as the left was not so deeply burnt as the right, earded cotton alone was applied: both were healed on the 14th day, and the pain in the right foot subsided much sooner than in the left, proving the advantage there is in uniting the two applications. The third, a boy, æt. three, burn at the second stage, cured on the eleventh day. The fourth, a woman, burn at the second stage, produced by the explosion of fulminating powder, occupying both hands and fore-arms, and almost all the face. On the tenth day, both hands, and almost all the left side of the face, were healed; on the fifteenth, both fore-arms, and, finally, the right cheek; cicatrization in this last was hastened by cauterizations with lunar caustic. The formula for the preparation of the liniment is: R. Ol. amygdal. dul. ʒj., aquæ calcis ʒij. M. After shaking it well, the froth which rises to the surface must be removed, and with a hair pencil the whole of the burn must be covered; and finally, over all, the carded cotton must be placed. The pain ceases almost instantaneously, and cicatrization takes place rapidly. The author resumes thus: 1^o In the treatment of burns, the utility of the combination of the oleo-calcareous liniment and carded cotton may be considered as established. 2^o Both, when employed alone, are useful, as numerous facts prove, but their association seems to form an exceedingly useful topical remedy. 3^o In burns (so dangerous in children), it is especially useful, on account of its sedative action, and of there being no need of frequent dressings.

Clinical Observations on Tarantism. Memoir read to the Medico-Chirurgical Society of Turin, by L. C. Gazzo, M.D.—The existence of this disease, produced by the bite of the *Phalangium* of Aristotle, the *Aranea Tarantula*, was considered to be doubtful, though declared to be endemic in Pouilles (province of the kingdom of Naples). The author had frequent opportunities of studying it, from 1838 to 1843, in the communes of Albissola (Albissola Superiore, and Albissola Marine), near Savone. Numerous spiders are found in the clefts of the rocks, in the grass and dry sticks, covered with a thick web. Their sting is venomous. Of the tarantulæ, some are black; others have small yellowish, or dark red spots on their backs; their antennæ and the proboscides are black, with eight legs and eight eyes, four of which are visible to the naked eye; four jaws, two large, and two small, in the midst of which the proboscis is prominent. Cases of poisoning from the sting of this spider took place in June, July, and August, which seems to prove that it is venomous only in the summer months. The patients were generally haymakers, or those who carried hay to town for sale. The symptoms are at their maximum of intensity on the fourth day, after which they decrease, to disappear on the fourteenth. They are: difficulty of breathing; convulsive cough; voice broken, harsh and weak; cardialgia; slight vomiting; contraction of the abdominal muscles; suppression of urine; constipation; cramps of the upper and lower extremities; surface of the body covered with a cold clammy sweat; burning heat in the wounded part; pains in the whole body; and convulsions. The affection may be divided into two stages:—1^o, *algid, or cold stage*; constituting, evidently, an asthenic affection; consequently, diffusible excitants were employed, *intus et extra*, prescribed as follows:—R. Ammoniac liq. ʒjss. Emulsion. gumm. Arab. Oj., two table-spoonsful to be taken every ten minutes; sometimes, tincturæ opii, gtt. xx. were added. The external applications consisted in frictions on the wounded part with an

ammoniacal liniment, and on the remainder of the body with warm flannel; for tisane, an infusion of the flowers of the linden tree: 2^o, the period of re-action; as soon as this stage commences, stimulating remedies must be abandoned, for fear of giving rise to serious accidents in the brain, the lungs, the heart; and in their stead, diaphoretics, cathartics and diuretics, must be administered. The spontaneous miliary eruption is a phenomenon common to many poisons, and seems an eliminatory effort of the organism; it was to facilitate this that several sedative antiphlogistics were administered. The facts observed by the author establish beyond a doubt the existence of the disease called tarantism, a fact which had been previously denied by several authors, and prove that it is produced by a peculiar venom of the insect, whose effect, analogous to that of the viper appears to be purely debilitating, and to act principally on the intercostal nerves. This was likewise the opinion of Dr. S. De Renzi, in a memoir read before the Medico-Chirurgical society of Naples on the 18th July 1842. Several authors have sought to discover the organ which secretes the poison in the tarantula, but ineffectually, having discovered nothing more than the usual glands, but does this prove aught but our ignorance on the subject? Are we acquainted with the origin of the contagious organic virus in animals. Can we point out what special apparatus, secretes the rabid virus? It may be remarked, that, like some other insects, the tarantula is venomous only at certain seasons, when the heat of the weather is sufficient to account for the production of its peculiar poisonous principle. The facts related were observed conjointly by the author and two of his colleagues, Drs. D. Ramorini and B. Freccero.—Case—Angela Siccardo, of upper Albissola; ætat 23; while cutting some grass on the 16th July 1841 at 8 a. m., was bitten by a tarantula on the left ham, and became aware of it on experiencing slight pain, and perceiving a spot similar to that produced by a flea-bite. In less than two minutes pungent pain followed by intense heat was felt, which increased and extended up the thigh in the course of the sciatic nerve, to the abdomen. It attacked the bladder, the kidneys, the stomach and the upper and lower limbs, being most violent in the stomach and kidneys. A quarter of an hour after, cold clammy sweats, cramps in the superior and inferior extremities set in, pulse feeble, deep, and slow. An hour after, tremors of the lower jaw came on in fits, lasting about eight or ten minutes, accompanied by dull pain in the head, with sense of weight, changing soon after into intense hemicrania of the right side; with a sensation as if some one were pulling her hair violently. The ammoniacal draught, and frictions, with warm fomentations were prescribed. During the afternoon; rigidity of the neck from contraction of the muscles of that part; with intense cardialgia came on; voice harsh; heat in the fauces; contraction of the buccinators; face of its normal colour; dazzling of the eyes; delirium; pulse hardly perceptible. *Contin. medicamenta.* In the evening, bilious vomiting whenever the patient drinks; the ammoniacal draught, however, is not rejected: tongue foul; bitter taste in the mouth; contraction of the abdominal muscles; ischuria renalis; sense of stricture in the loins, groins, and hypogastrium; weight in the thorax with dyspnœa; intense thirst, pulse as before. *Contin. medicam.* Enema cum ol. oliv. 3ij. 17th, morning: same state; has had a bad night, insomnia; intensely cold; and covered with clammy sweats; convulsions and cramps somewhat more violent. *Contin. medicam.* 12 o'clock, same state. In the evening: cold not so severe; no convulsions; diminution of the other symptoms; gentle perspiration; slight alvine evacuation; urine turbid, red, and depositing sediment; pulse somewhat stronger—R Magnes sulph. 3iiss in infus. flor Tiliæ Europ. calid. 18th diminution of all the morbid symptoms, has had a quiet night and some sleep; warm sweats; surface of the body hot; miliary eruption, chiefly on the abdomen and thorax; numerous stools; urine less turbid; pulse febrile. Omitt. haustus; contin. magnes. sulph. Two days after the eruption had disappeared, the patient complained of weariness in her limbs, and on the sixth she was able to get up, though still weak, especially in the articu-

lations; the amelioration however continued and the cure was complete on the tenth day. The second case that of a woman æt. 32, is similar to the preceeding.—(*Gior. delle Scien. med. d. Soc. med. ch. di Torino, Annales de Therapeutique.*)

Parisian Medical Society.—Sitting of the 19th Dec., 1844. Dr. Macarthy in the Chair.—Dr. Michael, W. Taylor, presented to the society a communication entitled, "*Remarks on the late Epidemic Fever of Scotland.*" The febrile disorder to which these remarks referred, was one of a peculiar and uncommon type, presenting characters very distinctly and essentially different from those which the continued fever of the large towns of Scotland had assumed for some years past. This fever first developed itself in Edinburgh during the earlier spring months of 1843, and reigned epidemically to a prodigious extent among the poorer classes in that city for upwards of twelve months. The author briefly described the general course and symptoms of the fever, in its ordinary and uncomplicated form, ending in recovery. These symptoms coincided in many important respects with those characteristic of the fever which prevailed in Edinburgh twenty years ago, and which is described by Dr. Christison in the Library of Medicine under the title of *synocha*. What the author considered as the peculiar pathognomonic character of the disease, comprehended the following symptoms: the suddenness of the attack, and the rapidity with which the fever attained its maximum of intensity; its sudden and complete resolution after a certain, but variable, number of days, by a critical evacuation, generally by sweating; the observance of a decided apyretic interval; and tendency to one, or more, relapses, similar in their nature to the first attack, each in like manner being resolved by diaphoresis. The disease was of a truly and highly contagious nature; but although it affected during its existence, an immense multitude of individuals, of all ages, yet the mortality was not considerable, for it did not exceed three and a half per cent.

But, in addition to the primary constant symptoms, there were often associated, either singly or combined, a number of secondary, or accidental, phenomena, which thus gave rise to many modifications in the character and form of the fever, increasing materially its danger, and constituting, in most instances, the principal objects of treatment. The most frequent of these complications consisted of a yellow tint of the conjunctiva, and of the skin of the body; of partial or total suppression of the urinary excretion, and its injurious consequences on the nervous centres; of petechiæ, vibices, and ecchymotic stripes on various parts of the body; of black melœnic stools; of hæmorrhages from the mucous membranes; of violent and continued retching and vomiting, accompanied in some instances with the ejection of a dark green, grumous looking matter, described by some as approaching in character to the true black vomit of the West Indian fevers.

Dr. Taylor next considered at some length the question, as to the origin of the Icterus, of so common occurrence in the course of the fever, during the autumn and winter months of 1843. Although after death, in many cases, the liver, as well as other internal organs, were found more or less congested; yet in none did that condition appear to offer decided or complete obstruction to the secretion of bile, as that fluid was found uniformly in the gall-bladder and duodenum, sometimes in considerable quantity. The author maintained the opinion, that in the great majority of cases, the Icterus arose from a functional cause, viz., the excessive formation of bile within the system, and the incomplete elimination of that excretion from the blood. It was argued, by reference to recent chemical doctrines, that during the course of a fever, a morbid quantity of matters, destined for excretion, might be produced in the blood, and that if the rapidity of its elimination were not commensurate with that of its formation, it must necessarily accumulate, and manifest its presence by several indications. It was somewhat in this manner, that the frequent presence in the blood during the course of this fever of two principal excretions, viz., bile and urea, was accounted for. Dr. Taylor gave an epitome of some of his

observations, in regard to the retention of urea in the blood, a circumstance which, in the course of the epidemic under consideration, he had frequent opportunities of substantiating. An extreme liability to abortion or miscarriage, was noticed as a remarkable peculiarity in this epidemic.

It appeared, that in regard to the true nature of this form of epidemic fever, there had been, as might naturally be expected, much contrariety of opinion among the medical public. It received from time to time a variety of appellations, each of which in its turn was discarded, these having been drawn mostly, either from an imperfect recognition of the disease, or from an undue consideration of one or more symptoms merely accidental or adventitious.

First, it was designated as influenza fever, then, from the occasional occurrence of Icterus and bilious vomiting, it was whispered of under the terrific appellation of yellow fever; it was likewise spoken of as resembling another fever of hot climates, the remittent fever; lastly, it was maintained that it was a mere variety of ordinary typhus, arising from the same contagious poison, and differing from it only in some accidental occurrences. The following were announced as constituting the chief points of difference between this disease and ordinary typhus, as it manifested itself in Scotland during the same period. 1^o The shorter duration of the former, and the cessation of the febrile paroxysm with a critical sweat. 2^o The tendency to relapse, manifested by the short sweating fever. 3^o The greater rapidity with which the febrile symptoms developed themselves, and the greater average frequency of the pulse in this disease than in typhus. 4^o The almost invariable absence, in the common fever, of the measly eruption of typhus. 5^o The average mortality in the former having been about one-third less than in the latter. All this, however, as the author remarked, does not entitle us to say that the two diseases are essentially distinct, or that they depend on two separate specific contagions. It has always indeed, been the general opinion in Great Britain, that all the varieties of continued fever, which have been observed in that country, ought to be regarded as fundamentally the same disease, or as depending essentially on one contagion, modified to a certain extent in individual cases, and still more in different epidemics; in the one, a form of complication being more frequent, or the cause from which danger might be apprehended different.

But, as was observed by Dr. Alison, what entitles us to say that the two fevers are essentially different is derived from two other sets of observations. Firstly, the fact of an individual passing through the two fevers consecutively, either being affected with the typhus first, and afterwards with the common fever, or *vice versa*; which of itself is a convincing proof of the non-identity of the two diseases. Secondly, as has frequently been noticed, the circumstance of a succession of cases of the one or other disease running through different families, occupying the same locality, and preserving its peculiar characters throughout, forces one to the conclusion that the one contagion was capable of producing but one form of fever. The essay terminated with a few remarks on the treatment applicable to the more severe cases of the disease.

Some questions having been put by Drs. Macarthy, Claney, and other members of the Society, in regard to the morbid appearances, peculiarities, &c., exhibited in this form of epidemic, Dr. Taylor observed that, in general, the pathological appearances in the fatal cases, were insignificant, and had nothing special in their character; they consisted for the most part of indications of more or less congestion of the internal organs, sometimes there were patches of sanguineous extravasation on the mucous membrane of the stomach and intestines, but without softening or ulceration, or that enlargement of the muciparous glands, to which so much importance has been attached by French pathologists. The fever was observed to attack individuals of all ages, but, as in other epidemics, the mortality was greatest among very young, and very old persons. After an interesting discussion, in reference to other points connected with the disease, the meeting was adjourned.

NOTICES TO CORRESPONDENTS.

We have received from A Witness an account of an operation performed at Bartholomew's by Mr. Stanley, (a case seemingly analogous to that unfortunate one of Mr. Liston, at University College Hospital, lately offered to public criticism). A malignant fungous tumour, is asserted to have been mistaken for aneurism, thereby causing the death of the patient. The statement which lies before us we cannot insert, without having carefully ascertained that it is substantially correct in every particular. This we consider an act of mere editorial justice, as our duty is to forward the interests of the science to which we are devoted, not to defame the character of the men who practise it. What renders us the more unwilling to touch this case is, that it calls in question, the discernment and skill of the medical, as well as the surgical, staff of the hospital. For, though it is asserted that at the post-mortem, a plentiful crop of softened tubercles existed in the lungs, the medical officers had pronounced, we are told, that he was not only not unfit for operation, but that the pulmonary tissue was perfectly healthy. There can be no doubt but that rumour has been doing its work with this case; the sooner, therefore, that a responsible statement is given to the world, the better for the staff of the hospital.

A Correspondent at Nottingham, in sending us one of the local journals, has called our attention to a report of the case of the young woman Wilmot, whose death was made the subject of legal enquiry last week. He particularly dwells upon the necessity for having the reasons published which induced the surgeon, who conducted the post mortem, to declare it his opinion that "she was not pregnant," and asks, "granting the cooling powders administered to her were mercurials, might not the effect of a full charge of that mineral be abortion?" He seems to consider the case as highly important in a medico-legal point of view, and thus, requiring a full account of it, from beginning to end, from the surgeon in attendance. In conclusion, he asks—"were the jury after the admission of the master, (a married man, who had seduced the deceased,) that he had given the medicine, acting in the full spirit of inquiry, in neglecting to ascertain where, or from what druggist the powders were procured?" He seems to think that much light might be thrown upon this mysterious affair by such information. As the report stands, the case seems very complicated. The question whether the medicine was given to produce abortion, or for the cure of supposed venereal affection, or whether the disease of the brain received its deadly character from the action of the medicines administered or not, are points left in much doubt.

Mr. Smith's case next week.

Medicus.—Twenty-four Pharmaceutical numbers complete a volume. An index will, of course, be appended to each.

A. B., Cannon Street.—No exception being made, in the Home Secretary's Bill, for the Apothecaries' Hall of Ireland, we suppose that, under the contemplated arrangement, any recognised medical practitioner will be at liberty, if he choose, to practice pharmacy there, as well as in Great Britain. The Act expressly regulates the Profession in both countries.

I. B.—The test for Arsenic will be given in the forthcoming Pharmaceutical number of the Medical Times.

An Old Practitioner.—Dr. Corrigan's lecture shall appear next week.

Some subscribers who have not received their numbers in time, must lay the fault with the post-office, the authorities of which are complaining, that they have now too much duty to perform, in reference to papers, to practice perfect punctuality. We have this week been visited by a gentleman, high in office in the post department, on the score of these irregularities of which we had made complaint, and we have arranged with him to send one half of our sucks an hour earlier than the required time, in order to do our share to facilitate the transmission of our journal in time.

Many letters are before us in reference to the Surgical Association, proposed by Dr. Costello in our last.

B. D. on the Hunterian Oration is clever but has been anticipated.

Several communications, are unavoidably postponed till our next.

THE MEDICAL TIMES.

SATURDAY, FEB. 15, 1845.

Quos Deus vult perdere, prius dementat.

We told the College of Surgeons how it would be with them. They have already reached the predicted moment when they dare not meet their members in their own Institution at a public lecture. The Hunterian Oration, founded by a deed of trust by Dr. Baillie and Sir Everard Home, and for the annual delivery of which the Council are solemnly pledged by covenant and fully received pecuniary consideration—is this year not to be given! The Council give the go-by to what may be called a statutory enactment of their Institution rather than face their brother members in their Common Hall—those members whose attachment and gratitude would as certainly have been secured by just and gentlemanly treatment, as their indignation has been roused by the outrages to which they have been actually subjected.

This is no small matter, for it is a partial self-infliction of that extinction their past impolicies have so richly merited for them. The Hunterian Oration is almost a condition of the Council's existence. Founded, as we have said, by special trust deed; having for its object the commemoration of a man who may be considered the true creator of the College—Hunter; or as Carlisle well put it, the keeping alive that great man's public minded exertions, and the cherishing, with his memory, the study of that science that made him so distinguished;—the Council, in declining, from timidity, the performance of this accepted duty and the fulfilment of this sacredly imposed charge, have declared themselves virtually unable to cope with their responsibilities. They have, in fact, abdicated their functions.

Is there no one in the ill-used body of members public spirited enough to see, that the imbecility and cowardice of the Council shall not frustrate the noble aims of the founders of this Oration?—Is there no one to say that he will discharge the duty these medical Bourbons have been obliged shamefully to fly from with affright? Is the opportunity of having a really good Hunterian Oration—so rare, so favourable—to be lost? We shall see.

Give not hastily the masterdom of thy fortunes to other's hands.—Old Author.

Our admonitory observations on the Associated General Practitioners have been followed by improvement more speedily than we expected. The Committee, it is true, has not yet been thrown open to the public eye; steps are each day being taken for which the sanction of the Profession is never asked, nor obtained; but at least this week the members have paid us the compliment of communicating to us, with some precision, the details of one of their most important recent proceedings.

Our readers will recollect the letter of Sir James Graham, published about three weeks since, pledging himself to the consideration of any Charter they might propose, if they would distinctly announce to him its details, and definitely propose the gentlemen they would place at the

head of the New Incorporation. The Committee at once acceded to the request, so far at least as sending the Home Secretary the heads of their proposed Charter. The important missive was sent off on Tuesday week. On Friday week we were able to announce that such a document had been dispatched, but were in total ignorance, like the rest of the world, of its nature. On Wednesday last, secrecy was at length broken, and an authorised copy furnished for perusal. This is one step in the right direction; another is announced. A General Meeting is to be called shortly to discuss the provisions of Sir James Graham's new Bill, and to get a public sanction, we will suppose, for their scheme of a new Charter. Better late than never. Better the cart before the horse, than no cart at all; though, for our parts, the more accustomed procedure would win most largely on our approbation.

To own the truth, the hardy—we had almost said the impudent—confidence of the Associated Committee in themselves, is something honestly to be admired at. They decide that an independent incorporation is best—we will take it—for the Profession. Forthwith they raise the standard. They think the Government should be asked for a Charter. No sooner thought of, than asked. They think that such and such things are good constituents of a Charter. In an instant they pronounce so. *L'état c'est moi*, said Louis XIV. and Napoleon. "The Profession? Behold it in our Committee," say these gentlemen. The very Charter that is to form a third estate—to make the greatest of revolutions in Medicine—to govern our body for perhaps centuries to come—they off-handedly, at a moment's notice, without an instant's consultation, fling before the Home Secretary on their own simple *imprimatur*. No public meeting to approve of the scheme—no previous publication of its nature, to elicit opinion—they put forward their "*sic volo sic jubeo*" with a dictatorial ease which a half century's occupation of corporative consequence might have well failed to inspire. They are dashing fellows these Associated Gentlemen of Marylebone. We cannot find it in our hearts to blame them. It is something to shew that they possess their own confidence, and can keep their own secrets. These are the arts that carry the individual through the world; and may it not happen that they are the qualities that may help on a society? We shall see. Meanwhile let us remember, that if they have not consulted us on the provisions they have fixed to Sir James Graham for our future Charter—they have at least, ten days later, done us the compliment of telling us what they are; and besides, promise us a meeting, some early day, for receiving the ceremony of our assent.

But our readers are anxious to know the nature of the College the Committee have recommended to Sir James. First then, it is to be a "College of General Practitioners in Medicine, Surgery, and Midwifery," and will receive on its incorporation as members, firstly, any English Apothecary; secondly, any member of a British Surgical College; thirdly, any man in practice in 1815; fourthly, any Bachelor, or Doctor in Medicine, of a British University; fifthly, any F. or L. of a British College of Physicians in actual practice as a General Practitioner. Subsequently to the incorporation, no one is to be a member, unless by examination and certificate of the New College. The governing body will consist of a President elected by the Council, and triennially, eligible for re-election; three Vice-Presidents, elected from and by the Council by ballot, one going out

yearly, and not re-eligible for a year. The Council will have sixty members, thirty living within ten miles of the Exchange, and thirty without, all at least fifteen years in practice, elected by members of at least five years' standing, who vote by ballot and no proxies, and one-third of the Council going out of office (after the first three years), every year, and not re-eligible for a year. The Council will have sole power of directing the studies that shall be asked, of making bye-laws, and of appointing and dismissing its stipendiary officers. The diploma fees to be fixed in the Charter. The examiners (eighteen) will be elected annually by the Council, of gentlemen not on the Council, and who must have been at least ten years medical men. The Courts of Examiners to be presided over by the President, or a Vice-President, of the College; but he is to have no vote.

It is not our purpose here to animadvert on the details of this scheme. A council of sixty certainly appears to us a rather numerous body of directors, and might be found rather unwieldy in the management. A half attending this week and another the next, a conflict of opinion and action would be possible, that would cast little credit on the corporation itself. The public, too, might not be satisfied with this parliament of general practitioners, or, as they would call it, perhaps, "Chambre d'Apothecaires." We think, also, that a distinction of the members into electors and non-electors, is very unnecessary, and may prove very successful in nothing but keeping up the political discord which, under a good system, should be extinguished. It might be all very well as a compromise with an established body, but with a *tabula rasa* before us, there is no reason we should enac cause for dissension with no earthly motive. Another point is the inclusion of a *surgeon* as a general practitioner in medicine and midwifery, or an *apothecary* as a general practitioner in surgery. But these are topics that may be safely left for further discussion; for it is difficult to fancy for a moment that Sir James Graham will step forward to annihilate the College of Surgeons by a concession such as that now asked from him. Common sense suggests immediately, that if a body of the kind proposed by the "Associated General Practitioners" is to be furnished us, the Home Secretary will model to the scheme the College of Surgeons, rather than establish, without one argument of expediency, a third establishment. That in his new Bill, or in some subsequent alteration of it, he will introduce reforms in the constitution of the latter body, there can be little reasonable doubt, and we must own for ourselves, that we should be much better pleased to see the association chiefs keep in view, a little more than they do, the hypothesis that the profession can be benefited, and most largely, by other means than by putting them at the head of a new incorporation. If absolutely necessary for the well-being of our science that a new establishment be formed, by all means let us work for that, and that only: we will gladly ourselves help them to the eminence they desiderate. On the other hand, if the profession can be best served by their not ostentatiously protruding their personal views, nay, by some little injury to their expectations, we have good reasons for asking from them the sacrifice. What we want is RIGHT—which may not necessarily put them at our head; but if ultimately that elevation be required to secure that right, by all means let them be promoted. Exactly, however, in proportion to the power with which

we now invest them, the more jealously shall we watch its exercise. It is given for *our* benefit, and it behoves us to see that *it is our benefit* that is looked to in the first place. Let them be potent, but potent for us. A Frankenstein association is what we should have as much objection to, as to the worst of our irresponsible corporations.

Tertius e caelo cecidit cato!

Mr. Wakley seems quite resolved that for *this* (his *last*) session, at least, the House of Commons shall not lose its character, of the great talking assembly. It is truly wonderful with what ingenuity he discovers topics on which his sagacity may add its stores to the collective wisdom. He is not, it is true, highly rated, but if he do not achieve the work of talking himself lower, aye, down to his true *locale*, it will very much surprize us. On Tuesday he shewed Parliament with what "perilous stuff" his brain is garnished, with a recklessness that speaks little for his self-love, and gives us uneasy fears that his parliamentary career will end, after all, in a *felo-de-se*. His first speech was on rail-roads, when, curiously enough, he affirmed that imputations having been cast on the honesty of the Government management of rail-roads, the charges should be investigated; forgetting that a correspondent of ours having made the same statement in reference to himself a fortnight ago, a Mr. Wakley had commenced an action against us for the opinion, as a *libel*! Sir James Graham replied, charging Mr. Wakley with whispering away the character of worthy men; and handsomely defended the aspersed. Mr. Wakley apologized for his imputations; he had only had them placed in his hands ten minutes before uttering them. This instance of discretion finished—which we give *par parenthèse*—Mr. Wakley proceeded to ask what were the legal qualifications demanded from union doctors? Since 1842, when the Poor Law Commissioners issued an order, extremely limiting the sources of a sufficient Poor Law Qualification, great discontent had existed; and now, in 1845, when the matter is nearly at rest, he had made up his mind to ask the Government for returns on the subject. Sir James Graham replied, that the returns should be readily granted, and thanked Mr. Wakley for the service his stirring the subject would do the Government Bill; for that Bill sought to remedy the evil out of which the mischief in this case had come. The Poor Law insisted on *legal* medical officers, and the best authorities of the law had pronounced that in England, the most accomplished medical men of Scotland and Ireland were not "*legal*," unless they had the license of the Apothecaries' Company. Pharmacy was wholly forbidden them. Sir James claimed credit for modifying the Act of 1815 in this particular; and silyly remarked, that though the *honourable* member, (strangers say he laid great stress on the epithet,) by at length calling for a change, tacitly acknowledged this as a good point in the Bill, he had carefully abstained from referring to it.

The question of employment in Workhouses was next discussed; and here Mr. Wakley suddenly jumped a political Jim Crow with marvellous agility. He had found out, he said, that local interests were too strong for centralized power, and he hoped the Government would not hesitate 48 hours in asking an accession of discretionary power for the three "demon kings" at Somerset House. The House laughed, and worse than that, Mr. Roebuck replied: his words condensed by the *Times*, will bear no change:—

"Mr. Roebuck called the attention of the house to the wide discrepancy between the opinions just expressed by Mr. Wakley and those which he had formerly advocated to obtain popular applause. In his past speeches, he would have deprived the "three tyrants of Somerset-house," "the pinch-paupers" of all power whatsoever. Now 48 hours were not to elapse without additional powers being granted to them for the sake of humanity. Mr. Wakley had formerly pointed the finger of scorn towards all who supported the New Poor Law. He (Mr. Roebuck) had supported it from the first; and he now fixed the finger of scorn on Mr. Wakley, for the recklessness either of his past or of his present assertions. That hon. member was not justified in employing the arts of popular demagoguism to cast obloquy upon men who were as humane and honourable as himself, and a little more cautious and deliberate in coming to conclusions on important subjects." Bravo! Mr. Roebuck.

PARLIAMENT AND MEDICAL REFORM.

On Tuesday next, Sir James Graham is to bring in his bill, with *alterations*. We trust that the alterations will be not only in the right direction, of which we have little doubt, but made in no ungrudging or hesitating spirit. The suppression of empiricism by all prudent, and even ingenious means—due justice to the claims of the general practitioner—and a thorough reform of the College of Surgeons—these are the points the Home Secretary must attend to, if he expect complete success for his bill, or warm gratitude for himself. The Government *can* give us a settlement; we trust ardently that they will not misuse the glorious opportunity.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. VII.

Mr. Toynbee's Evidence.

Mr. Toynbee, one of the surgeons of the St. George's and the St. James's Dispensary, is well known for the interest which he has taken in the ventilation of the dwellings of the poor. In visiting the dispensary out-patients at their own houses he has had the best opportunities of becoming acquainted with their condition, and the evils to which they are exposed, and he has accordingly added some valuable facts to those laid before the commissioners by Drs. Southwood Smith and Arnott. The point upon which his evidence most strongly bears, is the prevalence of scrofulous affections among the poor, their origin in the undrained, ill-ventilated, filthy, and overcrowded dwellings which they inhabit, and the excellent effects of ventilation in banishing this class of diseases, improving their general health, and enhancing their comfort.

The patients of the dispensary to which Mr. Toynbee is attached, reside in the districts of St. George's and St. James's, in the very centre of wealth and fashion. As it is not very probable that the elegant inhabitants of that part of London know more of the courts and alleys which skirt their handsome thoroughfares than they do of the Punderson's Gardens and Lamb's Fields to which we have introduced our readers, we will devote some of our space to their instruction.

In the year 1842, the Statistical Society of London published a report made by Mr. Weld, at the instance of Lord Sandon, and founded on a house-to-house visitation of the poor of St. George's, Hanover Square. This report states, that 1,465 families, of the labouring class, occupied 2,175 rooms and 2,510 beds, that 929 of their families had only one room each, and 408 two rooms each; that 623 families possessed only

one bed each, and 638 only two, and that some dwellings were altogether without a bed. Mr. Toynbee confirms this account, by the statistics of 100 families, from which it appears that the average number sleeping in a room is five; he further states that nearly all the families attended from the dispensary had but a single room each, and a very great number only one bed to each family; and he subjoins the following sketches of the domestic economy of families with which his professional visits brought him in contact.

"I am" he says "attending one family, where the father, about 50, the mother about the same age, a grown up son, about 20, in a consumption, and a daughter, about 17, who has a scrofulous affection of the jaw and throat, for which I am attending her, and a child, all sleep in the same bed in a room where the father and three or four other men work during the day as tailors, and they frequently work there late at night with candles. I am also treating, at the present time, a woman with paralysis of the lower extremities, the wife of the assistant to a stable-keeper, whose eldest son, the son by a former wife, and a girl of 11 or 12 years of age, all sleep in the same bed! In another case, which I am attending, in one room, there are a man and his wife, a grown up daughter, a boy of 16, and a girl of 13; the boy has scrofulous ulcers in the neck; the father though only of the age of 59, suffers from extreme debility and a broken constitution." The next case is so remarkable that it ought to stand alone.

"An aged Irish woman applied to me with a broken rib; she declined going into an hospital; the dispensary, therefore, supplied her with a flannel roller, and I promised to visit her and apply it. On reaching her home, I found that it consisted of one corner of a room on the first floor of a house in Peter Street. The landlady of this room, who herself occupied the central part, near the fire place, had tenants in the other three corners, in one of which was a widow with three or four children. I applied the bandage to my patient, she went on, to use her own words, *very comfortably* for four or five days, at the end of which time I found her in considerable pain from the following cause:—not being able to go out as usual with her basket to sell fruit and vegetables, she could not pay her daily rent, and, therefore, on the suggestion of the landlady, consented to underlet half of her bed; but it happened unfortunately, that the new tenant being bulky in person, occupied more than her fair proportion of the new tenancy, so as to press against the broken rib of my poor invalid, and displace it, thus producing a recurrence of the pain and suffering from which she had just been freed."

After Mr. Weld's averages, and Mr. Toynbee's individual instances, we cannot be surprised to hear that the rooms are extremely close; so close that, for self-protection, the windows must be opened during the medical visit; that they are not only close from over-crowding, but frequently contain noxious odours arising from privies and neglected drains, which, in certain states of the weather, are intolerable even to the inmates; and that the clothes of the poor people, living in these places, contract such a smell as to taint the air of a room in which they have remained only a few minutes. "In some streets and courts," we are told, "there are no sewers; and in others, in which there are sewers, there are scarcely any drains from the houses into the sewers, and the gully-holes are so far apart that the slops thrown out from the street-door mix with the dirt of the street, and very little of the fluid appears to arrive at the sewer. There are great complaints that the gully-holes emit very offensive smells."

With all this foul air and want of ventilation, a very serious obstacle is offered to the admission of fresh air by the windows opening only at the bottom, a circumstance also noticed in Dr. Arnott's evidence. The diseases which Mr. Toynbee particularly notices as due to this defective state, and deficient ventilation, of the dwellings of the poor, are scrofulous affections, "which abound to an enormous extent." "Scrofulous affections of the eyes, called sore or inflamed eyes, which are very frequent;" "scrofulous affections of the joints," especially of the hip-joint; "diseases of

the skin," as shingles, lepra, and ring-worm; "water in the brain," which Mr. Toynbee finds "associated with symptoms of scrofula, and arising in abundance in those close rooms;" and lastly ear-ache and deafness.

In tracing these and other forms of scrofula to deficient ventilation, with "want of personal cleanliness, badly chosen, and badly cooked, food, and defective clothing," as accessories, Mr. Toynbee is supported by the strongly-expressed opinion of Baudelocque, who, in his treatise entitled "Observations sur les Maladies Scrofuleuse," states that the repeated respiration of the same atmosphere is the cause of scrofula; that if there be entirely pure air, there may be bad food, bad clothing, and want of personal cleanliness, but that scrofulous disease cannot exist—a view supported by striking facts, which our limited space does not permit us to quote.

The miserable condition of the poor of St. George's, in a sanatory point of view, is clearly shown by the great mortality of that class as compared with that of the gentry and tradesmen of the same districts. During the year 1839, which was by no means an unusually unhealthy year, the average age of death of all above 21 among the gentry was 59 years, among tradesmen 50 years, and among the labouring class 47 years; while the average age of all who died, inclusive of children, was for the gentry 45 years, for tradesmen 29 years, and for the labouring class 27 years. From this comparison it results that the duration of life of the labouring class was less by 18 years than that of the gentry, and that the adults of the former class live on the average 12 years less than those of the latter. The mortality among the children of the labouring class is fearful. While the proportion of deaths under 10 years of age to the total deaths among the gentry is only two per cent, and among tradesmen only six per cent, it is in the labouring class no less than 26 per cent; and the proportion which deaths by epidemics bear to those from all other causes increase, from less than one per cent in the gentry, and less than two per cent among tradesmen, to nearly 10 per cent in the labouring class.

After this we shall not be surprised to hear of a fearful amount of sickness among the children of the labouring class. From a table prepared by Mr. Toynbee, it appears that in 100 families, containing 353 children, there were no less than 212 individuals sick, or more than one in every three persons, including the heads of the families; and three hundred families had lost no less than 253 children.

Such is the sanatory state of the labouring class as compared with that of the gentry and tradesmen of the fashionable district of St. George's, Hanover-Square. Let us now enquire how this favoured district stands, as compared with the more obscure and remote quarters of the metropolis. For this purpose, we turn to the first part of the seventh volume of the Statistical Journal, to an able essay by Mr. Neison, in which a precise comparison is instituted between the several districts of the metropolis, on the supposition that the population of Bethnal Green, which, until lately, was supposed to be the most unhealthy, is transferred to each of these districts.

But, before we proceed with this comparison, we must explain ourselves. Mr. Neison has proved, by several striking examples, that one population differs widely from another, in the proportion of persons of different ages which it contains. Thus, one nation contains more adults, or more children, than another. France, for instance, has a larger proportion of adults than England, and England than America. So also with towns, as compared with rural districts, one part of a town as compared with another; one order of society, or one profession or trade, as compared with another order, profession, or trade. Now, it is well-known that there is a much higher mortality among children than adults; hence, it must happen that a population having a high proportional number of children, will exhibit a relatively high mortality, and a low average age at death; and it will obviously lead to very incorrect results, if we compare, without making due allowance for this difference, two populations differently

circumstanced. This error was committed by Mr. Chadwick, in his valuable "Report on the Sanatory Condition of the Labouring Population of Great Britain," but has since been corrected by Mr. Neison, who compares the several districts of the metropolis, on the supposition that the distribution of the population is precisely the same in all of them as in Bethnal Green, the number of deaths, and the ages at death, being calculated from data obtained from the registers of the several districts. On applying this accurate system of calculation to the several districts of the metropolis, we find that St. George's, Hanover Square, instead of being greatly more healthy than Bethnal Green, has but a slight advantage over it, for while in Bethnal Green the annual mortality is 1 in 42, of the inhabitants, in St. George's, Hanover Square (exclusive of the hospital), it is 1 in 44½. The average age at death, in St. George's, Hanover Square, also exceeds that in Bethnal Green by only a year and a half.

If we take these corrected averages as our test of the sanatory state of the several districts of the metropolis, they will stand in the following order, beginning with the most unhealthy:—1. St. Giles' and St. George's, Bloomsbury; 2. Marylebone; 3. Clerkenwell, 4. Bethnal Green; 5. Kensington; 6. St. George's, Hanover Square.

Our object in instituting these comparisons, is to show that though St. George's, Hanover Square, occupies the first place among the metropolitan districts, in respect of health, the advantage which it possesses over the poorest quarters of London is very slight, when compared with the peculiar privileges of its position. The benefits which it derives from parks, and squares, and open streets, is nearly counterbalanced by the miserable state of the dwellings of the poor, which here, as elsewhere, are pressed into the narrowest possible compass, to make room for the splendour of fashionable streets and shops, and the showy spaciousness of squares and parks. When to the advantage which the poor must, of necessity, derive from the pure air of these open places of resort, we add the benefits that must flow to them from the wealth that surrounds them, we cannot avoid the conclusion, that the houses and streets in which the labouring class reside, must be at least as much neglected as those of the very lowest and poorest district of the metropolis; and that in the search after pleasure and amusement, the poor are just as much overlooked, as they are in the hurry and bustle of business.

The chief object, as we have stated, of Mr. Toynbee's evidence, is to show the ill effects of over-crowding and deficient ventilation on the health of the labouring class, and the benefit attendant on a due supply of air. In both these respects his evidence is very valuable. The dispensary to which he is attached, wisely appropriates a part of its funds to the prevention of disease, and, in so doing, exhibits a laudable economy. The chief preventive measure consists in the adoption of a very simple and cheap method of ventilation. Two kinds of ventilator are used, the one a window ventilator, consisting of a perforated zinc plate, the use of which was suggested to Mr. Toynbee by Mr. Cottam, the engineer, of Winsley-street, Oxford-street, and the other, a chimney ventilator, contrived by Dr. Arnott. The perforated zinc plate occupies the place of a pane of glass, and admits the fresh air; while the chimney ventilator, which is a square iron tube, of from three to six inches in diameter, is fixed into an opening made in the brickwork of the upper part of the chimney, and acts as the vent for the foul air, the orifice towards the apartment being filled with a perforated plate, and guarded with a flap of oiled silk, to prevent downward currents of smoke. The zinc plate may be fitted for two shillings, and the chimney ventilator for three shillings. This chimney ventilator was obviously unnecessary, and has been condemned as useless. The zinc plate, fixed in one of the upper panes, is still retained.

By this simple and cheap means the room of a poor man may be cheaply ventilated. But there are two drawbacks, the one is the draught, which is only somewhat modified by the perforated plate, and the cooling down of the air of the room. Mr.

Toynbee does not allude to the first objection, but states that the second may be obviated by apportioning the size of the zinc plate to that of the room.

The effects of this rude and uncouthly method of ventilation are thus described:—"The effect on the health of the patient, I have observed, is to accelerate the cure, and to alleviate the symptoms, so as to give great comfort to the patient. The general observation of the inhabitants, as well as the patients is, that the rooms is much more comfortable and airy; the smells from the abscesses are very disagreeable, and, in close rooms, sometimes insupportable. The people remark that the ventilation has carried away the smells and purified the place. They have frequently said, that they have been in so much better spirits since they have had these ventilators, and have always been most grateful for them; they have often been more thankful for the ventilators than for the flannel and bread and milk. I am now continually applied to by the friends of those whose rooms have been ventilated to bestow upon them a similar boon. In one at No. 8, Duke-street, Grosvenor-square, I commenced with one ventilator in a room, and, on the experience of this one, and the praises given of it by the patients, the inmates of the other rooms applied to me for ventilators; I have put ten ventilators there on the stairs and landing, and the whole of the people there express a very high sense of the comfort they have experienced. In the first room the smell was so bad that I could not enter into or remain in it, unless the windows were opened, I can now go there without annoyance. Tailors working at home have told me, that they can now use the hot irons for pressing with comfort; before the ventilators were introduced they suffered extremely from the heat and depression consequent thereon. Yesterday, at another house where I had put in one ventilator, I was asked for five more by the inmates of five different rooms; the landlady of the house herself joining in the application. I had four other orders for ventilators to give during the same day. I have taken clergymen, and other gentlemen desirous to carry out the plans of ventilation over the houses, into some of the rooms of which ventilators had been introduced; we could always tell by the state of the air immediately we entered a room, whether a ventilator was in operation. I have had dispensary patients who have paid for ventilators themselves." The ventilators, it appears, are also of great use in curing smoky chimneys.

This extract is important, as showing how much may be done by the energy and perseverance of a single person towards overcoming the prejudices of the poor in favour of close rooms. Medical men, in former times, have fostered that prejudice, and we are glad to see one of them coming forward to undo the mischief which their bad advice had occasioned. The stifling process has long been abolished in the treatment of disease, and we trust that it will soon cease to act as the cause of it. Mr. Toynbee corroborates the opinion that indulgence in spirituous liquors is often to be traced to the depressing effect of impure air. "I find," he says, "that the great majority of my patients confess, upon enquiry, that they are led to indulge in spirituous and malt liquors to relieve the extreme physical and mental depression produced during their occupation; "I may add, that I have found those who work singly, even in their own rooms, small as they may be, and surrounded by their families, to be in better health, or rather not to suffer so much as those artisans of the same class working in numbers."

One obstacle to ventilation mentioned by Mr. Toynbee, is the offensive odours arising from the cesspools, which enter by the window, and make the poor very averse to the introduction of ventilators.

The expediency and necessity of legislative interference for the proper ventilation of new houses, school rooms, work rooms, and places of public assembly, and of existing tenements, and for the due supply of water, are much insisted on by Mr. Toynbee in his replies to questions proposed by the commissioners. The deficiency of water seems to be quite as great as that of pure air, and the

poor seem to be fully alive to the evil which it occasions. "I have asked a great number of patients," says Mr. Toynbee, "whether they would consent to pay an additional rent of 2d a week, to have the water laid on in their rooms, and they have expressed warmly their willingness to pay even more; that such payment would be but a trifle for such a "blessing," as they have termed it."

In reply to a question, put by the commissioners, as to the extent to which disease among the poor will be diminished by the joint agency of effective drainage, a due supply of water, and free ventilation, Mr. Toynbee says, "It is difficult to form an estimate, but I feel confident of a reduction of one-third immediately. It is my opinion that the diseases which are produced secondarily, and which have hitherto been supposed to have no connection with the causes specified, would be influenced or prevented to a very great extent—the habit of drinking, stimulated, if not produced, by nervous depression, would be abated—the diseases, which are rendered more fatal and are modified by the habit, would be diminished. From what I have seen I am disposed to expect that very beneficial effects would arise from the depressing influences on the general spirits, the relief from the depression giving greater spirit and energy to them. I am disposed to believe, on a careful consideration of all the effects producible by such attention, that a reduction of one-half the existing amount of sickness and mortality might be produced by them. I can corroborate, by my own observations of particular cases within the sphere of the Charity, that the excessive mortality arising from the depressing causes specified, does not diminish the numbers of the population, and that it only produces a weaker and more wretched population. I find that the worse the condition of the people the earlier are they married, and the greater the mortality amongst the children the more rapid the births. Amongst the scrofulous and even the consumptive patients whom I have attended are remarkably numerous families."

The evidence of Mr. Toynbee concludes with some remarkable illustrations of the expense entailed upon the labouring class by disease. We shall give an abstract of these cases, which are the more valuable as they did not occur among the very poorest, but among a class, which, but for the heavy burden of sickness, would be in comfortable circumstances.

A policeman earning 20s. a-week, regular wages, and never out of work, applied to the Dispensary for relief. On being remonstrated with on the impropriety of his wishing to avail himself of the benefits of the Charity, he stated, that he paid for a miserable single room, divided into two, 5s. a week; that he had 1s. 8d. a week to pay for his clothes, which reduced the available fund for the support of a wife and four children to 13s. 4d.; that he had had all his children ill, and lost two; that he had during three years paid six doctor's bills, principally for medicine, at the rate of 2s. 6d. a bottle, amounting to between £30 and £40; that the funerals of the two children that had died, performed in the cheapest manner, had cost him £7; and that his wife and his four children were now ill. Mr. Toynbee adds that "they were so depressed and debilitated as to render them very just objects for the Dispensary and the Samaritan Fund," and that "all this misery was traceable to preventable causes."

Take another case. A porter, in regular employment, at wages producing £1 a week, paid 3s. 6d. a week for a most miserable and unwholesome room, in which himself, and six other people, four children, and three adults, slept; the children were shoeless, extremely filthy, and badly clad; the wife ill in bed, of a diseased knee, for which I attended her. Two children had been still-born, and he had lost three others; the sickness of one of these children, which had died at fourteen, of consumption, had cost him in doctors' bills sixteen guineas; the sickness of the one, which died eleven months old, of water on the brain, had cost him £6.; the third had died fourteen days old. The expenses in the three cases had so impoverished him, that he was compelled to apply to the parish for aid for their burial.

A third case was that of a cook, in receipt of

25s. per week, regular wages. He was living with his wife and three children, in a small, close, ill-conditioned room, for which he paid 5s. per week rent; he complained that the water was always "thick," and very disagreeable to the taste; and the smells from the sewers and the drains in the house were very bad. He had five children, of whom two had died; that he had paid doctors' bills for his wife's confinements, £5. each; and for one child, which died of scarlet fever, at four years of age, the doctor's bill was £4. 18s.; for the one which died of debility, at the age of ten weeks, cost him £1. 10s. He showed that the expenses of confinements, the doctors' bills, and undertakers' bills, and the illness of his wife, arising from five miscarriages, had so impoverished him, that, having now two children ill with scrofula, he was obliged, though reluctantly, to apply to the dispensary for relief.

Two more cases, and we dismiss Mr. Toynbee's evidence. A shoe-maker, a good workman, earning 20s. a week, pays 5s. a week for one small miserable room, in a narrow court; he has had seven children, of whom he has lost five, for which he has paid in doctors' bills between £2. and £3. each; the expense of his wife's confinements amounted to £3. 15s. each; the expenses of the funerals of the five children were between £3. and £4. each; his wife's age was 32, his own age 37, and at the age of 37, he continually suffered from nervous depression, and having one of his two other children with a lingering disease, a scrofulous affection of the hip, he was compelled to come to the dispensary; he complained that the water of the house was never clear, and never sweet.

The last case is that of a man in the receipt of 30s. a week, paying 5s. 6d. for one room, for himself, wife, and three children; he had lost four children by lingering consumption, and his wife and surviving children were never well. He also was considered a proper object for the charity.

We have not been afraid of wearying our readers with these details. We wish to make them understand and feel that disease is a very costly thing, and all unnecessary illness a sad waste of resources. It is so even with the rich, but how much more with the poor! We are afraid that medical men do not always sufficiently consider this, and that their exorbitant charges—exorbitant considering the small earnings of the labouring class—drive many to hospitals and dispensaries, who would greatly prefer a more independent mode of obtaining advice, and certain it is, that such instances as those given by Mr. Toynbee are by no means rare. The experience of every hospital or dispensary physician must furnish very numerous parallels.

In our next we shall analyse the evidence of Dr. Guy.

HYSTERIA SIMULATING PHTHISIS.—Mr. Durrant in the *Provincial Medical Journal* says there is an affection, which presents occasionally in hysterical young women, and is extremely liable to be mistaken for phthisis. The symptoms are these:—added to the hysterical diathesis, there is cough, short and hacking, or in occasional paroxysms; expectoration of mucus, tinged, and at times largely mixed with blood; pains in various parts of the chest; pulse seldom above eighty; tongue clean; considerable anorexia; bowels generally sluggish; catamenial flow, regular and healthy, sometimes profuse; no emaciation; sounds on percussion normal; an inferior degree of the moist bronchitic rhonchi, although not persistent, audible in various parts of the chest. Under these circumstances it is evident that the diagnosis must be chiefly influenced by negative evidence, such as the state of the pulse, the freedom from emaciation, the normal result of percussion, together with the absence of those phenomena, general, and physical, more especially appertaining to tuberculous phthisis. The affection is usually of considerable duration, and does not yield readily to treatment; the patient ultimately recovering completely, under the influence of comparatively insignificant remedies, or as the result of an unexpected moral impression.

TRANSACTIONS OF LEARNED SOCIETIES.

LONDON MEDICAL SOCIETY, Feb. 3, 1845.—Dr. Theophilus Thompson, President, in the Chair.

Incubation of Insanity.—Dr. Forbes Winslow read an elaborate paper on this subject. The author commenced by observing, that the utility of investigating and treating the disorders of the mind, in the early incipient stage, or during the period of incubation, few, who have had opportunities of witnessing the ravages of this fearful malady, will for a moment doubt. After alluding to the little advancement which had been made in a knowledge of the pathology of the brain and nervous system, the author asserts that it was his belief that a large proportion of the 8,736 incurable lunatics now confined in England and Wales, had been reduced to this melancholy state by the neglect to which they had been subjected in the incipient state of the malady. This he said advisedly. It was not based upon theoretical speculation, or upon the abstractions of the closet, but the opinion was grounded on the experience of many years, during which he had had many opportunities of seeing and treating cases of insanity. In the last official report to Parliament, it was stated that there were confined in England and Wales 11,272 insane patients; out of this number there were returned as "curable" 2,519, and as "incurable" 8,736. This alarming discrepancy was attributed to the ignorance which has prevailed on the subject of insanity. He thought that the notions promulgated by the "spiritualists," or "vitalists," to the effect that insanity was an affection of the spiritual or immaterial principle abstracted from a material organisation, and that the disorders of the mind did not proceed from any physical impairment, had much retarded the progress of sound knowledge on this subject. The notion that insanity was unconnected altogether, or but slightly associated, with bodily disease, naturally had the effect of inducing medical men to sleep at the post of duty, and little, if anything, was done to crush the malady in its early, or advanced, stages. The attempts which have been made to define insanity—to discover an infallible test or standard of mental derangement, had also operated very prejudicially. Each practitioner had formed his own peculiar notion of insanity, and no person was believed to be insane until he came up to this pre-conceived standard. Consequently, the period of incubation was entirely overlooked. The author considered it a well-established axiom, that the probability of recovery in insanity, lessened in a ratio to the period that is allowed to intervene between the first onset of the disease, and its more advanced stages. He considered that incipient insanity, provided it did not result from severe physical injury, and was not associated with a strong hereditary predisposition, yielded as readily to treatment as incipient inflammation. Nine cases of insanity out of ten recover, if subjected to treatment within three months of the attack. Dr. Winslow quoted a host of authorities in support of this assertion. In the primary or incipient stage of insanity, it is but slightly, if at all, connected with lesions of nervous structure, it manifests itself as a purely functional derangement, no doubt, in every case connected with some physical impairment. This stage is of some considerable duration; but if the disorder be permitted to exist for any length of time without any attempt being made to remove it, serious organic changes take place in the delicate structure of the brain, which for ever place the patient beyond the reach of remedial measures. Dr. Winslow considered that we ought to apply to the brain, and its disordered functions, the same principles and therapeutics which are had recourse to in the investigation of the diseases of other organs. Insanity was considered in every case to be but the effect of disease of the brain, or of some distant organ sympathetically affecting its sentient organ. In considering this class of diseases, it is necessary that we should dismiss from our minds all our pre-conceived notions, based upon legal definitions, of insanity. If we tie ourselves down to legal definitions, to metaphysical abstractions, we close our eyes to a medical truth, of the highest import

to the happiness and well-being of the human race. Insanity did not admit of being defined. It was not essentially different from other diseases; it obeyed the same pathological laws. He considered that it was possible to be pathologically insane without being legally mad. The period of incubation might last for months; it has been known to be of fifteen years' duration. Patients often confess that they have for months, and for years, struggled against the encroachments of this disorder; and this struggle has been most carefully concealed from those most nearly related and associated with them. Before deciding as to the presence of insanity in any given case, the physician must be careful not to confound natural singularity and eccentricity, with that departure from sound mental health which is clearly the result of physical disease. We must compare the manifestations which prevail at the time when the mind is supposed to be deranged, with the previous mental condition of the individual in its natural and habitual state. The patient's own mind must be the standard of comparison. A person may be naturally subject to violent paroxysms of anger; may be improvident, vicious, capricious, extravagant in his habits; these may be the ordinary characteristics of his mind, and as such, would not be considered as evidences of disease; but should a person remarkable for mildness of temper, suddenly become liable to fits of passion—should any great and sudden alteration take place in the habitual and natural constitution of his mind—then these deviations, if accompanied by an obvious impairment of bodily health, are valuable beacons to guide us in the formation of an opinion respecting the mental state of the individual.

For some time before insanity explodes, the patient is conscious of the existence of cerebral disorder, of morbid feelings, of "thick-coming fancies," against which, for months and even years, he has heroically struggled, and often with success. It was generally admitted that no affections were so insidious in their progress as those of the brain. In almost any case, even where the disorder of the mind has apparently developed itself suddenly, there will be found to have existed a well-marked period of incubation,—an incipient, precursory, or premonitory stage which has been overlooked. The first stage of insanity had, Dr. Winslow thought, been justly termed the stage of "moral incoherency." He was disposed to believe that in every case the moral faculties were the first to be implicated in the disorder, and that the intellectual insanity was but an advanced stage of the moral disease. The author then enumerated what he conceived to be the incipient signs of insanity: an alteration in the affection towards relatives without any obvious cause—this aversion being often in the direct ratio to the former attachment—a difficulty in guarding against dislike: the patient evinces an earnestness about, and a disposition to magnify, trifles—he becomes restless—his volition is weakened—his memory defective, and the power of concentrating his thoughts, gone. His mind is tortured with the apprehension that he is going mad—he appears to have a morbid dread of some impending evil—he neglects his ordinary business and pursuits, courts solitude, avoids the society of former associates—is suspicious of his best friend.

His natural character undergoes a complete change. He often suddenly manifests a disposition to take large quantities of intoxicating liquors, talks loudly; is extremely loquacious; is capricious in all his actions; his imagination becomes brilliant; old impressions are revived. In the commencement of insanity it is often difficult to know whether the person be drunk or mad. In connexion with these mental symptoms are certain physical signs: pain of the head; sense of tightness in and constriction across the forehead; heat of scalp; puffiness of the scalp; anxious expression of the countenance; prominence of the cornea; contracted pupil; a disposition to bite the nails and tips of the fingers; defective articulation; an oily or greasy appearance of the skin; a fetid cutaneous exhalation; an unnatural brilliancy of the eyes; great physical restlessness, the patient pacing and re-pacing the room as if wishing to throw off from the

system a redundant supply of nervous energy; sleeplessness; hepatic and gastric derangement. Dr. Winslow then, at length, entered into a consideration of the physical and moral treatment of incipient insanity. As a general rule, he deprecated bleeding; cases, however, occurred in which it would be necessary to deplete generally and locally. In the majority of these cases there is excitement without power. The author then pointed out the condition of the system in which bleeding would be beneficial.

He referred to the use of warm baths; application of cold to the head; counter irritants opiates; tonics; purgatives, in the treatment of mental derangement.*

An animated discussion followed the reading of the paper, in which Dr. Thompson, Mr. Dendy, Mr. Headland, Dr. Clutterbuck, &c., &c., took a part.

Mr. Dendy thought, that the chemical condition of the fluid circulating in the brain had much to do with insanity. He referred to Dr. Wigan's "Views of the 'Duality of the Mind,'" as being curious and deserving of consideration.

Mr. Headland said, that it was rare to find in the brain after death, in cases of insanity, any appreciable indications of disease. He thought that Dr. Winslow had attached too much importance to physical treatment; much more was to be effected by moral means.

The discussion was adjourned until the following Monday.

WESTMINSTER MEDICAL SOCIETY, Feb. 1st, 1845, Dr. Reid, President, in the chair.—*Sterility.*

Foreign Substances in the Body.

Mr. Greenhaigh exhibited the internal parts of generation of a woman of the town; the Fallopian tubes and ovaries were adherent to the back part of the uterus, and the vagina was also much ulcerated about the os uteri. This state of the parts was regarded by Dr. Reid and Dr. Snow as one of the causes of sterility, which, however, Dr. Reid did not consider to be a necessary consequence of its existence.

Mr. Chance then detailed several cases of foreign substances which had been imbedded in the arm for a long period, their presence there being accompanied by the existence of rheumatic pains, which disappeared on their removal. In the first instance, the foreign body was a piece of glass, in the other a piece of steel. He enquired the reason why abscesses followed the introduction of these extraneous substances in some instances, and not in others, and observed, that in his cases the surrounding tissues were perfectly healthy.

Mr. Fisher briefly mentioned a case in which he removed a bullet from the neck after it had been there for some time; he found it to be coated with phosphate of lime. He also stated that he had cut out several pieces of glass from a man's hand, which had got there through his having fallen through a sky-light about eighteen months previously.

Dr. Sayer also mentioned the case of a lady who was accidentally shot in the chest, and the bullet, after death, which occurred some years afterwards, was found in a pouch formed between the lung and the pleura. The presence of the bullet was supposed to be the cause of attacks resembling spasmodic asthma, to which the lady became subject after the accident. In another case a young lady was suddenly seized with pain in the upper part of the thigh, whence was extracted a needle blackened with oxide of iron. She could not recollect either the time or in the way in which it entered her person.

THE NEW REMEDY FOR PHTHISIS.

We have been favoured by Evan Thomas, Esq., surgeon, of Pwllhili, in North Wales, late house-surgeon to King's College Hospital, with notes of a case of phthisis pulmonalis, in which the newly proposed method of cure, by incision into the

* The above is but a faint outline of Dr Winslow's paper; which we should be glad to see published in a form worthy of its value, viz.,—entire.

chest, was tried. What the ultimate result of the operation may be we know not—the more immediate has been, a decided improvement in the patient's health, and a very great degree of relief from what had previously been a very distressing cough.

E. J., a sailor, ætat. 21, a native of Wales, who had always enjoyed good health, was attacked while on a voyage from London to Archangel, with severe diarrhœa, which, in a short time, became complicated with hacking cough and profuse expectoration. During the continuance of the pulmonary affection, hæmoptysis had not set in. On his arrival at Archangel he went into hospital, which, finding no improvement therefrom, he left to return to England. He had been under treatment by the reporter's brother for some time, during which, the chest symptoms, though skilfully treated, were not at all improved. The diarrhœa, however, was somewhat checked by the use of astringent and opiate injections. Mr. E. Thomas, finding from the history of the case, that no good could result from the ordinary plan of treatment, determined (with the consent of the patient, to whom he had explained the nature of his situation) to try the plan of making an incision into the parietes of the chest. He was induced to do so from having witnessed a case in which it had been previously adopted with success by his friend Dr. Stork in London. The physical signs presented by the patient, *now*, were: extensive dullness on percussion over the front of the chest on the left side, accompanied with *gargouillement*, and bronchial respiration, both of which were audible over the whole extent of dullness. Percussion on the right side also elicited a dull sound. But here there was no abnormal respiratory murmur. Measurement of both sides shewed a difference in size of an inch between the right and left sides, owing, as the reporter states, to effusion within the former. The operation was performed as the patient lay a-bed on his back. It consisted merely in making a vertical incision of two inches in length between the fifth and sixth ribs, close upon the upper border of the latter, and by which were divided the skin, superficial fascia, and the sternal fibres of the pectoralis major. It was completed by carefully dividing the pleura with a bistoury, and introducing through the wound a portion of gum elastic catheter, bent at right angles. This was prevented from escaping by means of pads of lint, and straps of adhesive plaster. Air came freely through the tube, when it had entered the tubercular cavity. The quantity of blood lost did not exceed a table-spoonful.

The immediate effects of this operation have been a very great alleviation of the distressing cough, which is represented as nothing now to what it was before the operation; a diminution in the frequency of the pulse and respiration, the former being lessened by fifteen strokes, the latter by six inspirations within the minute. Purulent matter continued to flow abundantly through the tube, until some few days since, when, on account of some uneasiness, the latter had to be withdrawn. What is somewhat wonderful, is, that since its removal, pus escapes in greater quantity through the wound when he coughs, than it did heretofore, while the tube remained within it. The operation has been performed a month since, and the patient still continues relieved.

Professor Spooner, of the Veterinary College, at Camden Town, has offered the sum of fifty guineas or a gold medal of that value, to any qualified graduate of the Royal College of Veterinary Surgeons, who may be successful in the treatment of a well-attested case of *rabies canina* in the lower order of animals, by abstracting as much blood by measurement as it can bear short of causing death, and transfusing above one half the quantity, or rather less, of the blood of a healthy animal of the same species; the vein which had been opened being then secured by ligature or otherwise, and the animal kept undisturbed to await the result. We cannot but suspect the condition of treatment enforced by Professor Spooner will render void all chance of a claimant for the prize.

THE MORNING JOURNALS ON MEDICAL REFORM.

The *Times*, a few days since, had a valuable article on Medical Reform. It declares that the College of Surgeons seem bent on their own destruction, adding an expression of its fear that the majority may be absurd enough not to sanction the improvements our pages had announced as in progress. It announces that it is the College that must now humble itself, and affirms that the *Times* will steadily lend itself to resist its injustices. While it advises the Profession to ask a Charter of Incorporation, as a means of compelling the College to do right, it recommends above all things opposition to the Bill. It urges every member of the College to write up immediately a protest to the Secretary against its injustices. It concludes:

"The Council have, blindly or wilfully, it little matters which, thrown away their main chance, and the game is now in the hands of the general practitioners; but they must play it out like men whose success depends on the exertions of each individual."

[In reply to this article, a Member of the Council next day wrote a letter, asseverating that the majority had not yet given a decision on the improvements promised through our pages. The writer, who calls himself "*Chirurgus*," and who is Mr. Samuel Cooper—if we know his style—expresses a great dread of letting the power escape from the hands of the "*pures*." He, however, is in favour of admitting members to the Fellowship on the ground of seniority.]

The *Times* followed up this article by another, in which, after some strictures on Sir James Graham's letter to the Association of General Practitioners, a comment is given on the letter of *Chirurgus*, and the high standing of the General Practitioner is maintained. It thus concludes:

"The '*pures*' are the surgeons in London, but the general practitioners are the surgeons in the country, and at their hands ten times the number of the surgical patients in London are daily experiencing the benefit of treatment as skilful and as successful as can be met with in the first London hospitals. For our own parts, we are fully alive from a painful experience to the unhappy position of a patient under the scalpel of one of the first London '*pures*,' but our acquaintance with country hospitals has not led us to entertain a greater dread of being operated on by the surgeons attached to them than by him. If, as we still hope, though most faintly, the council may be induced to do justice to their members, they must do it at once, in order to save themselves. It was not until we saw too clearly that that hope was rapidly failing us, that we urged the solicitation of a charter for the separate incorporation of the general practitioners. Let justice be done by the council, and the cry for that charter will be hushed at once; but we repeat, that our present course is clear. Procrastination is as much the object of the majority in the council as it is of Sir J. GRAHAM; and the general practitioners must strain every nerve to secure that the question of their charter shall be at once taken into consideration. When they are secure of that, they will be in a position to receive, if they please, and on fair terms, any offer of compromise from the council."

The *Morning Chronicle*, of Tuesday, gives a leading article on the same subject, and after ridiculing Sir James Graham for asking at this late hour for the symptoms of the malady, proceeds thus:

"The semi-pledge of the Home Secretary to grant the general practitioners a charter of incorporation, if they wish one, must, it is clear, exercise a very serious influence on the fortunes of that College of Surgeons which his recent innovations, have thrown into so much jeopardy. It is a practical abandonment of the ruling body of that institution to the consequences of his own ill-advised policy, and, if consistently followed out, will inevitably transfer the mansion in Lincoln's-inn-fields with all its surgical treasures—dead or living—to the hammer of Mr. GEORGE ROBINS, or the key of the Keeper of the Queen's Bench. The new incorporation, of which Sir JAMES GRAHAM talks so easily as a matter of course, is

in truth the double act of building up one medical establishment, and the destruction of another, and for no earthly reason except to make work for a few speculating masons and architects to be found in every profession. The College of Surgeons is at this moment essentially the college of general practitioners, with the drawback, it is true, of some stupid misgovernment. The general practitioners have supplied every element in its support and elevation. It has been raised by them, supported by them; whatever it has that is not the gift of Government, it owes to them: it is composed of them, and by them. To use the illustration of MENENIUS AGRIPPA, while the "*pure surgeons*" have played—and very fantastically—the part of head (including, of course, the gustatory apparatus) the general practitioners have acted all the other parts of the institution's economy. Nay, this multiple head itself is but the servant of the general practitioners. The fees—and very handsome they are—of the pure surgeons, as "*examiners*" and "*councillors*," come almost exclusively from that contemned body. Out of twelve thousand members, not two hundred can call themselves "*pure*" surgeons; who are, in truth, so small a particle in the aggregate mass, that such a secession of the general practitioners as Sir JAMES GRAHAM coolly deliberates about, must turn the Royal College of Surgeons of England from a great national institution into one of the smallest scientific societies of London.

The project itself of a *new* college, while we have two already dedicated respectively to medicine and surgery, is, with all deference be it said, little less than a stark mad absurdity. Destroy the two if you please, or unite them if thought better; but while they stand, to encumber professional finances with the heavy tax, or embarrass medical education with the mischievous rivalry, of a third institution, is just to show that, while actively investing our capital of hopes in bubble contingencies, we do not know how to use the opportunities actually before us. A change is undoubtedly necessary; but let it not be in that costly, clumsy, out-of-the-way manner which must outworth a thousand times its products, and reminds one of the man in JOE MILLER, who knew of no mode of giving his cow the herbage on his barn-top except by dragging her on the roof. A college like that in Lincoln's-inn-fields is not a wigwam, to be abandoned for another the moment one's position will bear a complaint. It will bear anything better than destruction.

The real question to be considered—the only one, indeed, on this matter that rises above a puerility—is, whether that college, whose duty it is to keep faithful watch over the surgery of this country, shall be placed in harmony with their responsibilities by *themselves* or by *Parliament*. If the information that has reached us be correct, it would appear that there is yet considerable hesitation on the part of the ruling council in realizing the changes which the *Medical Times* a short time since announced, it is said, on authority, as forthcoming. We trust, for the good sense of the council, the foreboding is to be proved false. The temper of the profession at this moment, and the expression of an opinion all but unanimous, has demonstrated that the College of Surgeons can no longer be governed for the exclusive benefit of its "*pures*." A revolution in its government must come ere long, and if the council lose the opportunity of extracting, out of its voluntary adoption, a graceful peace-offering to their now alienated members, the latter will have only to communicate, in district petitions to Parliament, the character of their wrongs, and their suggestions for a remedy, to receive a very speedy redress."

A petition has been sent us from Hertford on the new Bill. It asks for uniformity of qualification and fees; annual registration; equal rights of practice to medical men in all parts of the empire; suppression in every practical way of empiricism, and the appointment of a governing council representing Government, physicians, surgeons, and general practitioners. It makes a strong protest against retrospective legislation, and by consequence gives a home thrust at the new charter

THE MEDICAL PROTECTION ASSEMBLY.

A THIRD GRADE OR NOT?

Feb. 3.—Mr. Mc'CANN in the Chair.

Mr. Wakley said, that on Friday last, a sub-committee had been appointed to draw up a form of petition to the Crown, which he would move should now be read, and signed by those members of the College who were present.

The petition was then read by the Secretary, and Mr. Davies, the senior member present, in signing, said, he would just mention one effect of the late amended charter of the College; namely, that he and Dr. Soden, of Bath, had entered the army in 1800, that Dr. Soden's son was now a Fellow, but that he (Mr. Davies) was not. The other members of the College present then signed with the exception of Mr. Wakley, who appeared to want time to consider of it.

Mr. Ross thought the statement contained in the petition, that the council had acted illegally in procuring their late charter, was unfounded. Mr. Dermott had submitted the charter to Mr. Fitzroy Kelly, who had called it legal. Mr. Wakley said they were not charged with illegality, but misrepresentation. Some discussion took place as to where the petition should lie for signature, Mr. Cooper observing that he objected from experience to any hawking of it about, and adding a suggestion that Mr. Wakley was the fittest person to entrust it to for presentation. (Profound silence.)

The Chairman before proceeding to the adjourned discussion, read a letter from a Member of the Council of the College of Surgeons, stating that he and the Council were anxious to know what the profession would be at, that for his part he did not know,—that he thought 20 men of the elite of the profession were much more likely to do their duty well and honestly, than any number selected by the suffrages of the profession,—but that as an alteration had been made in that particular, he was prepared to support further changes. The writer then referred to his evidence given on Mr. Warburton's Committee, and in conclusion said that the Council were to meet on Thursday, and he and other Members would support the profession's reasonable demands, a programme of which he requested.

The Chairman called upon Dr. Lynch to resume the adjourned discussion. The Doctor was several times interrupted by Mr. Wakley, who rose to order with the most disorderly regularity, saying that he had the honor to be a member of another assembly, where they had many stringent rules to prevent "what we call botheration talk." Indeed the hon. gentleman seemed very much indisposed to listen to any speaker but himself, and one or two solitary supporters, one of whom, a Mr. Cooper said, that there had been too much talk, and that it was a sort of 'Irish Question,' alluding we presume to Dr. Lynch, who with much spirit objected to any impertinent reference to the place of a gentleman's nativity. Dr. Lynch then recapitulated the leading arguments with regard to the two important questions that agitate the medical world, namely, whether they ought to seek for a charter of incorporation or amend the charter of the College of Surgeons. He had cautiously abstained from expressing his own particular opinion. Several gentlemen had spoken. They were in possession of their opinions. It was the duty of the assembly as a deliberative body, to endeavour to ascertain the prevailing wishes of those whose interests were confided to their protection. The object of the discussion was accomplished. The objections against it were frivolous and unfounded. The real desire was to prevent discussion under the apprehension that it would interfere with the manifesto for a separate college put forth by the Marylebone Association. He expatiated on the benefits already resulting from the novel and startling enquiry whether incorporation would lead to degradation or regeneration.

Mr. Wakley rose to order, and objected to Dr. Lynch, as the original mover again addressing the meeting. Mr. Hilles protested against those interruptions as more irregular than the irregularities complained of. He considered highly repre-

hensible the repeated attempt made to stop discussion at this important crisis. He was strongly in favor of an amended charter of the college, and denounced the conduct of the Marylebone Association, in arrogating so much power to themselves without the sanction of the profession. He thought the "provisional" committee well named: they were already engaged in *providing* situations for themselves. He complained of their evasion of principle. Mr. Jones highly approved of the existence of an independent association like the assembly, and hoped they would watch and protect the profession against all selfish and designing men.

Dr. Lynch stated there were nearly 12,000 members on the books of the college, and nearly 16,000 in the list of the hall. He was a member of both. He would prefer a junction with the college on fair and honourable terms. He was opposed to a third grade. It would be a curse, a ruin, and a degradation to the profession. There was in reality but one degree, all others were anomalies. Medicine and surgery, were one and indivisible. The charter sought to create a subordinate class. Sir James Graham's bill, seeks to consummate that scheme. Both failed. We are about to voluntarily inflict on ourselves the mark of inferiority. The physician gets into practice by the imposition, that he is our superior in knowledge. We know that this prejudice is a delusion. A third estate, legally recognized in medicine, would confirm, would convert this delusion into reality. We are an aristocracy loving people. In vain, you might urge the arguments of the general practitioner, all would fall heedless on the public ear. The College of Surgeons, if we set up conditions of eligibility, would strike at all those that did not belong to them, and pronounce a damning exclusion, that would make the members seek for its diploma; thus the new college would become a failure. He instanced the experience of Mr. Wakley, on the difficulty of establishing a new college. He recommended that they should have an interview with Sir James Graham, induce him to amend the charter, to give the representation principle to the members of the college, periodical election of councillors, and to receive as members, all the licentiates of the hall and all others legally qualified, on the payment of a fee. They would then have but two grades, physicians and surgeons. He for one, and it was the general feeling with surgeons, would not wish to sink into a college of apothecaries. He censured the Marylebone men, for submitting their memorial to Sir James Graham, without receiving the authority of the profession, and feared that principle was about to be sacrificed to personal aggrandisement. The word apothecary was obsolete. They were ashamed of it. Who now put apothecary on their card? All assumed the title surgeon. With it was invariably associated in the mind, the practitioner of Mantua, "All poverty all bone." Mr. Wakley, by his denunciation of the trafficking spirit of the hags of Rhubarb Hall, had helped to shove them down the stream of oblivion. Some good-natured folk gave them credit for their recent concessions. Their doom is sealed. The sword of Dionysius hangs by a hair over their head. In the throes of extinction, in the agonies of a death-bed repentance, they exhibit symptoms of zeal in our cause. Many ask "Whence this new-born love of reform, this suspicious disinterestedness?" How many years were we subjected to every species of contumely and injury? Not one word of sympathy, of remonstrance, of concession was heard, until their profits and privileges were about to be abrogated. He would advise the Assembly to submit their demands to Sir James Graham; to try and break down the barriers of the College, if the infatuated garrison would not capitulate. He is too sagacious to resist the firm, and temperate, and just appeal of 12,000 Members, and to hearken to the superannuated selfishness, the mercenary imbecility of about 12 Members of the Council, who have made a trade of the profession, and whose names are unknown beyond the precincts of the College.

Mr. Cooper agreed with Dr. Lynch as to the conduct of the Provisional Committee. He would prefer an amendment of the College, if on the representative principle, to any other plan.

Mr. Wakley moved the adjournment of the Meeting, and repudiated all thoughts of union with the Council, and expatiated on the gross indignities perpetrated by them on the profession, especially in reference to the insult offered the Assembly, in refusing to receive their deputation. Now they were coming crawling on their knees, begging forgiveness, and asked them what they wanted!

Mr. Jones thought no gentleman would join the College in its present unamended state.

Mr. Hilles observed the profession were united, but not with the Marylebone Association.

These gentlemen addressed the Meeting, amid continual interruptions from Mr. Wakley. Mr. Ross finally gave notice of a motion for Monday next, "That this Assembly do petition Parliament for an independent charter of incorporation for general practitioners," which was agreed to be argued on Monday, with the understanding that Dr. Lynch is to have precedence.

Mr. Wakley in moving the adjournment begged the Members, whom he is endeavouring to sever, to unite, and stated that they had only one interest, which he seems much inclined to sacrifice. The Meeting then adjourned.

The Assembly met again on last Monday night, when a more than usually well-attended meeting made its appearance. We should say there were nearly thirty persons present. Mr. Ross moved that they should petition for General Practitioners' Incorporation. Dr. Lynch enforced his former argumentations against a third estate. Mr. Wakley, who was evidently very gratified at the numerous audience his distinguished position as an M. P. and a Medical Reformer of twenty-five years standing had collected about him, favoured them with an elaborate address of an hour's duration, and moved as an amendment, that the General Practitioners of the Assembly should join *individually*, but *not* *aggregately*, the Marylebone Association. He accused his opponents in the Assembly of standing too much on principle, and threatened to withdraw his countenance from them if they did not pass his resolution. His amendment was therefore carried. On the proposition of Mr. Hilles, Mr. Wakley further voted in favour of a motion for a Committee to draw up the assembly's manifesto of political principle.

ENLARGEMENT OF THE HEART; DISEASED VALVES; HEMIPLEGIA.—At a meeting of the Sheffield Medical Society, Dr. Favell exhibited the heart of a young man. He was admitted into the infirmary under the care of Dr. Favell, and at the time of his admission complained of rheumatic pain in his legs; on visiting him the next morning he was found hemiplegic; motion and sensation in the right arm and leg were very much impaired; the mouth was drawn to the left side; articulation was very indistinct; and the pupil of the left eye much more dilated than that of the other. He stated that he had a similar attack, but in a much slighter degree, on the previous Sunday. Pulse 90, regular; but vibratile; no pain in the head. On examining the heart, a distinct fremitus was felt when the hand was placed on the præcordial region. The impulse was much increased; the dulness considerably more extensive than natural; and the apex beat on the axillary side of the nipple. A loud rough murmur was heard with the systole at the apex, and also an inch above the ensiform cartilage, and gradually decreased towards the situation of the aortic valves. A softer murmur was also heard along the course of the left ventricle with the diastole. The heart was of twice the natural size, and weighed between sixteen and seventeen ounces; auricles were much dilated; the right auriculo-ventricular opening contracted, so as not to admit the little finger, and furrowed with ossific deposit; the mitral valve short, thick, and calcilaginous. The walls of the left ventricle very much thickened; the aortic valves rather thicker than natural, but contained no ossific deposit.

THE NEW INCORPORATION.

Sir,—I forward you my reply to a circular of the "Association of General Practitioners in Medicine, Surgery, and Midwifery;" for insertion in your columns, if you think fit, together with the Secretary's note of acknowledgement.

Although I approve the spirited course the General Practitioners have taken, in self-defence, as a not unlikely means of wresting justice from the College, I could not, for the reasons given, co-operate with the Association.

Allow me to take this opportunity of expressing my hearty thanks, due to you from every member of the profession, for your *qualified* approbation of Sir James Graham's bill; for your temperate, judicious, and talented "leaders" on Medical Reform; and for your continued, powerful, and I trust, successful efforts to wipe away the stigma with which the College has branded the great body of its members: and on the other hand, to avert the degradation, which the Association will, in the attainment of its object,—namely a Charter of Incorporation,—not fail to bring upon its members, by reason of the inferior *status* it must, I fear, as a third corporate body, hold in public estimation.

I remain, Sir,

Your most obedient servant,

J. B.

Great Yarmouth, Jan. 31, 1845.

Gentlemen,—I admit, that the great body of the General Practitioners, have been both slighted and insulted, by the Council and Fellows of the College of Surgeons; but the fault lay in the Government granting to them a new Charter, without a distinct understanding, that all the Members of the College should be admitted to equality of rights and privileges. On the other hand, the general Practitioners cannot feel surprised at the Council and Fellows, desiring to make a wide distinction between themselves and practitioners, who send to Lady Feigning, Spermaceti draughts (to be taken every four hours) after her accouchement, or sarsaparilla draughts (to be taken thrice a day) together with pills and lotions to Lord Careless—and also between themselves and practitioners, styling themselves surgeons, whose shop-windows are ornamented with red, blue, and green bottles, and over whose door shines a red, or variegated lamp, and where two-pennyworth of pilula cocci, and laudanum is dispensed over the counter for ready money. It is impossible that these two parties, between whom there is so broad a distinction, can fraternize. Although members of one body, there can be no community of sentiment, no *esprit du corps*; while other General Practitioners who have dissociated themselves from Pharmacy like myself; or those, who neither drug nor drench their patients, but supply in a convenient form only what their ease requires, and who charge chiefly for attendance, cannot but feel deeply mortified at the invidious distinction conferred upon men not more worthy, and in many instances less worthy than themselves to be accounted Fellows of the College. I have not been honoured by the offer of Fellowship; the papers, that I have written, being on midwifery, are as such eschewed by the Council and Fellows, as wholly beneath their notice. In 1827, I think it was, that I passed my examination before the Examiners at Apothecaries' Hall, and shortly after at the College of Surgeons, (although I have not my certificates framed and stuck up in a conspicuous place *ad captandum vulgus*) and then, after pursuing my studies in Dublin, Paris, and Edinburgh, I graduated in 1836 at the last University. I practised two or three years as a General Practitioner, dispensing medicines, and then commenced writing my prescriptions and charging for attendance only. After a time I took up my degree, and have since practised as a General Practitioner *with a degree*—which in my opinion is the right course to be pursued both for the respectability of the profession, and the good of the public. I practice, as I have just said, generally, in Medicine, Surgery, and Midwifery; and take my fee, half a sovereign, or a sovereign, whenever I can get it. Where my attendance is long, I send in an account of the number of visits immediately after; or in some few cases, at the end of the year. I have never had the slightest con-

nexion with the Druggists. I should rejoice to see my position taken up by the great body of the General Practitioners; both by those who have, as well as those who have not a degree. I mean a British or Irish degree, for there is now-a-days no excuse for men going abroad to obtain degrees in medicine, much less for getting them at home by purchase. I would reject all such degrees. The *status* which I desire to see the General Practitioner take in this country, is that, which I feel to hold myself. In vol. 10 p. 414 of the "*Medical Times*," I have advocated this reform in a paper entitled "On the present state and prospects of the Profession." We have all our pet notions of reform, and this is mine. With these views and opinions I feel it impossible for me to co-operate with the General Practitioners in their scheme of getting a Charter of Incorporation, which would serve to perpetuate a state of things, which I desire to see amended. I still hope that the College of Surgeons and the General Practitioners will come to a good understanding. Each must concede something. The College, the practice of midwifery; the General Practitioner, the trade in drugs. The expression is derogatory, but true, nevertheless, for I regret to say, observation and experience, justify me in applying it to practitioners in the provinces as well as in the metropolis. I trust we shall still see all the members of the College united in the bond of Fellowship, and with one spirit, pursuing their common profession for the sake of their own respectability and for the public good. With my apologies for troubling you with this letter, in which I have brought myself before gentlemen to whom I am a stranger, but which the circumstances will, I feel, satisfactorily explain.

I remain, Gentlemen,

Your very obedient servant,

J. B.

Great Yarmouth, Jan. 1, 1845

REPLY.

Sir,—I am directed by the Honorary Secretaries to acknowledge the receipt of your letter of the 17th inst., which will be placed before the Provisional Committee on Tuesday next,

I am Sir,

Your obedient servant,

LEIGH CLIFFE.

4, Hanover Square, 20th January 1845.

[Agreeing with much that our Correspondent writes, we must append an opinion, that the drenching system is more the fault of the public and the consequence of an ill-discharge of duties by the Medical Corporations, than the result of any interest or desire of General Practitioners. We are too many, the druggists encroach—and the public in many cases will not pay for advice except cheated into it. That an improvement is coming in all these respects, there can be no doubt.—ED.]

GOSSIP AND NEWS OF THE WEEK.

The Cheltenham Examiner, gives a detailed account of the experiments of Dr. Owen, and Mr. Vernon, the mesmeric lecturers in Cheltenham. It would appear, that each essay with the girl Knowles, and with Adolphe (the brother of Alexis) was so successful, as to have forced belief from a rather incredulous audience. The editors of the Examiner and Free Press, did their best to exclude the possibility of imposture, and yet found *clairvoyance*. Among a number of other experiments made, Mr. Wallace, a gentleman of respectability, and extremely opposed to mesmerism, tested Adolphe with a word known but to himself, and enclosed in a box, carefully covered and sealed. The word "hash" was named to him, and he admitted, that he could not escape confessing the fact of *clairvoyance*. The editor adds a statement to which, as appealing to our sense of fair play and rigid justice to either side, we must give a word of reply. "We believe," he says "it was the general opinion among the spectators that the exhibition was genuine: it certainly was of those who applied the tests. It is perhaps the more necessary to make this admission, from the fact of a high professional authority, the *Medical Times*, treating the whole of this girl's performance as a collusion, entitling Dr. Owens to the care of a constable, as a cheat and

impostor; the doctor alluded to this in his lecture, and urged how unfair it was to accuse him of collusion and imposition, in a matter in which it was so easy for parties to judge publicly for themselves." The girl (Jane Knowles, we believe), was detected at Bath, in an attempt to deceive, so gross, and we think, so indubitable, that our conclusion was immediate, that no further exhibition of her, in connection with mesmerism, could be justified. Dr. Owen, might have honestly produced her as proof of "*clairvoyant*" phenomena till that moment, but not afterwards. Imposture once shewn, she should at once have been dismissed, and we expect, that if her successes shall eventually turn out to be but the result of an extraordinary power of deception, Dr. Owen, after such a warning, cannot be screened, from participating with her the consequences. There is so much incredulity and euriosty afloat about mesmerism, and mesmerism contains so much, that enlightened science should rather study than be revolted from, that it behoves the Medical Journalist to use a bold hand in keeping the subject clear from suspicion, and noting and punishing every attempt at imposture.

Dr. Chambers, we understand, will be the president of the Royal Medical and Chirurgical Society for the next two years.

The Fothergillian Medal of the Medical Society of London has been awarded to Mr. W. C. Dendy, for a prize essay on lepra and psoriasis.

The seventh annual report of the Suffolk Lunatic Asylum, has reached us. It gives us very great pleasure to record the progressive improvement which each succeeding year develops in the economy of this institution. It appears from the report, that the number of admissions, for the year ending 1844, have been, males, 34, females, 29; of these were discharged cured, males 19, females 13; the preponderance of cure, being evidently in favour of the male. In the matter of death from mania, we find the males still further favored, the number of deaths among the males being only 8 in 34; while in the female, it ascends as high as 12 in 29. The number of those taken home (cured or otherwise not mentioned), is but 2. This little "brochure," affords admirable illustration of the superiority of moral discipline over the brutal restraint system. And if there are yet, any, so wedded to the old "regime," as to prefer brute force to gentler agency in endeavouring to win back the truant reason to its forsaken home, we would strongly recommend them to peruse this report, and then return to their old system "with what appetite they may."

It is impossible to conceive anything more absurd, than the present plan of stripping the resident managers of lunatic asylums of supreme authority over the domestics and maniacal inmates of these establishments, and investing it in non-resident medical officers, who give a hurried visit some four or five days a week, to, it may be, some two or three hundred patients. The superintendents of such establishments may be (as they should always be) themselves medical men, and to what scenes of collision (the unavoidable consequences of the new regulations) must not this latter circumstance give rise? These remarks have in some sort been caused by the perusal of a short and sententious letter, which some friend in Clonmel has done us the favour of writing to us, and which exemplifies pretty plainly the evil effects likely to ensue from the operation, not of the Code Justinian—but of a somewhat more perishable pile of legislation—the new code of the Chirurgical College of Ireland, upon the future well-being of the District Asylum in that town. From our friend's note it would appear, that the sanatory condition of the above-mentioned institution has been improving, year after year, under the excellent *surveillance* of the medical men who fill the office of managers. It seems, however, that this course of amelioration is destined to be checked by the "thus far shalt thou go, and no farther," of the very clever Secretary of the Irish College of Surgeons and his colleagues.

A NUT FOR GEOLOGISTS.—The Times of Tuesday has an extract taken from the "Cardiff Guardian," which details the finding of a frog imbedded in shale slate, at a depth of forty-five yards below the surface. On being extricated from its prison,

very soon gave indications of life, by jumping about pretty actively. Its eyes were open—though perfectly sightless, as might be proved by placing the finger upon them without the reptile's knowledge—and the aperture destined to play the part of mouth had become completely closed, presenting a mere linear trace. In consequence of the pressure exercised by its slaty prison upon the growth of the spinal column, the latter had become angular. The cast of the animal in the shale corresponds exactly with its shape and size. How came it there? or, how was it possible for life to have been preserved so long, as the space of time which must have intervened since the slaty materials of its domicile were in a fit state of plasticity to become the nidus of this batrachian reptile. Was it deposited there as a spermatozoon, hatched by internal heat, living, and growing, in its prison house for thousands of years? or has its confinement dated from a more recent and perfect period of its reptile existence? Not the least wonderful circumstance about the matter is, that although unfurnished with a mouth, since its liberation it has increased considerably in size. The only source of sustenance being furnished by the decomposition of atmospheric air, and the imbibition of watery fluid; the former being effected by means of (spiracula perhaps opening upon) the skin of the lower jaw, which is represented as being very thin. Here we have an example of reptile life in its organization, far above that of the vegetable world yet sustained by exactly identical resources with the latter; and find nature forging another of those fantastic though inexplicable links, which so closely connect the animal with the vegetable creation.

Faraday has been lecturing during the week to crowded audiences, at the Royal Institution, Albermarle Street. That which formed the subject of manipulation, was olefiant gas. This he condensed into a fluid before his audience; and informed them, that in his experiments on the subject, he had succeeded in liquifying phosphuretted hydrogen, hydriodic, hydrobromic, fluoboric, and fluosilicic acid gases; and in solidifying carbonic, sulphurous and hydrothionic acid gases, as well as euchlorine, nitrous oxide, and hydriodic, and hydrobromic acid gases. These experiments of this eminent chemist, must necessarily exercise a very great influence on the science of modern chemistry.

A meeting was recently held at Leicester on the Bill. Resolutions of a discriminating character were passed; and while the principle of the bill was supported, strong disapproval was expressed of many of its details. Dr. Noble was in the chair, and the speakers were Messrs. Brown, Lee, Bridges, T. Paget, Fullagar, Stallard, Gimson, Bright, Bownar, Moore, J. H. Stallard, Buck, Thrull, and Throsby.

From the *Daily Freeman*, of February 1, we learn that meetings of the Apothecaries and General Practitioners of Dublin have been held on the 20th, 24th, and 28th of January, at the Royal Exchange, at which a series of resolutions was agreed to, voting thanks to Sir James Graham, praising a council of health, and the registration of all classes of practitioners, recommending, however, that the former body should send to Government annual reports of its proceedings, and that the latter power should be compulsory. They add a protest against the monopoly in granting degrees in every branch of the profession, about to be allowed to Glasgow, a privilege which no other medical institution will enjoy.

At a special meeting of the members of the Liverpool Medical Reform Committee, and of the Local Council of the Provincial Medical and Surgical Association, held February 6th, to take into consideration a communication received from the Society of Apothecaries in London, it was resolved unanimously, "That this meeting, although sincerely desirous of co-operating in any measure calculated to elevate the position of the General Practitioners, considers that in the present stage of medical affairs, it does not possess sufficient information to form any decisive opinion on the subject. This meeting has every confidence, that in the amended Bill of Sir James Graham, the interests of the General Practitioners will not be lost sight of, while it is not prepared to decide whether

those interests would be best consulted by including the General Practitioners in the charter of the College of Surgeons, or by a separate and independent incorporation."

The Guardians of the Fylde Union, Kirkham advertise for a medical officer for the Lytham district, containing a population of 3042, and offer a salary of £16 per annum. For the district of Fleetwood, with a population of 3015, they offer £8 per annum. Do the Poor Law Commissioners, improved as they tell us they are, sanction this?

ROYAL COLLEGE OF SURGEONS. Gentlemen admitted Members on Friday, Feb. 7th. 1845.—E. L. Hussey, R. D. Harling, W. T. Iliff, W. B. Young, T. Murray, M. Baines, E. Candle, J. Gilbert, H. Wright, T. W. Harris, H. Hastings, C. Millar, G. Saunders.

APOTHECARIES HALL. Gentlemen admitted Members on 23rd January, 1845.—Edwin Jotham, Robert Cockerton.—30th January, 1845: Walter Christopher Turgar, Frederick Foster Morgan.—6th Feb., 1845: Thomas Palmer, George Downing, Daniel Carker, Peter Roscoe, William Henry Holman.

MEDICAL POOR LAW RELIEF.

PARLIAMENTARY REVELATIONS.

(Continued from p. 373.)

Mr. Pakington.—Do you found any particular argument upon the distinction you have now drawn between the medical officers of the Poor Law Unions?—I should say it is impossible to form any opinion as to the payment and station of one set of men by comparing them with another. A surgeon may take an hospital for nothing, but he would not accept the situation of a poor law officer. A poor law officer takes the situation for a certain small sum of money, but he takes it for his bread: the other holds it for the opportunity it gives him of advancement, and for obtaining even a European fame.

Then it does not follow, because these high offices in London are gratuitous, that therefore the medical officers of unions ought to work for very low salaries?—I cannot compare the views of the one with the views of the other.

May not the same motives, and the same principles, apply to both cases to a certain extent?—No; a physician or surgeon taking an hospital in London, does it for the high honour it bestows; the other man takes the office for his bread; he takes it, as the Mantuan apothecary sold his poison both to his friends and foes, to get his living.

Mr. Warburton.—Does not it in both cases bring the parties into notice?—In the one case it is a high honour, and in the other it is merely gaining his bread.

In the one case, he is brought under the notice of a very important class of society in the metropolis; in the other, he is brought under the notice of the inhabitants—the parishioners?...The London physician or surgeon is brought under the notice of the whole world; he becomes a public teacher, and an instructor of all Europe, if he has the ability for it.

Mr. Pakington.—The object of the hospital physician or surgeon is the professional honour which he gains by holding that office; the high station which he may attain?—Yes. The other man can attain to no high station; he takes the office only to get bread, and as soon as he has got that, he oftentimes gives up the office.

But he has the advantage of making himself known in his neighbourhood, and gaining considerable experience?—To a certain extent; but the moment he has obtained it, he often gives up the office, and throws away the ladder which he has made use of, because it is no longer of service to him. There is no respectable practitioner (as the word is commonly used) who either accepts the office or retains it, unless it be to keep out an interloper. A man who is already in practice will take it for an inferior sum, for the purpose of preventing a stranger being brought in, who might possibly do him some injury. He calculates the value of the injury, and the value of the place, and he says, "I will take the place rather than suffer the inconvenience;" and the consequence is, the poor are neglected.

Do not you consider that, for the sake of the introduction to practice, and the experience gained, it may be worth while for a young practitioner to accept these situations at a lower compensation than would remunerate his exertions?—Certainly: a man who is seeking bread will accept anything. The error is in the persons who make him undertake a duty which he cannot perform for the money.

Chairman.—The question is, whether you can thereby secure the best assistance for the poor?—You cannot have it in that way.

Mr. Pakington.—How would you propose to secure the best attendance for the poor otherwise than by requiring certain qualifications?—You must give the means of performing the duty. If a man has a great distance to go, he must keep a horse; if you do not give him enough to enable him to do that, he cannot go at the proper time, and the consequence is, the poor suffer or die. In some parts of the country, where there are large districts, the guardians appoint a station, where the surgeon has to go twice a week, simply because he has not an extra horse, and cannot go oftener: the people assemble there on those days to see him; and if any children or other persons are sick for a day or two days before, they wait till this day. This happened at a place called Chitten Polden Hill, which is in the

Bridgewater Union. The medical officer was to attend twice a week—one day was Saturday, but on Saturday he could not go; and why? Because he had been at a labour all night at a place three or four miles off, and he was unable to quit the woman, who required his constant attendance. The father of five children, who were all very ill, waited till the Saturday, in the expectation of his coming to the usual station, and finding that the medical man did not come, he went over late in the evening to his house, to say that his children were very ill, and wanting assistance. The poor doctor was tired—he had no extra horse—he could not go over, but he gave the man two powders, and said he would go over the next day. When he went the next morning, one of the children was dead, and in the course of four succeeding days, the other four were dead; so that five children were destroyed, one may say, through the want of attention, which they ought to have received three days earlier. I do not mean to say, that it is not possible that they might have died, if they had received attendance; but there can be no doubt they would have had a better chance of living, if such attendance had been properly given. No medical man should have a greater distance to go than he can go at all times, and under all circumstances.

Mr. G. Knight.—You said that this medical man could not possibly leave the case of labour which he was attending?—He could not on the Saturday.

Then if he had had only one mile to go instead of four, would it not have been the same?—No; he would have gone one mile that night when the father came to him, but he was so tired he could not walk three or four miles; he had not sufficient means of conveyance, and he declared himself unable to go.

Mr. Pakington.—Do not you think that professional qualification is the best general test of professional competency?—There is no other besides a reasonable standing in the profession. I would not allow a young man to become an independent union surgeon till he had been two or three years in practice, upon the ground that a union surgeon cannot have a consultation. He is the sole arbiter in every case of disease; whereas a young man in private life can generally have a consultation with another if he thinks it necessary. There is no allowance made for a consultation; there is an order given that, under certain circumstances, there may be a consultation; but as the payment for that consultation is always refused, it rarely takes place.

Chairman.—Will you explain what you understand by the "per-case system"?—The "per-case system" is one that has been approved of by, I believe, nearly all the Assistant Poor Law Commissioners; it is one that the doctors all delight in; and it is one which the Board of Guardians, in most districts, highly approved of until within the last two or three years. It has been abandoned, by the guardians, in consequence of finding that it leads to much greater expense than if they were to pay a regular annual salary; and I am the more desirous of explaining the system, because it is the original cause of the great mischief which the relieving officer commits in reference to the poor. The per-case system is managed in this way: a pauper list is made out by the Board of Guardians, which ought to include every person in the district receiving parochial relief of any kind, and for that list it has been proposed by the different Assistant Commissioners, and it has been approved of by the Commissioners, and received generally, that 2s. 6d. a head should be paid. At the first step there is a dispute between the doctors, the Commissioners, and the guardians, what the 2s. 6d. is to be paid for, whether it is to be paid for one illness, or for a year; at first it was proposed to be paid for a case, or one illness.

What do you mean by a case?—A case of sickness: a man may have an inflammation of the bowels in the month of January; an inflammation of the heart in the month of April; any other inflammation in July, and a fourth inflammation of a different description in December, and for these the surgeon claims to have four specific cases, or four half-crowns. The Board of Guardians prefer paying only 2s. 6d. for the whole year; so that for that 2s. 6d. they calculate that a man who is ailing may be upon the list, and may be supplied with medicines for 365 days. There are many casual paupers, as they are termed, in each district, who claim medical relief. As these are not placed generally upon the pauper list, they have been paid for at the rate of 7s. 6d. a-head; so that "the per-case system" includes two kinds of persons; one set for whom 2s. 6d. is paid, and one for whom 7s. 6d. is paid, I am speaking of the Newmarket district particularly in giving these various amounts, having here a memorial to this Committee from nine of the surgeons of that district, requiring an alteration of the system. It has also been a question with respect to the 2s. 6d., whether it should be 2s. 6d. for each case, from the beginning to the end of the illness, or 2s. 6d. once a quarter, which I believe was the feeling of several of the Assistant Commissioners. With regard to the 7s. 6d. cases, the question arises whether the man is sufficiently sick or not to entitle him to the relief of the surgeon. This is the great evil which I alluded to at the conclusion of my last examination. A person does not come to the surgeon and say "I am ill," but he is obliged to go to the relieving officer and say "I am ill," and then the relieving officer is to judge, he not being competent to decide whether a person has really an inflammation of the lungs or not. I venture to say that one half the young men who take office as poor-law surgeons are not able to decide what part of the lung is inflamed, and a relieving-officer is totally unfit to decide whether any part is inflamed or not. The result is that a great many persons have suffered materially, and some have died. I do not mean to say that positively persons have died in great numbers, but I wish to impress upon the Committee that if a man does not get early advice in complaints of an acute nature, they are apt to leave a disease behind them which becomes chronic, and embitters their future days. I do not know that I can give the Committee a better explanation of the evil that takes place under those circumstances than by giving it them from the persons at Newmarket who have signed that memorial, and perhaps the Committee will allow the memorial from the nine surgeons to be read. The memorial was read.]

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SUMMARY.

FEB. 22.

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CLINICAL LECTURES IN MEDICINE.

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, Founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

(Prepared from the German, expressly for the Medical Times.)

Pneumonia in the Upper Lobe of the Right Lung, with Simultaneous Irritation of the Brain and Intestines.—Difficulty of the Diagnosis.—Occult Inflammations.—Relapse of the Pneumonia.—Inflammation of the Heart.—Cure.

May 24th, 1841.—Christian Söhnholz, a goldsmith, 42 years of age.—The patient was brought into the hospital this morning, but in such a state, that but little information could be obtained from him. He is in a state of constant delirium, very restless, head hot, face rather flushed, and the eyes a little injected. Delirium tremens might have been conjectured, but his breath, at his reception, did not the smell of spirits, nor was there any trembling of the hands. The chest symptoms are more important; the patient breathes freely and coughs but little. Percussion gives a clear sound on the left side, and auscultation does not discover any morbid symptom; but the sound on percussion is dull and faint, and bronchial respiration, mixed with dry crepitation, are heard on the right side, in the upper part of the thorax. Abdominal symptoms are also present: the abdomen though soft is distended, and painful in the region of the cæcum; a rumbling noise is heard also in that situation. Considerable fever is associated with these local symptoms; the pulse is 120 per minute, small and soft; skin hot. The state of the stools and urine we have not yet had an opportunity of examining. It is evident from the above symptoms, that two organs are particularly affected:—1st, the upper lobe of the right lung, in which inflammation has already reached the stage of hepatisation; and 2ndly, the lower part of the mucous membrane of the intestines: a complication which leads us to suspect some typhoid affection, with inflammation of the upper lobe of the right lung, in which case the cerebral symptoms would be merely secondary. Although our examination is as yet imperfect, still we cannot do otherwise than base our mode of treatment on the facts elicited. With a view to the removal of the pneumonic symptoms, we shall immediately apply cupping glasses to the upper part of the chest, and, in the event of any material exacerbation taking place in the evening, we will institute a venesection, giving for internal use: infusion of digitalis, $\mathfrak{z}\text{iv}$; mucilage, $\mathfrak{z}\text{ij}$; nitrate of soda, $\mathfrak{z}\text{ij}$; simple syrup, $\mathfrak{z}\text{i}$. Mix.

May 25th.—Our diagnosis yesterday afforded us some points perfectly well marked, others less so. We considered the right lung as the principal seat of the affection, but the value of the intestinal symptoms was not so clear, as they might possibly be the effect of medicines previously administered; instances of which we have seen in other patients. It is difficult enough to determine this, when information can be gained respecting the previous treatment, but still more so, where no information at all can be elicited. The cerebral affection pre-

sented another difficulty; the brain certainly was in a state of irritation, but we considered this irritation as a secondary effect. We had also to determine whether this might not be the result of the abuse of spirituous liquors, for although the breath had no smell, yet the character of the delirium, and the slight congestion of the brain, were circumstances of suspicion. There was, then, no alternative, but that of directing our particular attention to the evident signs, which in this instance were formed by the diseased state of the upper part of the right lung. Cupping was repeated in the evening, and this morning six ounces of blood were abstracted from the arm. The patient spent a very uneasy night; it was with difficulty that he could be kept in his bed; sleep, however, came on in the morning. Subsequent to this, we obtained information that he had been ill for about nine days, and that he had used several doses of the sulphate of magnesia, which caused a state of diarrhoea; the affection of the mucous membrane of the intestines is, therefore, probably only a medicinal symptom, having no connexion with the disease. The point of concentration is, doubtless, in the organs of respiration.

May 27th.—Our first impression as to the state of the patient was rather doubtful; the diagnosis showed that we had to deal with a far advanced inflammation in the upper lobe of the right lung. The abdominal and cerebral symptoms were, however, exceedingly difficult to interpret. In this case, we have since ascertained that the abdominal symptoms are to be attributed to the purgative previously administered, they form, therefore, a secondary, or artificial group of symptoms, while those of the brain appear to be mere adjuncts to the fever, induced by the pulmonary affection; the local symptoms in the chest exhibited themselves only subsequently to sleep having taken place after an abstraction of blood. I saw a man brought into the hospital affected with bilious pneumonia and violent delirium, who did not exhibit the slightest local symptoms in the chest, he breathed freely, and, on being asked whether he felt any pain, he answered, striking his chest with his fist, that he felt quite well; it was only on recovering from the delirium that the local symptoms made their appearance. So it is with our patient; he complains of both head and chest, now that the delirium has left him. The pulmonary symptoms, in this instance therefore, occupy our principal attention; they continue, though not in a very violent form, the fever is moderate, pulse 100 per minute, there is a commencement of a distinct crisis through the skin as well as the kidneys, the symptoms of irritation of the mucous membrane of the intestines have disappeared; the medicine, as before prescribed, to be continued.

May 28th.—The entire treatment of the case was determined by, and based on the conviction, that the principal seat of the disease was situated in the upper lobe of the right lung, and, as the inflammation became again perceptible last night, we instituted another venesection of eight ounces. Matters have evidently assumed a more favourable aspect to day; the cerebral symptoms have entirely disappeared, the patient has slept well, and can inform us better as to his feelings; the abdomen is

not so distended, the diarrhoea has ceased, indeed constipation has taken its place, compelling the employment of a glyster: all the other symptoms indicate a progressive improvement. The sound on percussion, at the upper lobe of the right lung is still dull, but a mucous rhonchus begins to be audible in the anterior part; the inflammation at this spot, therefore, is beginning to disappear, which is further indicated by the mucous nature of the sputa; bronchial respiration, however, is still heard at the side, in the axilla, and behind, where the lung still remains in a state of hepatisation; we may expect, notwithstanding that resolution will also take place here, on continuing the measures adopted. A very distinct crisis has manifested itself by perspiration, and also by the urine, and these symptoms are accompanied by a considerable decrease of the irritation of the system generally; the pulse in the morning was only 84 per minute, and very soft. Disturbances and impediments, however, may still take place, and we shall therefore, endeavour to encourage the critical tendency, and continue the treatment as adopted. I believe this case is particularly calculated to show the value of auscultation as a mode of investigation in doubtful cases of disease, for, under the old system, it would have been impossible to judge of this case correctly, since not a single symptom of pneumonia, as recorded by the ancient authors, was present. On the other hand, however, there were a number of other symptoms, which necessarily fixed our attention, and yet they proved to be but of secondary importance. The countenance of the patient exhibited no alteration during the respiratory process, but this forms a very characteristic feature of this complication of disease, namely, that the functional symptoms of derangement of the respiratory organs recede as soon as the cerebral disturbance manifests itself, not only because the patient does not complain of anything, but also because respiration itself does not then exhibit any signs of impediment. Stokes has particularly directed our attention to this, impressing the necessity of examining the chest in individuals who are brought into hospital with disturbed consciousness, and who may be suffering from delirium tremens.

This is a case which would, most probably have terminated fatally, had any other treatment been adopted, and would seem to form a justification of the opinion that there is such a thing as occult inflammation. This inflammation certainly was hidden, but only to those who could not understand the means of discovering it. This doctrine, from its commencement has been a delusion; the frequent repetition of it, however, made it so familiar to physicians, that they at last gave credence to it. The so-called occult inflammations, would soon vanish as shadows, if the important practical doctrine of never omitting the most accurate examination, particularly of the chest, in individuals whose mental faculties are disturbed, were always adopted. From the symptoms apparent in this case,—the *status nervosus* of the ancients—the adherents of the old school would have adopted the use of stimulating remedies; but a fatal termination would have been the certain consequence of such treatment.

June 2nd.—The patient has caused us much

uneasiness and perplexity. Our last examination afforded us every hope that a speedy and favorable termination of the disease would have taken place. This anticipation, however, has been defeated by the imprudence of the patient himself, in leaving his bed when in a state of perspiration, which was instantaneously followed by a return of the pulmonary affection, and an increase of the general febrile phenomena. A vein was again opened, cupping glasses applied to the chest, and digitalis, with nitrate of potash administered internally. This relapse in this individual, who had already been much reduced in strength, must render us more cautious as to our prognosis. The state of things to-day is therefore by no means so favorable as it was some days ago; it is true there are no traces of cerebral or abdominal symptoms, but the continuance of the inflammation in the posterior part of the lung, and the fever, which distinguishes itself by the great frequency of the pulse, and by the crude state of the urine, render the matter doubtful. We shall continue our antiphlogistic and sedative treatment, with due consideration, however, to the strength of the patient. Calomel and sulphur, two grains of each, morning and evening, shall be added to the already prescribed medicines.

June 4th.—A decided affection of the serous lining of the heart, must now be added to the former pneumonic symptoms; an affection which manifests itself by the remarkable increase of the frequency, and by the irregularity of the pulse, which cannot be attributed to the digitalis, since it coincides with another remarkable symptom, namely:—a bellow's murmur, audible towards the commencement of the aorta, on the left side of the sternum. In consequence of the affection of the heart, a large blister was applied to the cardiac region. The pulmonary symptoms to day are again less marked; the state, otherwise, is the same as yesterday.

June 5th.—There is now only a trace of humid rhonchus left towards the anterior part of the lobe of the left lung; the cough, also, is rare, and the symptoms of inflammation of the lining membrane of the heart, have disappeared; finally, the febrile reaction is considerably moderated (pulse, 70 per minute, still irregular, but no longer intermittent); the skin is moist; the urine clouded with mucus, approximating in colour and quantity to that of the normal state.

We yesterday stated that the irregularity of the pulse was to be considered as a morbid, and not as a medicinal symptom, and that for the following reasons:—1st, because this irregularity coincides with other symptoms of the heart; 2nd, because it is not accompanied by a diminished frequency of the pulse, which latter is generally the primary symptom of the effect of digitalis; and, finally, there was a third reason, namely:—that none of the other symptoms of digitalis, cerebral disturbance, constriction of the throat, etc., etc., were present. At all events, there now existing no reason for its further administration, we shall discontinue this medicine, and thus obtain a decisive proof one way or the other. I take this opportunity to repeat that it is extremely embarrassing to be placed in such a position, with regard to the interpretation of symptoms, as to have to decide whether they arise from the disease, or from the medicine administered, and that we should, in such cases, abstain as much as possible from employing remedies which may produce symptoms analogous to those of the disease,—inculcating, thus, the very opposite principles to those of homœopathy.*

Prescription; Decoction of salep, oz. vj.; nitre 3ij; muriate of ammonia, 3j; solution of liquorice, oz. ij. 1 table spoonful every hour.

You have already seen several cases where a relapse of the inflammation of the lungs was accompanied by carditis. I am of opinion that such cases are by no means of rare occurrence, and that the relapse is rendered exceedingly dangerous by

hese attacks. This phenomenon is an enigma as to its usual connection; we may form conjectures, but cannot assert anything with certainty, as to whether these relapses are brought about in such individuals, to whom, in the course of the pneumonia, digitalis has been administered,—a remedy which lowers the activity of the heart so much, and reduces that organ to a state of atony and debility. An analogous circumstance which occurs in chlorotic females, may be compared with this, viz: that any inflammation, with which they may be affected, readily attacks the inner as well as the outer lining of the heart. In such cases, an energetic antiphlogistic treatment must be considered as a predisposing cause to inflammations of the heart. I repeat these are merely suppositions; experience may afford us some explanation, but no certainty exists at present. The circumstance, that affections of the heart readily associate themselves with relapses of pneumonia, may be sufficient for the knowledge of the practical physician.

June 8th.—The progress of improvement is considerable; the fever has almost disappeared; the symptoms of the heart no longer exist, and there is a material abatement in the affection of the lungs; the cough is very slight; there is no difficulty of breathing, but a mucous r  le is heard at the region where the bronchial respiration formerly existed.

The patient took no further medicine, and left the institution cured, on the 20th of June.

OVARIOTOMY.

CASE OF SUCCESSFUL EXTIRPATION OF A DISEASED LEFT OVARY, 53LBS WEIGHT, BY THE LARGE INCISION.

By CHAS. CLAY, M.D., &c., Piccadilly, Manchester.

(Continued from p. 413.)

On the 17th January, I proceeded to tap my patient, with the assistance of Mr. Ledward. I selected the left side as the one on which the sac appeared most prominent. As my patient, however, had always been tapped, centrally, beneath the umbilicus, she expressed some slight fears as to the alteration of the mode of procedure, but assuring her it was not only the most common mode, but most particularly applicable to her case, she immediately acquiesced. The sac was penetrated by a large trocar, and 24 pounds of thick, viscid fluid of a dark coffee colour, were extracted: she bore the operation extremely well; this was the seventh time she had submitted to it. The quantity each time had increased, and the space of time between the tappings had diminished. She supposed she had been subject to the disease ten or twelve years at least. After the fluid contents had been evacuated, I had the patient laid on her back, and found that the tumour was still of a considerable size, but from its retreating easily towards the pelvic cavities without any drag upon the abdominal parietes, and from the great facility with which it could be moved about, I concluded that no adhesions of any importance existed, *certainly none anteriorly*, so that on that point no objection could be raised to the extirpation. I was equally well convinced that the uterine structures were perfectly normal; indeed, the only circumstances that could at all be deemed objectionable were the flat chest, and habitual cough, which, though evidently asthmatic, yet were to be dreaded, as her family had furnished examples of phthisis, and it was not impossible, if any great determination towards the chest, took place a change to phthisis might be the result; still, all circumstances being considered, I concluded the case a favourable one, and one that ought not to throw away the chance of life by extirpation. It was therefore proposed to operate on the following Tuesday, the 21st of January. In the interim she was very cheerful; the cough was a little troublesome, most probably from a cold she had taken whilst journeying to Manchester. The operation was begun by me on the Tuesday morning, a little before 12 o'clock, accompanied by some friends who had been with

me at most of my former operations, and others that for the first time wished to witness it, viz., Dr. Radford, Mr. Windsor, Mr. Southam, Mr. Vaudrey, Mr. Roberts, and my assistant, Mr. Ledward. The preparations were much as usual; the room was heated to 76 F. I made an incision of about fourteen inches, when the pearly white sac that had been previously emptied on the 17th, came full in view, which was found to be connected with two other sacs that had lain posteriorly, that is towards the spine, one of which was small, but the other large, and also accompanied with a large mass of solid matter—this solid part had chiefly occupied the pelvic cavities. To lessen the volume somewhat, and facilitate its removal from the abdominal cavity (the opening to which, though 14 inches, was *small enough*), I emptied the smaller sac to the amount of 6lbs., which, with the 24lbs. previously abstracted, made 30lbs. The whole mass was still found to be very large. The diagnosis of the case was perfectly correct, no adhesions, *save the pedicle*, presented themselves. After dividing the pedicle, which, in this case, was remarkably thin, I had the satisfaction of lifting the whole mass from the abdominal cavity. This mass weighed 23lbs., which, added to the 30lbs. before, make a total of 53lbs. weight—at least 9lbs. of this was solid; so that Dr. Bird's plan would have been out of the question; as all present witnessed, it required no little exertion on my part to get this tumour through an opening of 14 inches. The pulse of my patient before operation was somewhat above 90. During the operation not two ounces of blood were lost, and the wound was closed with nine interrupted sutures, and the pedicle ligature brought out at the lowest part of the incision. *The time occupied by the operation was about 20 minutes, by Mr. Windsor's watch.* My patient was then put to bed very cheerful, and complaining only of pain in the groin, *which is usual where the pedicle had been separated.*

In reporting my previous cases, I have adopted a tabular view of the progress for the first few days, first as a matter of convenience to myself, but principally because I believe it an excellent plan of placing the symptoms and treatment at one glance before the eye, when the result of each is easily seen. It serves also another purpose, whilst visiting a patient under such circumstances, this table of items serves to refresh the memory as to the points to be attended to, some of which might possibly be over-looked. At the suggestion of some of my medical friends I shall continue the plan in this case.

By observing the annexed table, the progress of this case will appear very satisfactorily. At my 5th visit after the operation, viz., 7 o'clock A.M., Wednesday, 22nd, I found menstruation had commenced, that is in 19 hours after.

On Friday morning, the third day, I dressed the wound, removed the greater part of the sutures, and found the wound perfectly healed. On the Sunday, the remaining sutures were taken away. From this time, the case progressed favourably, with the exception of her cough, which became very troublesome, in consequence of the severe frost accompanied with dense fog mixed with smoke which got into the room; the cough for some hours harassed her much, and depressed her spirits, but which resumed their usual condition after the fog and frost gave way; so much did the cough harass her that she was afraid of encountering a similar state of atmospheric impurity, and she was determined to travel home as soon as she was possibly able to do so. To this, I offered no great objection, as the fogs of Manchester are of very frequent occurrence, and of a very dense character. My patient now sat up a little every day, and on the 15th day after the operation she returned home into Wales at a much earlier period than any other patient had ever left my care; but as her brother-in-law was a medical man, and had had the management of her case so long previously, I had every confidence in his attention to her, more particularly as my patient resided with him.

From the long standing of this case, its magnitude, &c., the results must be considered a flattering testimonial in favour of ovariectomy,

* *Sch  nlein* makes the following remarks, with regard to another patient, in whom likewise, symptoms of disease of the heart had taken place simultaneously with a relapse of the pulmonary inflammation.

Operation, 12 o'clock, Tuesday, 21st January 1845. Temperature 76 F.

Time	1 P.M.	4 P.M.	9 P.M.	12 P.M.	22d. 7 A.M.	11 A.M.	4 P.M.	8 P.M.	23d. 7 A.M.	2 P.M.	10 P.M.	24th. 10 A.M.	10 P.M.	25th. 10 A.M.	10 P.M.
Temperature	74	72	68	68	68	68	68	68	66	66	64	64	64	64	64
Pulse	90	100	116	110	110	96	96	96	96	96	94	96	94	94	94
Hæmorrhage	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Surface of Body	Warm, Dry	Warm, Dry	Warm, Dry	Warm, Dry	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist	Warm, Moist
Tongue	Clean	Clean	Clean	Clean	Clean, Moist	Clean, Moist	Clean, Moist	Clean, Moist	Clean, Moist	Clean, Moist	Clean, Moist	Clean, Moist	Clean	Clean	Clean, Moist
Thirst	None	Little	Little	Little	None	None	None	None	None	None	None	None	Little	More	Less
Flatus	None	None	Little	Little	None	None	None	Little	Less	Little	Little	None	None	None	None
Light-headedness ...	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Cough	None	None	None	None	None	Little	Little	Little	Less	Little	More	More	Less	More	Less
Pain	Severe	Severe	Less	Little	Little	Little	Less	None	None	None	None	None	None	None	None
Shivering	Little	None	None	None	None	None	None	Very little	None	None	None	None	None	None	None
Urine	—	—	—	—	Naturally 3vj	Ditto 3iv.	Ditto 3vj.	3vj.	3vj.	3x.	3xij.	3x.	3xij.	3x.	3xj.
Motions	—	—	—	—	—	—	—	—	Little with Clyster	—	Copious with Clyster	One with Clyster	—	Naturally one	—
Respiration	Free	Free	Free	Free	Not so free	Better	Free	Free	Free	Free	Free	Not so free	Free	Not so free	Better
Sleep	None	None	None	None	1½ hours	20 minutes	None	20 minutes	2½ hours	¼ of an hour	None	2 hours	½ an hour	1½ hour	None
Sickness	Little	None	Little	Little	Less	Little	Little	Little	None	None	Very little	None	None	Little	None
Directions	Ext. Hyocyam. grs. vj.	Panada—Gum water.	Panada—Gum water.	Panada — Gum water, little Tea.	Ditto	Ditto	Ditto	Ditto	Weak Broth	Ditto, with Bread	Broths, Tea	Broths—Mutton Chop	Ditto	Fish, Broths	No particular restriction

VENTILATION.

To the Editor of the Medical Times.

SIR,—Will you allow me to suggest to the profession, and through them to the public, by means of your columns, a plan for ventilating all wards of hospitals, especially bed-rooms; which would be at once very simple and yet effectual; as it would enable us to regulate their ventilation exactly, according to the weather or season, wind or calm, and their fluctuations; and indeed to cause the whole air of a room to change, in a few minutes, without a local draught; or to keep it constantly changing, during the night, in all dormitories of institutions, or sleeping chambers of private dwellings.

But we must first fix the principles on which to proceed:—

It is the manifest law of all ventilation, that heated air, being specifically lighter from being swelled into a larger space than colder air, must ascend; and that, by the weight of the atmosphere, cold air will always press in below, as much, and exactly as fast, as the warmer air tends to ascend and escape above, and so to leave it space to enter and occupy. Hence, if we only ensure and permit a free egress above, for the hotter, and, therefore, uppermost strata of air, we may be quite certain that colder air will find its own way and will rush in at every lower crevice and aperture; and as, comparatively, except in very pernicious localities,

or under singular circumstances, the cold external air that then gains access, is always purer than the hot air which escapes from rooms inhabited, but especially slept in by human beings, or in fact by any respiratory animals, or plants, we may be certain that the change will, not only as to temperature, but as to purity, be for the better, as more cool and more salubrious, and less mixed.

There are, however, three other principles as to ventilation which are very commonly overlooked. These do not, it is true, apply to unused buildings; where the only object of ventilation is to prevent damp or mould, and to preserve their inanimate materials or contents, whether dead vegetable matter, as timber, &c., or mineral substances, as stones, mortar, &c., from decay or decomposition; but they apply universally to buildings or rooms wherein human beings or animals congregate while awake or during the day, such as churches, school-rooms, courts of justice, play-houses, ball-rooms, meetings, assemblies, &c., or in which they singly or in numbers spend their nights, as dormitories, wards, bedrooms, berths, stables, &c. These three principles are: 1st, that hot air thus produced by the warmth of living bodies is not mere dry hot air, but is hot air loaded with heated moisture, produced by the evaporation and perspiration of the more fluid or serous parts of the blood from the lungs and skin; and, therefore, does not ascend as readily as dry hot air; and also, as it cools again, it deposits its

moisture. 2ndly, that this is not pure air, or even pure moist air merely heated, but it is moist air made hotter, and at the same time also, chemically vitiated in various ways; and 3rdly, that as respiration always produces carbonic acid, which is specifically heavier than the other gases found in impure air, this poisonous gas must always tend to lie in the lower part of the room or building, and, therefore, cannot be all removed by the mere ascent of the hot air, nor is it wholly removeable, therefore, by any, even the best, provision at top, for the escape of such heated and uppermost layers of air.

Inattention to one or other of these three principles has, I believe, been the cause of the failures in many attempts at ventilation.

Another great mistake incident to many plans of ventilation is, that it is attempted by the introduction of hot air produced by hypocausts, or double-sided stoves, and this has one or two inevitable defects; first, that such hot air, even with the greatest care, to prevent any of it coming from the fire, and to cause it to be merely heated by contact with, or passing near layers, or partitions, or walls of iron, or bricks, or tiles, or through earthen or iron pipes, or tubes, always has an unpleasant feel to the surface of the body, and a disagreeable smell; but its main, universal, and incurable defect is, that it both heats and dilates the air, and inevitably produces also some slight difference in its chemical constitution, and

much more in its electrical and magnetic conditions.

The consequence of its dilation is, that we actually take in less air (compared with its medium bulk and coolness), and, consequently, less oxygen (as fixed by its chemical proportion of atoms) than we should; the heat of the air that we breathe also produces greater habitual delicacy of the lining membranes of the air tubes and cells of the lungs, and, consequently, greater risk from exposure, on coming out of such a heated room, into the external atmosphere, and its altered electrical state is, I believe, the cause of many headaches, &c., besides many other unexplained effects.

It is not intended, I conceive, in the constitution of nature, that we should breathe hot air, but, on the contrary, that our breathing should warm the air by the necessary chemical changes, both of the atmosphere and of our blood, and by the transfer of actual heat. It is, I believe, and have always believed, intended that breathing should coat the internal parts of our chest, while at the same time, by its effects on the blood, it should provide a means, by the united effects of our sanguiferous and nervous systems, and also by digestion, secretion, nutrition, and growth, which are subordinate to those systems, whereby all the other parts of the body may be warmed. Hence it is, that in all hot countries, men use, in speaking, a multitude of vowels, which are all pronounced by greater or lesser apertures of the mouth, in breathing and in speaking, and use very few consonants, all of which are produced by more or less complete interruption of the breath, and contact, or even closure of parts, among the organs of speech. Any one who examines the Italian language, will find, therefore, about sixty vowels, in every hundred letters; and in the Otaheitean (Tahitian) language, which sounds very like Italian, there are even more; it is said about 75 or 80 vowels, in every 100 letters.

The proportion is very different in English, in which consonants preponderate, and if we examine the language of Lapland or Greenland, or of the Arctic-American Esquimaux, we shall find that there are an enormous number of consonants, in their more than sesquipedalian words, and that most of these consonants are guttural, as they do not like to open their mouth, to the cold air, sufficiently to pronounce the labial, dental, or lingual consonants; much less the vowels, and least of all the more open of the vowels. This is a universal law; though immigration or colonization, or the ancient transplantation of a whole nation, by a tyrant conqueror, may sometimes present an apparent exception, or anomaly, by our finding a language or a people, originally temperate or torrid, in a frigid zone, or *vice versa*.

There should be only four sources of warmth to our bodies; first, the effect of the natural functions of digestion, nutrition, respiration, and innervation; secondly, exercise, in all its forms, and in its mechanical and chemical effects, as giving activity to these functions; thirdly, the direct application of heat to the stomach, &c., by warm food, when necessary; and fourthly, heat, applied by radiation or contact of hot bodies to the universal surface of our skin.

I believe, that the heating of the body, by making the air that we breathe hot, should always be avoided as much as possible, as contradicting the natural intention of that function, and rendering us, especially in cold climates, preternaturally susceptible of injury afterwards. This is the reason why persons who live in an artificial temperature become gradually unfitted for this climate; and, as to the organs of the lungs and throat, this is the reason why smokers of tobacco, who have habituated themselves to make chimneys of their nose, mouth, trachea, air-pipes, and cells of the lungs, are more liable to colds, sore-throats, and coughs, than others; and also if exposed to weather, when travelling, are perpetually puffing every moment like locomotive engines, to keep themselves warm; while others, who have not spoiled and unnaturalized their habits of breath, by this dirty, idle, vulgar, offensive, and costly weed, do not feel the least inconvenience from breathing the bracing air of frost; nor compelled

to disgust and nauseate all ladies and gentlemen around, by constant hawking and spitting their slaver around.

The radiation of heat, or caloric through air, does not heat that air at all; witness the sun's rays passing through our atmosphere, and the radiant heat of an open fire of red hot coals. Hence it is that fire-grates in rooms are much more wholesome than any stoves or hypocausts or hot air apparatus can be. For, even when sitting near a fire-place, we are breathing cold air, while the surface of our body is properly warmed by the constant emission of radiant heat, from the glowing embers. The least injurious of all hot air apparatuses is that, in which the air is heated by tubes, filled with hot water, or steam; as in this case the heat never can be great.

Ventilating and heating processes should be considered quite separately.

What I would propose for ensuring the ventilation of all rooms, would be, to make the cornices all round the top, or ceiling of the room, and the skirting all round its floor, hollow: so as in fact to have a continuous tube, all round the room, in each place; and then at each corner of both, next to the external wall of the house, to have an aperture through the wall, communicating with the external atmosphere, and the canal of these tubes or pipes, which could be shut entirely, or opened more or less, as occasion required, by means of a tap or cock, with a handle, easily within reach, inside the room.

When leaving such a room for a while, these taps could be turned, and before our return, in a very few minutes, the whole air would be changed, and the last thing done before stepping into bed at night, might be to open a very little of each tap, above and below, by which means the air would be constantly undergoing a change, by slow degrees, during our sleep. Long experience has convinced me, that nothing could be more conducive to public health, than the ventilation of our bed-rooms; multitudes of people never one single day, for years, rise refreshed in the morning, but always feel weary, oppressed, and unwilling to rise on awakening, though feeling lively, well, and unfatigued in the evening. The commonest of all the causes of this oppression and laziness, is the non-ventilation of our bed-rooms. I believe, that this simple plan would entirely cure many apparently perennial chronic discomforts, make thousands rise early and refreshed, who now rise, or lie in bed, stupid, unrefreshed and heavy; prevent innumerable head-aches and foul tongues, dissipate the gloomy thoughts and despondency with which so many rise to their daily tasks of body or mind: and cause many to start up active and alive, who never now feel refreshed, and who have, in fact, so many attractions of cohesion of comfort between themselves, their beds, and bed clothes, that their unrevived spirits, from a want of pure air during the night, and their habitual irresolution, produced by a nameless ailment, of which they do not know the real cause, prevent their ever being able to practice a habit of early rising, as it requires too great a daily struggle, for which a want of feeling of internal habit, disqualifies them. In this way, the purity of the air of our bed-rooms would be as great at least, and probably much greater, than that of our sitting-rooms, which are pretty well ventilated, by the constant opening of their doors, and the draughts of their fires; but even in these, the upper strata of the air are very imperfectly changed.

In the present improved state of manufactures and machinery, and the common use of sheet iron, or sheet zinc, nothing would be easier than to make very handsome cornices of sheet zinc, or sheet iron, which, when painted, would look exactly like other cornices; and yet from being perforated with innumerable small holes, would be perfectly permeable by air.

The skirtings of rooms would of course require still to be made of wood, as at present; only they should be made with backs next the walls, so as to be polygonal pipes, and they should have, here and there, oblong zinc plates perforated with holes, about the size of a large pin or a watch key, inserted in their side next the room, so as to let cold air enter into the room from the tops of the

skirting pipe as fast as the hot air escapes through the top of the ceiling pipe.

The expense of this plan in the construction of hospitals, &c. would be trifling, and even its introduction in buildings already erected would be comparatively little.

I have the honour to subscribe myself

Your obedient humble servant,

CHARLES EDW. HERBERT ORPEN, M.D.

Fellow and member of the Royal College of Surgeons of Ireland and of England, &c.

34, Hamilton-square, West Woodside, Birkenhead, Cheshire.
1st, February, 1845.

CONTRIBUTIONS TO SEMEIOLOGY.

ABDOMINAL PULSATION.

By J. NOTTINGHAM, M. D.

Member of the Royal College of Physicians, London, and of the Societe d' Emulation, Paris.

In some forms of organic disease in the belly, and in certain disordered states of the abdominal viscera, as well as in affections of the pericardium, heart, or aorta above the diaphragm, this symptom is often so prominent as to attract particular attention, and now and then its real source is sufficiently obscure to render the most careful enquiry as to its cause a matter of imperative necessity.

Aneurism of the abdominal aorta may give rise to it: when its intensity will be influenced by the position, size, and state of progress of the aneurismal tumour: the facility with which it is detected and examined by the practitioner depending on the state of the belly, the parietes of which being thin and the omentum and mesentery not loaded with fat, the hand will be easily pressed towards the spine, and held over that part of the aorta supposed to be diseased.

But, as is evident, aneurism thus situated can scarcely be examined by ordinary manipulation in such a way, as to satisfy the enquirer as completely as may often be done in cases of popliteal or other aneurisms more exposed or approaching the surface; and it may also be well to recollect that it is likely that the aneurismal pulsations may have something of a confused character, not only from the position of the tumour with regard to adjacent parts; but also from the fact, that we sometimes meet with two or more aneurisms of the aorta, with but short portions of the unaffected vessel between them. In examining the body of a man, who died of disease of the lungs, in one instance I found four distinct aneurisms in the course of the descending aorta.

An aneurismal tumour might occur behind the pancreas; the latter organ being raised by the pulsations of the tumour, would in some degree mask the symptoms, and render the diagnosis more difficult.

The pancreas is occasionally enlarged, and indurated, in which state it sometimes leads to the suspicion that aneurism of the aorta exists, the motions of the blood-vessel raising the diseased organ, the character of the pulsations being little attended to;—of this I have seen a remarkable instance in a female who died of consumption;—she was supposed during life to have not only the pulmonary malady;—but also an aneurism of the abdominal aorta; there was a strong pulsation above the navel, *bruit de soufflet* was heard there when the stethoscope was applied;—the impulse was great, the hand of the observer when placed on the belly being considerably raised by each stroke of the heart, so that it might have been thought that an aneurism of great size was beneath. The patient died and the body was examined; the aorta was healthy, but the pancreas was not, it was enlarged and indurated, its volume being much greater, and its granules much firmer than usual; hence the difficulty in the previous diagnosis; the *bruit de soufflet* being here associated with a narrowing of the tube of the aorta by the pressure of the enlarged pancreas, a cause of the sound, which in its essential characteristic resembled those which frequently give rise to it in valvular disease or in contractions of the cardiac orifices.

In some cases where the transverse colon is in

a loaded state from excrementitious accumulation, patients will complain of "beating in the inside," and allude to it as one of the most remarkable symptoms of their malady;—by attending to the state of the intestinal tube as well as to that of the circulating system, the source of the "beating" will be easily detected.

In a recent instance, where a patient was suffering from dyspeptic symptoms, pulsation of the abdominal aorta was much complained of;—it was no longer troublesome after the colon had been freely emptied.

In cancerous disease of the stomach, abdominal pulsation is occasionally felt, and it may occur as a symptom of mesenteric disease, in enlargement of the lumbar glands, or in any case of tumor, foreign growth or abnormal accumulation bearing on the abdominal aorta.

After pericarditis, when from adhesion the heart is more or less fixed to the diaphragm, its action is sometimes accompanied by a movement of alternate retraction and relaxation, observed on the exterior of the epigastrium, and in some cases a feeling as of abdominal pulsation is at the same time experienced;—this symptom may be modified in its character by the condition of the heart and great vessels, being rendered more remarkable in cases especially of hypertrophy of the left ventricle, and increased by contraction of the cardiac orifices or disease of the valves. With regard to pulsation in the above mentioned conditions, it is supposed that the ordinary quantity of blood passes along the canal of the aorta, the calibre of which may or may not be influenced by pressure from neighbouring parts, and that the vessel has its ordinary tone and action, except in the case of aneurism;—but there are states of the system or accidents to it, in which the quantity of circulating blood is suddenly lessened, at the same time the irritability of the nervous system being as suddenly increased, whence excitement of the heart and arteries. Of which state abdominal pulsation is not unfrequently a symptom, so that we meet with it after hæmorrhage and it is sometimes very great after parturition.—When its source in the latter cases is compared with its mode of origin in the former, it is easily understood with what circumspection its treatment as a symptom should be commenced.—If auscultation be employed in the study of cases where abdominal pulsation is a symptom, with regard to females it must be borne in mind, that after the fourth month of pregnancy the placental *bruit* may be heard, synchronous with the pulse of the mother, and after the fifth month, the beat of the foetal heart, with double pulsations, quicker than the pulse of the mother, and that a *bruit* similar to the placental has also been met with in some cases of tumor.

In certain cases that are not frequent, the presence of large accumulations of flatus in the intestines, may, to some extent, render more perceptible to the feeling of the patient, or to the practitioner by exterior examination, the beating of the abdominal aorta.

INFLAMMATION OF THE SPINAL CORD.—Mr. Reeves describes several cases illustrative of inflammatory action affecting different parts of the spinal cord. The principal symptoms were pain at the pit of the stomach or cardiac region, cramp or pain in the legs, and more or less numbness, together with profuse perspiration, strawberry tongue, and sore throat. The treatment consisted of general blood-letting, when it could be borne, and counter-irritation over the part of the spine which was affected. The disease appears to have been endemic.

DIVERTICULUM ILEI, COMMUNICATING WITH THE UMBILICUS.—A child, rather more than a month old, was brought to the Cheltenham hospital, with a red fungous tumor, about the size and shape of a raspberry, attached to the umbilicus, at the apex of which there was a small opening whence issued occasionally liquid feculent matter in jets, and through which a probe passed directly backwards to the extent of two inches. The feces passed properly by the rectum, and the child was in good health. A ligature was tied firmly round the base of the fungus, which sloughed off in a few days; the canal became obliterated, and the discharge completely ceased.

MAGIC, MESMERISM, HYPNOTISM, &c. HISTORICALLY AND PHYSIOLOGICALLY CONSIDERED.

By JAMES BRAID, (of Manchester), M.R.C.S.E.

(Continued from page 399.)

"It is well known to physiologists that the heart beats, and the function of the lungs is performed, even after an animal's head has been removed; but to suppose for an instant that the functions of the body can be performed for any length of time without a supply of fresh arterial blood, which necessarily implies the action of respiration, is absurd; and though in cases of asphyxia from drowning or hanging, or the inhalation of noxious gases, both circulation and respiration cease for a time; still there is a limit to this, beyond which life becomes extinct, and no power with which we are acquainted is able to recal it. My own opinion is, that the man enjoyed the functions of respiration, circulation, and assimilation, in a degree compatible with the existence of life, and that by long training he had acquired the art of retaining the air in the lungs for some minutes, during the time he was being shut up, and when he was again exposed. How he managed to get a supply of food and drink, I by no means wish to hazard a guess. It is said that previous to undergoing the confinement, this man gradually overcomes the power of digestion, so that milk received into the stomach undergoes no change. He next forces all the breath in his body into the brain, which is described as imparting the feeling of a hot coal to the head; the lungs now collapse, and the heart deprived of its usual stimulus, to use a homely phrase, 'shuts up shop.' Having thus disposed of digestion, assimilation, respiration, and circulation, all the passages of the body are next stopped. The legs and thighs are crossed, the hands and arms are pressed to the sides; in short, the man presents the same appearance as when his box was opened. However childish this may all appear, the explanation was quite satisfactory to the good people of Lahore. The same individual exhibited at Jesselmere with success. An account of his feat there is given in Lieutenant Boileau's work lately published."

I have given Dr. McGregor's remarks in full; but it is quite obvious that he must have been ignorant of Colonel Townsend's feats, quoted in a former number; and the idea of hybernation in man, or trance, by artificial contrivance, seems never to have occurred to him. His only mode of solving the difficulty, therefore, was the very common and summary one, to allege that collusion had enabled him to accomplish his extraordinary feats. However extraordinary it may appear, that a human being should acquire the power of thus suspending or depressing the vital functions, it seems to be equally difficult to imagine it possible for him to act as Dr. McGregor supposes, under the strict ordeal to which he was subjected, especially in the particular instance when he was buried by General Ventura. Let us revert to a few of the leading particulars therein related, and this must appear quite obvious. The man was stripped, and put into a linen bag, and, "after he had caused himself to die away in a kind of lethargy (or trance), the bag was closed and sealed with Runjeet's seal, and afterwards placed in a small deal box, which was also locked and sealed. The box was then placed in a vault, the earth thrown in, and trod down, and a crop of barley sown over the spot, and sentries placed round it." I would ask what greater precautions could have been taken in the first instance? And the remainder of the narrative seems enough to remove every doubt, and prove that collusion was impossible, under such circumstances. Thus, "the Maha Rajah was, however, very sceptical on the subject, and twice in the course of the ten months he remained under ground, sent people to dig him up, when he was found to be in exactly the same position, and in a state of perfectly suspended animation." The state in which he was found also, at the time of his resurrection, was strongly corroborative that there had been no collusion at work, such as Dr. McGregor suspected. More-

over, it appears he had been frequently subjected to such experiments, and *always* with success, which is too much to suppose possible had he been an impostor.

Captain Osborne, at a subsequent part of his work, draws a very unfavourable inference as to the integrity of this Fakir, because of the subterfuges to which he resorted, to escape from another interment for a week, under the immediate arrangements of Captain Osborne. Whoever will take the trouble of perusing the arrangements proposed by Capt. Osborne, will find them even less stringent than those under the interment by General Ventura; and if no better proofs of collusion can be adduced than the grounds on which the allegations have been preferred by Capt. O. and Dr. McGregor, I think that charge has no substantial grounds for sustaining it, although they were quoted in the *Lancet* (7th March, 1840) as quite conclusive of collusion, according to the Editor's preconceived notions and prejudices against Mesmerism.

In reference to his manœuvring with Capt. O., I consider his conduct readily admits of a more fair and charitable construction, than Captain Osborne was inclined to attach to it. It appears that he had undergone long trials. Now, during hybernation, although the lamp of life BURNS SLOWLY, still it MUST BURN, or inevitable death would ensue. And again, as it is the destruction of the tissues, and first of the fat, by which this process is supported, there must, of necessity, be a limit beyond which it cannot extend. Now, the Fakir, from experience, might know that *he was not in a favourable condition on that account*, for undergoing such a trial at that time; and, moreover, if *his mind had become excited, by a belief that there was some secret intention to destroy him, and his religious order, this might so distract his mind as to render it IMPOSSIBLE for him to hypnotize himself, so COMPLETELY AS WAS REQUISITE FOR THE SUCCESS OF SUCH AN EXPERIMENT.* I have particularly adverted to the influence of mental emotion disturbing the ordinary influence of hypnotism, in my little work, when treating of the power of hypnotism to mitigate, or entirely prevent, pain during surgical operations. Captain Osborne not being aware of all these circumstances, naturally rushed to the conclusion that all his other feats had been accompanied with imposture; but time will clear up this mystery, as it does many others, by affording farther opportunity for repeating the experiments and observations on this curious practice.

The following Extract from "A Narrative of a Journey in Rajwarra, in 1835, by Lieut. A. Boileau," strongly corroborates the reality of these remarkable feats, and his feat at Pooshfully, met Dr. Mc G's. requirements.

"Just before our arrival at Jesulmer, the Rawul had adopted a most singular expedient to obtain an heir to his throne, and the circumstances of the case are altogether so extraordinary that we should hardly have given them credence, had they not occurred so immediately under our notice. We were told, soon after our coming, that a man had been buried alive, of his own free will, in the bank of the tank close to our tents, and that he was to remain under ground for a whole month, before the process of exhumation should take place; the prescribed period elapsed on the 1st of April, 1835, and in the forenoon of that day he was dug out alive in the presence of Eeshur Lal, one of the ministers, who had also superintended his interment. The place in which he was buried is a small building of stone, about twelve feet long, and eight feet broad, built on the west edge of the large tank, called Gurreesir, so often mentioned; in the floor of the house was a hole about three feet long, two and a half feet broad, and the same depth, or perhaps a yard deep, in which he was placed in a sitting posture, sewed up in a linen shroud, with his knees doubled up towards the chin, his feet turned inward toward the stomach (?), and his hands also pointed inward towards the chest. The cell, or grave, was lined with masonry, and floored with many folds of woollen and other cloth, that the white ant, and such insects, should be the less able to molest him. Two heavy slabs of stone, five or six feet long, several inches thick

and broad enough to cover the mouth of the grave, were then placed over him, so that he could not escape, and I believe a little earth was plastered over the whole, so as to make the surface of the ground smooth, and compact: the door of the house was also built up, and people placed outside to mount guard during the whole month, so that no tricks might be played, nor deception practised.

"Though we knew that the disinterment was likely to take place during our stay at Jesulmer, we did not recollect the precise day fixed for the ceremony, and might perhaps have missed it altogether, but Lieutenant Trevelyan's Moonshee, Saadut Alee (attached to the Ajmer Agency), had fortunately stationed a person to give him notice of it, and he ran there in time to see the ripping open of the bag, or shroud, in which the man was enclosed.

"When the man was sent by the moonshee, we went to see if Lieut. Mackeson would join us, but he was in delicate health and unequal to much exposure to the sun, so Lieut. Trevelyan and I set off together to see what might yet remain to be seen. The outer walling of the house door, had been broken up, the covering of the grave removed, and the body lifted out in the presence of Eeshur Lal; the moonshee arrived in time to see the opening of the shroud, as above mentioned, and stated that he was taken out in a perfectly senseless state, with his eyes closed, his limbs cramped and powerless, his stomach very much shrunken, and his teeth jammed so fast together that the by-standers were obliged to force open his mouth with an iron instrument, in order to pour a little water down his throat. Under this treatment he gradually recovered his senses, and was restored to the use of his limbs; and when we went to see him, his naked body had been covered with a clean white sheet, and he was sitting up, supported by two men, several other people being assembled round him, and round the door of the building, anxious to get a sight of this wonderful person, whom they supposed to possess supernatural powers, and to whom they made reverential salaams. He conversed with us in a low, gentle, tone of voice, as if his animal functions were still in a very feeble state, but, so far from appearing distressed in mind by the long interment from which he had just been released, he said THAT WE MIGHT BURY HIM AGAIN FOR A TWELVEMONTH IF WE PLEASED.

"He is rather a young man, about thirty years of age, and his native village is within five kos of Kurnaul; but instead of remaining at home, he generally travels about the country to Ajmer, Kotah, Indor, &c., allowing himself to be buried for weeks, or months, by any person who will pay him handsemely for the same. In the present instance, the Rawul put this singular body in requisition, under the hope of obtaining an heir to his throne, as already mentioned, and whether the remedy is efficacious or not, it certainly is fully as deserving of notoriety as the circumambulation of the shrine at Bap, described some pages back; but though the fakier fairly performed his part of the contract in being buried alive for a whole month, we have not since heard that the desired result has been obtained.

"This individual is said to have acquired by long practice the art of holding his breath for a considerable period, as during the time that one might count fifty, and gradually increasing at intervals to one hundred, two hundred, and so on, as the pearl-divers may be supposed to do. He is, moreover, said to have acquired the power of shutting his mouth, and at the same time stopping the interior opening of the nostrils with his tongue, which latter feat is at times practised, as a means of suicide by the negro slaves in the West Indies when suffering under the lash, and in those cases always terminates fatally; but it is not improbable that the lives of some of those miserable people might have been saved had any well-authenticated case, similar to this Jesulmer affair, been made known to the medical world. As a farther preparation for this long burial, the subject of the present experiment abstains from all solid food some days previous to interment, taking no other nourishment than milk, which is believed by the natives to pass off almost entirely

by the urethra, so that he may not be inconvenienced by the contents of the stomach or bowels, while pent up in his narrow grave; nor is his mind perfectly at ease after his restoration to the light of day, until some part of the food which he may take subsequently to that event is passed in a natural and healthy manner, so as to assure him that his system is in good order, and that no portion of his intestines have mortified. His powers of abstinence must be wonderful to enable him to do without food for so long a period nor does his hair grow during the time he remains buried—at least, such is the common report; and I do not remember to have seen any beard on his chin, though even a week's cessation from shaving would produce a considerable crop on any ordinary native.

"On the occasion of a former visit to Ajmer, this man told Major Spens of his wonderful powers, and as might have been expected, was laughed at as an impostor; but another officer, before whom he also appeared, put his abstinence to the test at Poosbkur, by suspending him for thirteen days enclosed in a wooden chest, WHICH HE PREFERS TO BEING BURIED UNDER GROUND, BECAUSE THE BOX WHEN HUNG UP TO THE CEILING, IS OPEN TO INSPECTION ON ALL SIDES, and the white ants, and other insects, or vermin, can be easier prevented from getting at his body while he thus remains in a state of insensibility. These are all the particulars I have been able to collect, respecting this really surprising affair, and I firmly believe there is no imposture in the case, but that the whole proceeding was actually conducted in the way mentioned above. The romance of the business may, however, be a little marred by the report which was rumoured abroad, that the dead, alive—being tired of waiting, after his disinterment, for the reward, promised by the Rawul, which, like most of that prince's disbursements, was 'very slow to come forth,' helped himself to a camel, uninvited, and without waiting for farther remuneration, turned his back on the walls of Jesulmer."

It appears to me, that the above evidence of Lieut. Boileau, added to the other arguments I have adduced, should be of sufficient force to counterveil the mere assertions and conjectures of Dr. McGregor and Captain Osborne on the subject.

It does not appear that this practice has been long known to exist, and it is rather a curious speculation to determine how it could have originated. The following ideas have occurred to me on this subject, and I think that a quotation which I shall now make from the Dabistan, affords the key to unlock this mystery.

"It is an established custom among the Yogis that, when malady overpowers them, they bury themselves alive. They are wont, also, with open eyes, to force their looks towards the middle of their eyebrows, until so looking they perceive the figure of a man; if this should appear without hands, feet, or any member, for each they have determined that the boundaries of their existence would be within so many years, months, or days. When they see the figure without a head, they know that there certainly remains very little of their life; on that account, having seen the prognostic, they bury themselves."—vol. ii., page 138-9.

Thus, they die voluntarily in order that they may escape the ordinary pangs of dissolution; that is, they reduce themselves to the deep state of self-hypnotism, which I have likened to trance, or hybernation in man, in which condition they are committed to their tombs or graves, as their final earthly resting places. Now, it appears to me no very unreasonable supposition to allege, that accident had revealed to them the fact, that some of those who had been thus buried, might be restored to life after exhumation, the action of the air restoring respiration and circulation, on an accidental disinterment of a body of some one thus interred; and the fact once observed, would encourage others to try how much they could accomplish in this way, as the newest and most striking achievement which they could perform in token of the divine origin and efficacy of THEIR RELIGION OVER THAT OF ALL OTHERS.

It is quite obvious, that had any of the cases of trance, in which the patients have lain for

days and nights in a state of, apparently, completely suspended animation, been hurriedly buried, and accidentally disinterred a day or two after, the very same results would have been realized as happens with these fakirs from artificial contrivance. Nor are we without cases in which such striking results are said to have occurred in different parts of Europe.

It may be well to refer to the authenticity of the works to which I have so often referred in these communications. Ward's "History of the Hindoos" is by the learned and excellent missionary of that name, who long resided in India; and the "Dabistan" is an English translation of a Persian work, first brought into notice by the late eminent scholar and orientalist Sir William Jones, who "declared that he had been induced by his earliest investigations to believe, and by his latest to conclude, that three primitive races of men must have emigrated originally from a central country, and that this country was Iran, commonly called Persia." Examining with particular care the traces of the most ancient languages and religions which had prevailed in this country, he rejoiced at a fortunate discovery, for which, he said "he was first indebted to Mir Mahommed Hussain, one of the most intelligent mossoulmen in India, and which has at once dissipated a cloud, and cast a gleam of light on the primeval history of Iran and of the human race, of which he had long despaired, and which could hardly have dawned from any other quarter." This was, he declared, the rare and interesting tract on twelve different religions, entitled "The Dabistan." The following is his opinion of the work, which he communicated in a private letter to Lord Teignmouth; he says:—"The greatest part of it would be very interesting to a curious reader, but some of it cannot be translated. It contains more recondite learning, more entertaining history, more beautiful specimens of poetry, more ingenuity and wit, more indecency and blasphemy, than I ever saw collected in a single volume. The two last are not of the author's, but are introduced in the chapters on the heretics and infidels of India. On the whole, it is the most amusing and instructive book I ever read in the Persian."

The English translation of the Dabistan was published in 1843.

The result of this investigation seems to warrant the following conclusions:—1. So far as can be traced, the Magi of Persia were the first who, by artificial contrivance, for religious purposes, threw themselves into a state of self-hypnotism, or ecstatic trance. 2. That for the accomplishment of this, they resorted to means essentially the same as those which observation and experience had led me to adopt for the like purposes—and that without any knowledge on my part of their notions or practice—namely, by fixing the sight and thoughts on an object, and suppressing the respiration. 3. That whilst there is this remarkable coincidence between their notions and practices and my own, as far as regards the induction of the sleep and various phenomena—proving the influence to be a subjective or personal influence—our notions about the ulterior phenomena are entirely different. In this point their notions rather coincide with those of the mesmerists. 4. That whilst I do not believe in the existence of a magnetic fluid, or special influence passing from the operator to the patient, as the cause of the sleep and general phenomena, I admit a certain degree of efficacy to the mesmeric passes and manœuvres, in modifying the ulterior results, through physical and mental influences, as explained at length in a former paper. 5. That from Persia, self-hypnotism found its way into India, about 500 years before Christ, and subsequently into every other country. 6. That it has played an important part in their various religious practices, in the oracular predictions, and other services of the temples, and for the cure of disease, amongst the Egyptians, Greeks, Romans, and latterly, with various modifications, throughout Europe and the whole habitable globe. 7. That an analogous condition of the nervous system, accounts for the Egyptian magic, Dr. Dee's crystal-seeing, the vigilant experiments of modern mesmerists; for various crup-

tions of fanaticism, and superstitious delusions and visions. 8. That with such a mass of evidence as is afforded by these eastern devotees for the last 2400 years, in addition to what has been realised and recorded of the practices of other countries, superadded to all which has been realised in Europe, especially since the days of Mesmer; it is neither rational nor philosophical, for those ignorant of the subject to deny the reality of the sleep and general phenomena, without a candid investigation of the subject by experiment and observation. 9. That, at one stage of the sleep there is extreme exaltation of the organs of special sense, especially of hearing, smell, (probably also of taste) touch, resistance, heat, and cold, and electrical impressions, and particularly as regards currents of air. 10. That, owing to this, they are capable of receiving impressions through the *ordinary media*, which would be quite inappreciable during the waking condition. 11. That I attribute phenomena to exalted function of natural organs, enabling them to perceive *faint* impressions through the *ordinary media*, which the mesmerists allege to result from some peculiar and impalpable medium, through which their unexpressed thoughts, knowledge, and desires are imparted from the mesmeriser to the mesmerisee, as by a species of inspiration or sympathetic reflection. 12. That the concentrated and quickened state of the mind may also enable them, occasionally, to trace out the natural bearing of events and circumstances with more adroitness than they could when awake. 13. That the extremely vivid state of their imagination, leads them to believe as reality, whatever ideas are suggested to their minds; and their extreme docility, sympathy, and irritation, induce them instantly to manifest themselves as actively engaged in the scene so vividly portrayed before their fervid imagination. 14. That the notion of spiritual alibis, the soul leaving the body on voyages of discovery to the uttermost parts of creation, seeing through opaque bodies, correct thought-reading, universal lucidity, and a host of omniscient and omnipotent attributes, are mere delusions—being nothing more than vivid mental pictures or dreams. 15. That the senses may not only be abnormally quickened, as is the case at one stage; but, at another, they may be rendered so torpid, as to be quite unimpressionable to mechanical or chemical stimuli. 16. That by judicious management this influence is capable of being rendered a powerful therapeutic agent, either exciting or depressing the natural functions in an extraordinary degree. 17. That this is accomplished chiefly through the law of concentration, and mental impression, changing physical action, according to the quantity and quality of the blood passing through any particular organ or part in a given time. 18. That even in the normal waking condition, by directing the *attention strongly* to any particular part, organ or function, the sensation, circulation and function will be thereby excited. 19. That directing the attention strongly in any particular direction, or to any particular organ or function, we may thereby suspend pain and depress the function of some other, or distant part. 20. That owing to the particular condition induced by hypnotism, both as regards the mind and body, the effects of *attention exciting or depressing function*, can be rendered far more efficient than in the waking state. 21. That this influence may be rendered available in rectifying *mental*, as well as *physical disorders*. 22. That the power of mental and moral impressions to influence physical action, plays an important part in *every* mode of treatment. 23. That, whilst hypnotism is by no means entitled to the credit of being a panacea, or universal remedy, it is capable of being rendered eminently useful in many diseases of the most painful character, and which prove most rebellious to *ordinary* treatment. 24. That, it may be made available in exciting the absorption of morbid deposit. 25. That, it may also be directed so as to invigorate the strength and increase the bulk of morbidly weak and atrophied parts. 26. That it may also be rendered a valuable adjunct to other medical means, but, as well as the latter, ought to be applied, in the treatment of disease, by professional men only.

I have thus wrought my way, in tracing this

subject in its various modifications and applications, through a period of 2,400 years. The enquiry has afforded myself considerable pleasure as well as instruction; and it is gratifying to me to have had so many assurances, from some of your most intelligent readers, that they have perused my papers with great interest. In respect to others I beg to conclude with the following quotation:—*"Let him who liketh it, receive it; AND HE who doth not, let him produce a better."*

P. S. Through the kindness of a friend, application has been made to a distinguished and learned native for information on this point in particular. If I hear anything of importance either for or against, the good faith of the Fakir, it shall be fairly laid before your readers, as my great desire is to elicit truth.

3, St. Peter's Square, Manchester, Jan 27, 1845.

IODINE IN RECENT TUMOUR.

By MR. CLOSE, SURGEON, MANCHESTER.

The cases related by Mr. Tatum at the Royal Medical and Chirurgical Society, and reported in the *Medical Times* of Saturday last, may be corroborated by one which has recently fallen under my care, in which the power of iodine in removing adventitious structure of recent deposition is illustrated.

Mrs. S—, of Mount Street, Manchester, in the beginning of Dec., 1844, brought her little girl to me, and stated that the child had shown for a fortnight, a gradually increasing inability to stoop, or to move the lower extremities, but that in every other respect she seemed to be well, and had always enjoyed good health. On examining the abdomen I detected an indurated condition of the abdominal muscles, extending from the pubic and right and left iliac regions, nearly to the umbilicus. The mother said, she was quite ignorant of the existence of the tumour, as the child had never complained of pain or uneasiness in the part, nor could she tell what had given rise to it. On the following day, however she mentioned to me that about a month previously, the child had fallen from a height of 5 or 6 feet, and had alighted with the lower part of the abdomen upon the edge of a wicker basket, vulgarly called a *skep*; the father saw the accident, the basket was overturned; she seemed unhurt, and the misfortune was soon forgotten.

No pain was complained of on pressure, but there was considerable dysuria, which induced me to suppose that the bladder suffered either from pressure or sympathy. I ordered a blister to be applied to the affected part, to be kept open and dressed with the ung. hydr. nit., and suitable doses of the hydr. e. cret., to be given internally. The irritation of the bladder was removed, but at the end of a week, no decided impression appeared to have been made on the size of the tumour. I then ordered the iodine in the form of ointment, to be applied night and morning, and to be given three times a day, combined with potass. iodid. The improvement became rapid, the tumour diminished from the circumference to the centre, in a short time she began to walk; and now she is as active as ever she was, there is still some induration left, apparently in the substance of the rectus muscle, but this is gradually being removed by the use of the same agent.

This is one case of many in which I have prescribed the iodine with perfect confidence as to a successful result. The deposit was of recent formation, no doubt the product of subacute inflammation in the form of coagulable lymph; this if disregarded probably would have become consolidated, and as Mr. Tatum conjectures "ossific deposit" might have followed, or from peculiar diathesis some malignant tendency might have been imparted.

How varied is the experience of medical men, as to the powers of iodine! Now, I think a guide to its pathological usefulness in the removal of tumours, may be found in the circumstance, whether the tumour be organized or unorganized, that is, whether it be a secretion more or less consolidated, but lifeless, and not possessing blood vessels capable of adding to its own structure, or even of pro-

ducing a deposit and growth of a dissimilar nature.

In the commencement of practice, I was highly gratified with the way in which I succeeded in removing an enlargement of the submaxillary gland, the size of an orange, from each side of the neck of a girl *ætat.* 12, by iodine. The case was recorded in a contemporary journal.

In the course of time, cases of bronchocele came under my care, some were more or less expeditiously removed by the same means; others I found obstinate, and many incurable. I soon learnt that failure was not singular. * Bayle gives a summary of the cases published by Coster, Ir-menger, Baup and Manson, from which it appears that of 364 cases of this disease treated by iodine, 94 were uncured. † Dr. Bardsley cured only 9, and relieved 6 out of 31 cases. Now, what are the different morbid conditions of enlargement of the thyroid gland which may exist?

We meet with this enlargement very frequently amongst females, at the age of puberty, when there is a concomitant change in the voice, not so decided as in the male, with increased circulation of blood in the adjacent textures:—here it may depend on an accumulation of blood in the vessels, and an effusion of serum or lymph in its tissue; a similar state I have seen produced by severe straining during parturition. I have never seen the iodine fail in such cases, if administered at an early period. If the case has been neglected and the patient be more than from 21 to 24 years old, more difficulty is experienced.

We have enlargement from infiltration of coagulable lymph in the substance of the gland, an analogous condition to that which I have narrated as occurring in muscular tissue,—this may be gelatinous, fibrous, cartilaginous, or osseous; each term being expressive of the different and successive stages of development produced by the period of time during which it has existed. Now, iodine is capable of removing the gelatinous, or fibrous, or cartilaginous deposit, so long as it remains in the state of cartilagification, but as soon as the cartilage is traversed by vessels carrying red blood, it becomes incapable of exerting any influence upon it.

We meet with an encysted enlargement of the thyroid gland, in which cells are developed in its structure, these containing substances of a fluid or solid nature. These, by physiologists, are considered to be organized and capable of reproducing themselves and are completely uninfluenced by iodine.

Hypertrophy of the gland is sometimes said to exist; if by this term is meant, simply an enlargement of its own healthy structure, I have never met with such a case.

Lastly: a scirrhus condition of the gland is sometimes met with. Now, Müller has detected blood vessels in all morbid growths, cholesteatoma excepted, which is often developed within cysts, with which it maintains no organic connection. He scouts the idea of scirrhus being unorganized, and he also repudiates the notion of the arrangement of the vessels in any tumour, except in aneurism by anastomosis, presenting anything remarkable. Iodine, I need not say, has no remedial influence on scirrhus.

From these considerations, it becomes a matter of importance to ascertain as precisely as we can, the nature of the enlargement, and its age, previous to forming a prognosis. Unfortunately there is much difficulty in diagnosing such tumours; the sense of touch is most to be relied upon, and ought to be educated; this, assisted by the exploring needle, will generally enable us to form a tolerably correct opinion.

In the discussion on Mr. Tatum's cases, Mr. Acton has not mentioned that particular pathological effect of the potass. iodid., to which M. Ricord alluded, and which I found exceedingly puzzling in the first case in which I administered it. The case was one of secondary venereal symptoms: these disappeared under its influence, but they were succeeded by a peculiar eruption very much resembling acne. So much at a loss was I, that I wrote to a medical friend, who has been long in

* *Bibliothèque de Thérapeutique*, tom. 1er. p. 394.

† *Hospital Facts and Observations*, p. 121.

extensive practice, and he recommended me to give the hydrar. bichlorid. I conjectured, however, that the tertiary eruption was owing to the potass. iodid., with which I dispensed altogether, and gave a mixture of magn. carb. and aq. menth; pip.;—the acne disappeared, and the patient was permanently cured. Mons. Ricord says:—"The skin is most susceptible of the action of the potass. iodid.: Eczema, herpes, erythema, impetigo, rupia, an affection simulating acne, &c., are common from its influence. These effects disappear by the discontinuance of the remedy."

Feb. 8.—I have this day visited Mrs. S——'s daughter, and find that the tumour is completely dispersed. It will be proper, however, to continue the iodine a few weeks longer.

UTILITY OF STRYCHNIA IN OBSTINATE CONSTIPATION.

In the notes of a case, sent to us by Mr. Small, surgeon, of Boston, we have, strongly portrayed, the beneficial effects of strychnine in obstinate constipation. It would appear, that a patient of Mr. Small's, Mrs. B., in the ninth month of pregnancy, was attacked with pain in the right side, accompanied with bilious vomiting (probably duodenitis, or hepatitis). This, after a week's duration, subsided considerably, when in the middle of the night, having occasion to use the *bidet*, the child came away, without any uterine contraction, or pain. On Mr. Small's arrival (he having attended her on two previous occasions, when the labours were healthy) he found the child nearly smothered in the bed. After tying and dividing the funis, he succeeded by the usual means in restoring the nearly suspended respiration of the infant. It lived, however, but for four days. The placenta came away, and the uterus, contracted firmly, as in ordinary cases. Matters went on well, for three weeks, when the patient began to complain of abdominal tenderness, and a large quantity of fluid collected in the body (*anasarca* we presume) and in one leg. This, however, was re-absorbed in ten days. Vomiting, which had been occasionally troublesome, now became, permanently, and distressingly so, and the bowels were constipated. Finding, that the usual aperients, *per orem*, had not the effect of relieving this latter affection, an enema was ordered, which brought away not a trifling portion of fecal matter, and caused such a state of exhaustion, that the patient was, for many hours, in expectation of instant death. During the next week, in spite of, the most powerful purgatives, sulph-magnes; senna, oleum ricini, jalap: scammon: olivum erotomis, mercurials, &c., &c., the constipation became more obstinate, and the patient exhausted to such a degree, that death was momentarily expected. In this state of things, rendered more discouraging by delirium, aphonia, subsultus tendinum, suppression of urine, and fecal vomiting, it occurred to Mr. Small, to endeavour to stimulate the intestines by small doses of strychnine. Acting on this idea, he administered it every third hour in 1-16th of a grain doses, as an acetate, dissolved in distilled vinegar. The effects, he says, were miraculous: after the second dose, the pulse became stronger, the vomiting ceased, delirium abated, *flatus* was abundantly passed *per anum*, and on the following day, the bowels were freely moved. She continued to take the strychnia for the next day; since when her recovery has been most rapid.

The writer concludes, by stating it as his opinion, that the recovery in this case, must be solely attributed to the strychnia, as no other medicine had been given for three days previous to its being prescribed.

HOSPITAL REPORTS.

ST. GEORGE'S HOSPITAL.

Mary Curly, ætat 35, was admitted, under Mr. Hawkins, with femoral hernia, of three months' standing. She states that, about four days since, it came down, and became strangulated; since its first appearance it has descended frequently, but, until this last time, always allowed of easy reduction. She complains of pain in the tumour;

her stomach is irritable; countenance anxious; and pulse 120, and sharp. Previous to admission (eight p.m.) she has had an enema, which moved her bowels once. The taxis was immediately, but ineffectually, attempted; afterwards, she was put into a warm bath, and bled from the arm to fourteen ounces. Finding, after these means, all attempts to return the gut unavailing, the operation was determined upon, and performed at nine o'clock, p.m. On opening the outer sac, a mass of omentum was discovered, with some dark-coloured intestine adhering to its centre; on turning aside the omentum, in an inner sac, the intestine was discovered, healthy in appearance and texture: a small knuckle, of about the size of the point of the little finger was strictured; the stricture being divided, this was returned, with the omentum, subsequently, having first carefully dissected the discoloured intestine from its central portion. Half an hour after the operation, the sickness at the stomach had entirely ceased, and two hours later, the bowels were freely moved. She was ordered chamomile stupe to the abdomen, and a full dose of opium, two grains of the watery extract. Eleven o'clock following morning: Symptoms of peritonitis began to appear; her skin is hot; her tongue white; pulse 120; and she complains of abdominal tenderness; the bowels are constipated. The usual treatment was adopted immediately; she was leeches largely over the abdomen, and put upon full doses of calomel and opium, every two hours. In addition, she was ordered a draught, every third hour, of two drachms of sulphate of magnesia, in an ounce and a half of pimento water. Nine p.m.: No improvement has taken place; the bowels still continue unmoved, and the tenderness of the abdomen not at all lessened: let her take the pills every third hour; stop the draughts. To have an enema immediately, viz.:

R. Enematis communis Oij.

Olei ricini ʒj. M. injicietur, statim.

22nd.—Her bowels have been moved five times during the night; stools have been decidedly feculent; abdomen less tender; pulse small, and down to 106. Discontinue calomel and opium; let her have half a glass of brandy.

23rd.—Yellowish discharge from the wound.

24th.—The artificial anus is discharging more freely: no stool *per anum*. The wound, however, looks healthy, and she is free from abdominal tenderness; ordered a common enema, and ordinary diet, with porter one pint, in place of her brandy. She continued to improve every day; in twenty-three days after the operation, she had a truss applied, and was allowed to get up. In six days afterwards, the artificial anus had completely closed, and she left the surgical for the medical ward, to be treated for a severe cough, attended with bloody expectoration, that attacked her while under Mr. Hawkins' care.

PROGRESS OF FRENCH SCIENCE

FROM OUR OWN CORRESPONDENT.

Paris, Jan. 30th, 1845.

Statistics on the Cæsarian Operation.—The editor of the *Journal de Chirurgie*, after some remarks on the operation performed successfully by M. Lebeau (v. *Medical Times*, vol. xi. p. 277) gives an abstract of a memoir published at Copenhagen by Keyser, entitled *De Eventu Sectionis Cæsareæ*. Michaelis is the first author who published the results of this operation; he excluded as apocryphal all the facts anterior to 1750, and brought his researches down to 1833. A Danish physician continued it to 1839. These are the two statistical tables that Keyser submitted to a severe examination; he struck out 62 cases from Michaelis' list, and added 69 which the German author had rejected, or did not know of. He likewise enriched Levy's table with facts unknown to him. The number of cases in Michaelis' table was 265, and in Levy's 73; total 338; on which there were 128 successful, and 210 unsuccessful, operations. The mortality was: for children 0·32, for the parents 0·62. But, on account of the unsuccessful cases not having been published, it is positive that the mortality is greater; Keyser, therefore, chose the cases which

had occurred under his own eyes; and on 67 cases he reckoned 52 fatal, or 0·79. Wilde stated that the mortality was about 0·90; and Levy coincides with this opinion. Considering the mortality in children according as the mother died or survived, Keyser found it to be 0·32 in the former, and 0·27 in the latter. According to the time which had elapsed from the commencement of the labour until the moment of the performance of the operation, Keyser has formed three categories: in the first it was done during the first twenty-four hours; in the second from 25 to 72 hours after; and in the third after 72 hours had elapsed. In the first the mortality was for the mothers 0·67, and for the children 0·23; in the second, mothers 0·55, children 0·32; and in the third, mothers 0·72, and children 0·60. In 112 cases in which the condition of the membranes were observed, there were 47 successful, and 65 unsuccessful; of the former, in 12 the membranes were entire, and the average time which had elapsed in the others ere the operation was performed was 18 hours; of the latter the membranes were entire in seven cases, and the average time in the remainder was 26 hours. Dividing these last into three categories, we find when the operation was performed immediately, or at farthest in six hours after the rupture of the membranes, that the mortality was for the parent 0·50; for the children 0·14; when from seven to 24 hours had elapsed, mothers 0·60, children 0·22; beyond 24 hours, 0·66, and 0·49. In thirty-two cases in which version, the application of the forceps, or perforation of the cranium, had been previously attempted, the mortality was 0·66; and in 28 of these 32 cases, the mortality of the children was 0·82; it was 0·60 when the diminution of the pelvis was owing to rachitism, and 0·69 when produced by mollities ossium. In 147 cases the incision was made on the linea alba; mortality 0·56: on the side in 56; mortality 0·68. In cases of hæmorrhage, mortality 0·72; of hernia, 0·67. The mortality, when the measurement of the pelvis was 1½ inch, and less, was 0·47; on the contrary, when it was 1¾, and above, it was 0·66. On 123 cases, the causes of death were as follows.

77 died from inflammation of the abdomen.

29 " " nervous accidents.

10 " " effusion of blood.

2 " " internal hæmorrhage.

2 " " inflammation of the thoracic organs.

1 " " rupture of the uterus, and violent hæmorrhage on the 7th day.

Relative to the epoch of death, it took place: once immediately; 9 times in less than six hours; 16 times in from six to twenty-four hours; 108 times from the 1st to the 7th day; 16 times from the 8th to the 21st day: once on the 30th day by osteo-malacia; and once on the 36th day by intestinal perforation.

Academy of Sciences—Sitting of the 3d Feb.—M. Elie de Beaumont in the Chair.—Received: *Medico-Chirurgical Transactions*, vol. 27th; Catalogue of the Library of the Royal Medical and Chirurgical Society of London (offered by the Society); *Observations on the Structure of the Shells of Molluscous and Conchiferous Animals*, by J. S. Bowerbank, F.R.S.; *Transactions of the Microscopical Society*, London, vol. 1, parts i. and ii. (offered by the Council); *Edinburgh New Philosophical Journal*, conducted by Professor Jameson, Oct. 1844, to Jan. 1845; *Proceedings of the Zoological Society*, London, January to September, 1844; Letter of thanks for the *Compte Rendu* from William Ogilby, Secretary to the Zoological Society, London.

On the Action of Cold on Liquefied Chlorine.—Professor Dumas informed the Academy of several experiments in which liquefied chlorine was submitted by him to a cold of about 130° F., produced by the action of ether on solid carbonic acid. Phosphorus when thrown into the chlorine takes fire, and explodes violently. The same substance, submitted to the above mentioned degree of cold, explodes with the same rapidity. Arsenic, at the ordinary temperature, takes fire when thrown into the chlorine; antimony, on the contrary, remains in the chlorine without combining with it, and even no action takes place when chlorine is distilled on antimony. From these facts, Professor D. concludes that M. Schrotter's experi-

ments were performed under peculiar conditions, which ought to be known, as they could not be repeated without evident danger to the operator.

On a New Series of Compounds of Tungstic Acid and Alkalies, by M. Margueritte, pupil of M. Pelouze, M.A.S.—When tungstene is calcined with an excess of an alkaline carbonate, a mass is obtained, which, on the addition of water, furnishes a neutral tungstate, with excess of the alkaline carbonate employed; and the liquid, when hydrochloric acid is added, gives a white precipitate (hydrated tungstic acid), which is re-dissolved on agitating the liquid. This, however, no longer takes place when the hydrochloric acid is in excess, though the solution still contains some tungstic acid, since, when a bit of zinc is put into it, it becomes of a deep blue colour. When evaporated, at first an alkaline chloride, and then an alkaline tungstate, are obtained, the latter in very minute proportions. The various compounds studied by the author are: 1^o the bi-tungstate of soda, in lamellated crystals; decomposed by acids.

Composition.	Calculation.	Analysis.
Anhydrous salt.	$\begin{cases} 88.34 = \text{W O}_3 \\ 11.66 = \text{Na O} \end{cases}$	$\begin{cases} 88.45 \\ 11.55 \end{cases}$
	100.00	100.00
Hydrated salt	$\begin{cases} 76.78 = \text{W O}_3 \\ 13.10 = \text{H O} \\ 10.12 = \text{Na O} \end{cases}$	$\begin{cases} 77.08 \\ 13.20 \\ 9.72 \end{cases}$
	100.00	100.00

formula $\text{Na}_2\text{O} (\text{W O}_3)_2 + 4\frac{1}{2} \text{H O}$.

2^o Tri-tungstate of Ammonia, in octohedrons, melts in its water of crystallization.

Composition.	Calculation.	Analysis.
	$\begin{cases} 83.3 = \text{W O}_3 \\ 10.5 = \text{H O} \\ 6.2 = \text{Oxyd. Am.} \end{cases}$	$\begin{cases} 83.29 \\ 10.70 \\ 6.01 \end{cases}$
	100.00	100.00

formula $\text{H}_4 \text{A}_3 \text{O} (\text{W O}_3)_3 + 5 \text{H O}$

3^o Quadri-tungstate of Soda, crystallized in plates in the midst of an acid liquid, or under water like phosphorus.

Composition.	Calculation.	Analysis.
Anhydrous salt.	$\begin{cases} 93.8 = \text{W O}_3 \\ 6.2 = \text{Na O} \end{cases}$	$\begin{cases} 93.8 \\ 6.2 \end{cases}$
	100.00	100.00
Hydrated salt.	$\begin{cases} 89.0 = \text{W O}_3 \\ 5.0 = \text{H O} \\ 6.0 = \text{Na O} \end{cases}$	$\begin{cases} 88.8 \\ 4.9 \\ 6.3 \end{cases}$
	100.00	100.00

formula $\text{Na}_2\text{O} (\text{W O}_3)_4 + 3 \text{H O}$

4^o Penta-tungstate of Potass, in prisms.

Composition.	Calculation.	Analysis.
Anhydrous Salt.	$\begin{cases} 92.6 = \text{W O}_3 \\ 7.4 = \text{K O} \end{cases}$	$\begin{cases} 92.2 \\ 7.8 \end{cases}$
	100.00	100.00
Hydrated Salt.	$\begin{cases} 83.2 = \text{W O}_3 \\ 10.1 = \text{H O} \\ 6.7 = \text{K O} \end{cases}$	$\begin{cases} 82.8 \\ 10.2 \\ 7.0 \end{cases}$
	100.00	100.00

formula $\text{K O} (\text{W O}_3)_5 + 8 + \text{H O}$

5^o Hexa-tungstate of Ammonia, in lamellated crystals.

Composition.	Calculation.	Analysis.
	$\begin{cases} 89.80 = \text{W O}_3 \\ 10.2 \begin{cases} 3.30 = \text{Az H}^4 \text{O} \\ 6.90 = \text{H O} \end{cases} \end{cases}$	$\begin{cases} 89.7 \\ 3.1 \\ 7.2 \end{cases} \quad 10.3$
	100.00	100.00

formula $\text{H}^4 \text{Az. O.} (\text{W O}_3)_6 + 6 \text{H O}$

6^o Bi-tungstate of Ammonia and Potass.

Composition.	Calculation.	Analysis.
	$\begin{cases} 78.8 = \text{W O}_3 \\ 7.8 = \text{K O} \\ 8.9 = \text{H O} \\ 4.3 = \text{Az H}^4 \text{O} \end{cases}$	$\begin{cases} 79.9 \\ 7.8 \\ 9.0 \\ 3.7 \end{cases}$
	100.00	100.00

formula $\text{K O} (\text{W O}_3)_2 \text{H}^4 \text{Az. O}_3)_2 (\text{W.} + 6 \text{H O})$.

Shewing that there may be 2, 3, 4, 5, and even 6, equivalents of acid for one of base. These compounds are not decomposed by chlorohydric,

nitric, or sulphuric acids, even when the mixture is heated to the boiling point, and it is only after ebullition has taken place some time, that tungstic acid is deposited; their solubility does not decrease according to the quantity of tungstic acid. When an excess of base is added, they are decomposed by the acid, because they are converted into neutral tungstates; they have an acid re-action on litmus paper, the neutral tungstates, on the contrary, are, if any thing, alkaline; their taste is far more bitter than the neutral; calcined, they lose their water of crystallization, and are no longer soluble.

On the Chlorides found in Albuminous Liquids. By Dr. Turek.—The liquids examined by the author were: saliva, serum of the blood, white of egg; and from his researches, he concludes that the chloride of sodium, whose presence is indicated by the ordinary processes in all albuminous liquids does not really exist, especially when those are recent—that there is at that period a chlorohydrate of ammonia with free soda; these two compounds re-act slowly on each other, ammonia is disengaged and a chloride of sodium formed.

Mr. E. J. Cooper addressed a letter to M. Arago, proposing that all astronomers, furnished with proper instruments should engage to observe, and produce a catalogue of all the stars within their zone precisely similar to that published by the Astronomical Society of London. To facilitate which, Mr. C. says he will forward about next midsummer, to all such as will undertake to co-operate, a catalogue of the stars in his zone.

Academy of Medicine—Sitting of the 4th Feb.—M. Caventou in the Chair.

The President informed the Academy that Dr. Ribes was no better, and that Dr. Virey was quite well.

Dr. Segalas mentioned that Professor Royer Collard's health was so far improved that he had been capable of taking a walk; and he trusted shortly to be able to join his colleagues at the Academy.

Dr. Rouchoux presented a memoir on quarantine in the plague, by M. Moulon, of Trieste, author of an esteemed work, entitled *Systemes en Medecine*.

Dr. Naequart proposed stating previously, that there would be a *Comite Secret*. The President, in reply, said this was impossible, as the fact was not known before hand. Dr. Gerardin proposed having extra sittings for this subject. The Academy then was formed into *Comite Secret*.

Paris, Feb. 13th, 1845.

On the Utility of the Valerianate of Zinc in Neuralgia: by Dr. Lericke, of Lyons. Before enumerating its physiological and therapeutical properties, the author gives the following description of this salt, which he owes to the kindness of Mr. Fournier, a distinguished pharmacien, of Lyons. The valerianate of zinc is procured sometimes in crystals of a pearly white, not unlike those of the *sel sedatif de Humbert*, of the odour peculiar to valerian; at other times, in inodorous, amorphous masses of a slightly styptic, nauseous taste. The salt is prepared by various methods, but after repeated trials, the author came to the conclusion that when obtained by the process, recommended by Prince Lucien Bonaparte, it is most active.

Physiological proprieties: (Experiments performed on the author himself.) On the 2nd of July, at six a.m. gr. ss. of valerianate of zinc was taken, the effects were, strong, slightly saline, taste of valerian. At ten A.M. second dose: half an hour after, slight vertigo set in, pulse 72, somewhat stronger than natural. At eleven a.m.: vertigo increased, but not sufficiently intense to prevent the author from pursuing his ordinary avocations: all these phenomena disappeared gradually during the day. 3rd July, six a.m.: gr. j. of the valerianate was taken, the effects were much the same as those of the first dose, the preceding day. At eleven a.m., second dose: the symptoms produced were, disturbed sight; strong vertigo, similar to that caused by the ingestion of spirituous liquors; incapability of study; nausea; pulse 80; skin hot, but not dry; tongue white; drowsiness; these symptoms decreased after a nap of two hours (from twelve to two p.m.), and, finally, dis-

appeared in the course of the evening, leaving nothing, but a sense of weariness; the different secretions were normal. The various affections in which it was administered, were: 1^o Irregular neuralgia of the infra orbital nerve of six years standing, in a lady, ætat 68; the cure was obtained after two months treatment; the valerianate was prescribed as follows: R Valerian. zinci gr. ss. Pulv. sacch. alb. gr. iss. Ft. Pulvis. To be taken at the commencement of the paroxysm, and repeated three hours after. This was continued for two days, and then the dose was increased to four powders per diem. 2^o Neuralgia of the supra-orbital nerve of an intermittent character, in a lady, ætat 42: cured in about a fortnight by the same dose. 3^o Infra-orbital-temporal neuralgia, with exacerbation when the patient got into bed, in a lady, ætat 62; dose as before; after ten days, the amelioration was so great that the dose was gradually decreased. 4^o Cancerous cachexy, in a young woman, ætat 33; affected with cancer of the uterus; dose gr. $\frac{1}{2}$ twice a day; the nervous excitation diminished under this treatment, and the same effect was produced in two cases of phthisis. 5^o Epilepsia, in a man, ætat 55, doses *ut supra*; cured in about two months. 6^o Chorea, in a child, ætat 11 $\frac{1}{2}$; doses, at first, gr. ss., and, afterwards, gr. $\frac{3}{4}$ per diem; the chorea disappeared in the course of five days; steel was administered to remove the chlorotic state of the little patient. The valerianate was prescribed in powders, pills, and draught as follows: Powders: R Valerian. zinci grs. xij.; pulv. sacch. alb. \mathfrak{ij} .; oleo-sacchari menth. \mathfrak{ij} .; fiant pulv. xxiv. Pills: R Valerian. zinci grs. xij.; pulv. sacch. alb. \mathfrak{ij} .; muc. gum. arab. q. s.; fiant pilulæ xxiv. Draught: R Aquæ distill. til. Europ. \mathfrak{z} ij.; aq. distil. flor. aurant. \mathfrak{z} ijss.; valerian. zinci gr. ij.; syrup. menth. pip. \mathfrak{z} ij.; fiant haustus vij.; Str. unus sæpe in die.—*Gazette des Hôpitaux*.

Polypus of the Uterus, excision and cauterisation.

—Richter, speaking of this affection, states, that cutting instruments are, in the generality of cases, improper, because they not only may injure the vagina, but likewise give rise to serious hemorrhages; they are, however, indicated where the pedicle is ligamentous, and can, therefore, neither be tied nor extracted. Mr. S. Cooper, after recording this opinion, adds that the bistoury may be used with advantage, when a polypus, with its pedicle attached to the fundus uteri, suddenly falls downward, occasioning an inversion of the uterus. The following case, recorded in the last number of the *Annales de Therapeutique*, proves that, in the hand of a skilful surgeon, the actual cautery may be applied even to the uterus, not only without giving rise to any serious accidents, but without causing much pain, and shews it to be a heroic remedy against hemorrhage, on which Montfaucon (*Dict des Sciences of Med. Verbo, "Polypes de l'uterus"*), thus expresses himself:—"If, during the operation, any large vessels have been divided, their ligation cannot be attempted, and the hemorrhage can only be combated by remedies, sometimes dangerous, and often ineffectual. This accident is the principal danger attendant on the excision of uterine polypi." Case,—a woman, ætat 50, was received in the wards of Dr. Jobert de Lamballe, at St. Louis, for an affection of the uterus. Manual and instrumental examination discovered a voluminous polypus, by which the os uteri was dilated to the size of about a shilling. The general health was good, notwithstanding the frequent hemorrhage which of late had taken place; the other symptoms were those observed in similar cases. On the 10th of January, Dr. Jobert de Lamballe performed the operation in the following manner:—the patient was placed as for lithotomy, the bivalvular speculum was introduced, so as to expose to view the os uteri, whose anterior lip was then seized with Muzieux's pincers. The speculum was then removed, and the uterus slowly and carefully pulled downwards, until it appeared at the os externum; during the whole time the labia and nymphæ were kept wide apart by two assistants. A second pincers was next fixed on the same lip, and the os uteri having been thus raised, and the right fore finger placed behind the posterior lip, the polypus was seen distending the os internum, like the head of a fetus. The polypus

was next seized with a third pincers and cautiously drawn downwards, until it projected beyond the os externum; the pedicle (about an inch and a half in diameter) was now carefully examined, to ascertain whether any arterial pulsations could be felt, and, as none were perceptible, the tumour was removed by means of a probe-pointed bistoury. The operation was accomplished by the distinguished surgeon with his wonted precision, ease, and promptitude. Very little blood was lost by the operation; but the uterus having been permitted to return to its normal position, an abundant gush of arterial blood took place. The speculum was instantly re-introduced, the anterior lip of the os uteri seized, and the organ brought down to the os externum: after dilating the orifice of the uterus, its inner surface was carefully wiped, so as to discover the precise spot from whence the hemorrhage proceeded and one of the valves of the speculum was placed so as to protect the anterior surface of the vagina, exposing solely the insertion of the pedicle. Every thing thus arranged, the actual cautery was applied firmly on the spot, and the blood ceased immediately. Dr. Jobert de Lamballe adopts cauterization as a means of stopping the hemorrhage; because he considers it preventative of the serious accidents, such as metritis, uterine phlebitis, &c., which so frequently occur when other methods are had recourse to; and as being productive of healthy suppuration, limited phlogosis, and speedy cicatrization. No pain was experienced on the application of the cautery, and the patient walked from the operating room to her bed. No serious consecutive accidents ensued; very little fever; a bubo, which terminated by suppuration, appeared in the left groin when the patient was convalescent.

Dissection of the Tumour; size that of an adult's fist. It was pyramidal, heavy and elastic, like caoutchouc; its external surface sero-mucous, even and smooth, composed of two tissues, the exterior formed of the muscular coat of the uterus, the other evidently fibrous; the former varying in thickness from one-third of a line to four lines, and here the muscular fibres were easily seen; the latter was the real type of fibrous tumours, offering several nodosities, very similar to old cicatrices. Both were united by a loose cellulofibrous tissue, and were easily separated from each other, like the rind of an orange from the pulp.

On the different modes of exploring the os uteri: by E. Paire, M.D., of Bourdeaux.—One of the most important means of diagnosis in diseases of the uterus, is the examination of the os uteri, of use principally in indicating the results of treatment adopted. The recent researches on this subject, prove that its diseases are not, as formerly, incurable, because, in examining their causes, they are found to proceed more from changes in the vitality of this organ, than from a constitutional pre-disposition; and, as Bell justly observed, scirrhus of the uterus is especially met with in females with black hair and pale complexion, large eyes, and excessive nervous mobility. External causes may likewise produce this affection, such as lesions during the accouchement; the custom some females have of introducing their finger into the vagina while performing their ablutions; miscarriages, induced by criminal manoeuvres. The consecutive accidents produced by external lesions are metrorrhagia, ulceration, with suppuration of an ichorous nature, acrid, abundant and similar to that of cellular tissue; nervous disturbance, more or less intense, such as uneasiness, spasms, cardialgia; finally, a very curious phenomenon, noticed here for the first time, a general tremor, produced whenever the finger, introduced into the vagina, touches the diseased part. The immediate effects are, a trembling of the whole body, which persists more or less, numbness of the uterus, irradiating into its dependencies; pain similar to that produced by the sting of certain insects; swelling of the neck of the uterus, accompanied by pain, irritation, inflammatory swelling, and a peculiar mucous secretion from the uterus itself. Drs. Loeck and Merriman justly observed, that it was indispensable to ascertain the effect of the remedies employed upon the organic lesions; this may be attained, according to the author, by means of the *ostinometre*, by which, not only the

nature and consistency of the tumour developed on the os uteri, but likewise the increase or decrease of the disease, may be accurately ascertained. This is the more necessary, for, as Dr. Gimelle stated, a polypus may be taken for cancer, &c., and, without denying the efficacy of the oxyde of gold, the preparations of arsenic, the sulphate of iron, &c., still may it not be admitted, that it is from an erroneous diagnosis that they are quoted as having cured cancer? The os uteri in its normal condition, is about an inch in length, but varies according to the state of the organ. Dr. Gibert makes the following distinctions, comprising the various forms, under two heads, *virginal* and *maternal*, to which the author adds a third, denominated *sterile*, where the os uteri, though healthy, may be double, and even treble its natural length. As to the curability of these affections, partial swellings, consecutive to a phlegmasia or oedematous state; certain *engorgements* without induration, some cases of scirrhus disease developed in the tissue of the uterus, without degeneration; and hypertrophy of the neck of the uterus, may be cured during the first and second stages. On the contrary, cancerous, fibrous, or calcareous affections, are not susceptible of so favourable a termination, especially when they have produced a disturbance in the various functions: then they are beyond the resources of medical aid. The *ostinometre* is similar to a forceps, about ten inches in length, its anterior branches thin, rounded, and terminated by oval knobs; the posterior, slightly concave interiorly, are of the usual shape, in one of which is fixed a scale of proportion, which passes through an opening made in the other, and divided into ten equal parts of half a line each: the exact size of the organ examined is ascertained by multiplying the number of lines obtained, by ten. The ulcerations may not only affect the external, but even the internal surface of the os uteri, and even the uterine cavity; to discover the former, the author employs an instrument called the *releveur*, by means of which he raises the anterior lip of the os uteri, and the second, a peculiar kind of speculum, which he denominates *speculum du col*. The symptoms of these lesions are, secretion of a liquid, sometimes of a reddish, or dark yellow colour, at others greenish, acrid, and sanious, pain more or less acute, phlogosis and congestion of the neck and body of the uterus; lesions of the dependencies of the uterus are indicated by pain in the parts corresponding to the Fallopian tubes and ovaries, deranged catamenia, hyperemia of the os uteri, sometimes with very considerable itching, and occasionally to such an extent as to produce hysterical phenomena, and onanism. When the ulceration of the external is complicated with that of the internal surface of the os uteri, it is to be diagnosed by the continuation, of certain symptoms, after the disappearance of the external ulceration, such as continuation of the hemorrhage, or fluor albus, pain on introducing the speculum, heat in the urethra during the emission of urine, and tenesmus. The treatment consists in cauterization with the nitrate of mercury, or nitrate of silver, narcotic injections, hip baths, rest, emollient drinks. Should the cauterization give rise to lancinating pains in the diseased spot, fleeting pains in the loins and groins, tenesmus, or retention of urine, a hot bath, venesection, application of leeches to the os uteri, or the hypogastrium, must be employed. In general, as the local lesion is ameliorated, the fluor albus decreases, and all the other symptoms disappear; menstruation becomes regular; finally, assimilation and nutrition assume their normal condition, and cause the yellow hue of the skin, which accompanies all chronic diseases of the uterus, to disappear.

Aneurism of the Popliteal Artery.—Dr. Huguier, at a late sitting of the *Societe de Chirurgie*, related the following case of aneurism of the popliteus operated upon after the Hunterian method, modified by Professor Roux. A postillion, *etat* 30, sanguineous temperament; experienced about two months ago, a violent pain in the right ham, and, on touching it, felt a pulsating tumour, which increased gradually in volume, and caused continual pain. Having consulted several persons, it was pronounced to be popliteal aneurism, and he

was advised to go to Paris, and have the operation performed. Examined by Dr. Huguier, on the 20th January; the tumour, about the size of a small orange, presented all the characters of aneurism, except the bellows sound; the pain extended to the leg and foot; skin over and round the tumour, sound. Operation. An incision was made on the lower third of the thigh, parallel to the external edge of the sartorius, the ring of the adductor magnus femoris was next divided; the artery laid bare, raised, and two ligatures applied. The pulsation of the tumour ceased instantaneously: the edges of the wound were united, and the limb, slightly bent, was placed on a cushion; venesection was performed; a strict regimen and emollients were prescribed. No consecutive accident took place, and on the 25th January, four-fifths of the wound were cicatrized, and the aneurism, considerably diminished, presented no pulsation. The reasons adduced by Dr. Huguier, for preferring Hunter's to Scarpa's method, were: 1° The danger of an operation is less, as the distance from the trunk increases. 2° In the ring, formed by the adductor magnus femoris, the *cruralis* is neither surrounded nor crossed by any of the branches of the *crural plexus*, which obviates the danger of including these in the ligature, and dividing them, as sometimes happens when the operation is performed higher up. 3° The *crural artery* is not so closely united to the vein in this spot as in the summit of the inguinal triangle, and the cellular tissue being less dense and compact, the artery is more easily isolated from the vein, and there is less danger of wounding the latter. 4° The distance from the external saphena is greater, consequently its lesion or inflammation is less to be feared; besides, there is no danger of wounding it, which might occur in the operation by Scarpa's method. 5° The large lymphatic vessels of the thigh are never wounded. 6° The return of pulsation in the tumour is not so likely, because there are fewer collateral arteries between the aneurism and the ligature, than in the upper third of the thigh. 7° If consecutive hemorrhage takes place, there remains a sufficient portion of artery for the employment of pressure, or the application of a ligature. 8° The inflammatory accidents which follow this operation, such as, erysipelas, imposthume, phlebitis, angioloecitis, and the extension of pus to a distance, are less to be feared in this spot than higher up, as they may there reach the interior of the pelvis. 9° There are fewer anomalies in the origin, the direction and the *rappports* of the arteries, than in the groin, and consequently the accidents resulting therefrom are not so great. 10° Finally, the healthy state of the surrounding parts, the small size of the tumour, the rapidity with which it developed itself, and the age of the patient, led to the conclusion that the artery was sound, and that neither inflammation, suppuration, nor gangrene would occur in the aneurismal sac. This communication elicited the following opinions: Dr. Michoux contended, 1° that Roux's case could not be adduced in support of this, because in the case operated upon by the professor, the circulation was re-established by the ramus anastomaticus magnus and the articularis superior interna. 2° That though the danger is greater, according as the operation is performed nearer the trunk, it is equally so, according to the depth of the incision, and in Hunter's method this is deeper, than in Scarpa's. 3° That the patient is exposed to consecutive hemorrhage, precisely on account of the proximity of the ligature to the tumour. 4° That the arterial anomalies mentioned, did not exist in the spot recommended by Scarpa, but higher up; and 5° That the operation, as performed by Dr. Huguier ought not to be preferred. Dr. Chassaignac did not consider Scarpa's method more dangerous than Hunter's. Dr. Robert stated that the danger attendant upon this operation is chiefly owing to the inflammation and suppuration of the sac, and yet this does not always take place, for in a case lately operated upon by him, the artery was found ossified, and the ligature was of necessity placed immediately above the tumour, without producing any untoward accidents. Dr. Lenoir thought that previous to operating, compression ought to have been em-

ployed, cases having been recorded of a cure by this method; and even when this does not take place, it hastens the cure: and that the circulation is re-established in Scarpa's as soon as in Hunter's method.

Academy of Sciences—Sitting of the 10th Feb.—M. Elie de Beaumont in the Chair.

On the Action of the Sulphas Quininæ on Animals. By Dr. Desiderio, of Venice. The lethal properties of the sulphas quininæ having, as yet, never been announced, the author performed a series of experiments (78 in number), from which he concludes: 1^o That the symptoms of poisoning by sulphas quininæ in animals are: drowsiness; impossibility of remaining erect; immobility; diminution of sight; occlusion of the eyes. 2^o That $\frac{1}{2}$ made into pills with honey, and given to an ordinary sized rabbit, causes death. 3^o That the fatal effects are hastened by the administration of opium, and its compounds, and alcohol. 4^o That, on the contrary, $\frac{1}{2}$ of the aqua distillata lauro-cerasi, administered in divided doses, according to need, delays its action, and may, if properly given, prevent any injurious effects taking place. 5^o That venesection is still more efficacious. 6^o That pulvis digitalis has also a salutary effect, but the difficulty of administering it to the rabbit, prevented its frequent administration. 7^o That sulphas quininæ produces an exciting effect on man in health. 8^o That the symptoms of an overdose are weakness; drowsiness; deafness; diminution of the intelligence and memory; eyes dull and languid; eyelids closed; gastro-enteric inflammation and irritation. 9^o That $\frac{3}{4}$ of sulph. quin. taken by an Italian lady, gave rise to phenomena of an inflammatory nature, which were subdued by general and local bleeding, combined with other antiphlogistic remedies. 10^o That two cases of poisoning from the bite of the viper were cured by the sulphas quininæ. 11^o That the action of quinine in pernicious intermittent fever is analogous to that of venesection, digitalis, opium, wine, and alcohol, aqua distill. lauro-cerasi, secalc cornutum, consequently these remedies may be usefully prescribed in marsh fever. 12^o That the analogy between intermittent fever and rheumatism is, perhaps, the reason why the latter is cured by the sulphas quininæ, and not on account of the exciting properties of this substance.

Practical Considerations on Surgical Operations, and on the Means of Avoiding the Danger and Accidents attendant thereon. By Dr. Ballard, chief surgeon to the military hospital of Bourbonne and Besançon. Memoir read. Of 28 amputations (20 of the inferior extremities, of which 11 were of the thigh), not one was unsuccessful; none of the patients experienced traumatic fever; the greater part were permitted to get up on the fifth or sixth day, and all left the hospital ere the twentieth day had elapsed. The various causes which render them fatal are: 1^o The dread and expectation of the operation. To avoid these, the patient must be kept ignorant not only of the exact time, but also of the necessity of the operation. 2^o Nervous agitation: against this, a mixture, containing from grs. ss. to grs. j. of hydrochlorate of morphine, must be given, by table-spoonful at a time. 3^o Traumatic, or suppurative, fever; its development must be anticipated, for when once the pain and inflammation have commenced, it is difficult, if not impossible, to check their progress. 4^o Formation of pus: whence the separation of the skin from the parts beneath: the denudation of the bones, the appearance of abscesses, the absorption of pus, &c.; the causes which are efficacious in the preceding, are likewise so in the present one. 5^o Finally, the re-union of a great number of patients, marshy situations, imperfectly ventilated rooms, &c.

On a mode of Catheterism.—Dr. Guillon claims a priority to the invention of the method indicated in a memoir presented on the sitting of the 13th of January, and further states that this method cannot be employed in every case, but nevertheless is really useful. 1st.—When very large false passages exist in the urethra. 2nd.—When retention of urine is caused by chronic prostatitis, or by the valves situated at the internal orifice of the bladder. 3rd.—When a soft fungus at the neck of the bladder prevents the escape of the urine.

4th.—When the retention is caused by a swollen condition of the mucous membrane of the urethra.

On the restoration of nervous influence after an autoplasmic operation.—By Dr. Jobert de Lamballe. Memoir read. (This interesting memoir, after revision by the author, will be published in the *Medical Times*.)

Academy of Medicine—Sitting of the 11th Feb. M. Caventou in the Chair.

On a Vital and Hydraulic Method for Dilating Stricture of the Urethra. Memoir read by M. Goujon. The instrument proposed by the author is composed of a caoutchouc bottle, attached to an ivory tube, the former being filled with water: this is made to escape by jets. The stricture by this treatment yields promptly. To prevent its return, an ivory catheter of his invention must be introduced.

Professor Roux read the second portion of his memoir on aneurism of the arteries in bones. This memoir, at the request of several members, was sent to the *Comité de Publication*.

Cure of Cancer of the Lower Lid. By Professor Blandin.—A woman, from the country, came to Paris, to be operated on for cancer, which had already been removed thrice by Dr. Pinault, and re-appeared. On examination by Professor Blandin, the cancer was found to have invaded the whole of the lower lid, extending somewhat into the orbit, and upon the side of the nose. On reflecting on the successful termination of a case of cancer of the nose, in which autoplasty was employed, (the flap having been taken from the forehead), and which did not relapse, though the patient remained eighteen months in the Hotel-Dieu, Professor B. determined upon operating. The cancer was removed, and a portion of the neighbouring integuments taken to replace the lost lid. The operation has now been performed three months, no trace of the disease has as yet appeared, and it is to be hoped that it will not, as the eye-lid has been formed by a part not previously affected with cancer. The Professor, in terminating, stated that though the new lid could not be considered as equivalent to the natural one, still it was better than to allow the conjunctiva to be exposed to the injurious influence of external causes.

Pathological Anatomy of a case of Vesico-vaginal Fistula, by Professor Berard, will be given at length next week.

A discussion on these two interesting observations will take place at the next sitting.

GARLAND DE BEAUMONT, D.M.P. B.L. & S., &c.
Honorary Physician to the Spanish Embassy.

NOTICES TO CORRESPONDENTS.

Query.—The price was correct.

A bona fide Medical Student.—Reports of cases occurring within any hospital in Great Britain, or Ireland, will be received as claimants for our proposed prizes. Our object being to excite pupils to the study of hospital practice, we intend to make no exceptions in favour of the larger or chartered hospitals. Some of the most celebrated Clinical Schools in Germany, contain no more than fifty or sixty beds, both for medical and surgical practice. Our prizes therefore, like those of a tourney, will be open for all knightly comers.

Tyro.—Hoblyn's Dictionary defines, in the smallest space, the terms used in medicine, surgery and the collateral sciences. It should be found among the works of every medical pupil.

A Constant Reader.—The Valerianate of Zinc may be procured from any respectable wholesale druggist, or dispensing chemist.

A Subscriber to the *Medical Times*, Dublin.—On referring to our last number, will find that his wish has been anticipated. Numerous applications of the same nature as his, relative to the present defective system of management adopted in Irish Lunatic Asylums, have reached us. Press of matter, on the all-absorbing question of Medical Reform, has prevented us from paying the subject its due share of attention. As soon as we are allowed a little breathing time from medical politics, we shall devote to the subject of Irish Lunatic Asylums our best energies, in an endeavour to put before Government, in its proper colours, that

mishmanagement of which we have received so many complaints.

Medicus.—Borax in Solution, may be recognised by being precipitated in micaceous plates, on the addition of an acid. The precipitate is Boracic Acid, soluble in alcohol, to the flame of which it imparts a green colour.

A Subscriber.—The remedy of which he speaks has been a very old one for nasal polypi, but recent experience has shewn, that the cases in which it has been effectual were not "polypi" properly so called, but a thickening of the lining membrane of the nostril. With regard to the last request, we have repeatedly declared, that we cannot prescribe in our journal for any person, for reasons already assigned. He should consult some respectable surgeon.

J. W. L.—It is impossible to comply with the demands of gentlemen who do us the favour of writing to us at the end of the week, and expect to see themselves in print forthwith. The communication about which he writes must await its turn.

S. T.—The missing papers undoubtedly left our office to be posted. We very much fear that there is some other cause than occasional and pardonable irregularity for the non-receipt of our journal. We have had this week, a letter from a subscriber in Lancashire, stating, that a letter from this office to him, had been opened ere it reached him, and several papers duly posted have failed to reach their destination.

Canadiensis.—A letter has been left at his banker's:—his order has been duly received.

A Friend—Calls our attention to some "bad English" in a contemporary, ex. gr. "Mock-Marvels," "Hallucinating Frands," "Rise progress, and—Mysteries (!) of Mesmerism." "Marvel," says "a friend," "is by its very nature not "mock." Hallucinating is not an English word: if it were it is absurd applied to "fraud," for a fraud that does not "cheat" is not a fraud. The rise and mysteries—are not *ejusdem generis*, more than would be "The fall and L—s of C. R. Hall." Our correspondent proceeds, charging "C. R. Hall" with want of knowledge and truthfulness in his references, charges that can do the latter no service to incur, nor us to prove.

J. T. has been received, and will be noticed.

We have received from Baulry a post-office order for £1 Os. 6d., with which there was no letter to inform us from whom it came.

Professor Royle's Lecture on Education has been received.

Dr. Costello's scheme of an Association of Surgeons, seems to be generally popular, if we may judge from the character of our correspondence; but as the new Bill will be introduced so shortly, and as on the character of its provisions will depend the necessity of any new movements, it will be as well to postpone the matter till we have the Government measure under judgment.

Our attention has been called to an infamous attack on Dr. Gny, by an unprincipled contemporary, whose malice is explicable only on the supposition of motives that disenthle him alike to all courtesy and all forbearance. From such a one the only law we can expect obedience to is the *lex talionis*. We shall notice the matter next week.

THE MEDICAL TIMES.

SATURDAY, FEB. 22, 1845.

Fungar officio cotis.

SIR James Graham has been obliged by the protracted debate on the Post-Office System, to postpone the introduction of his Bill till next Tuesday. We regret the delay less for the painfulness of the suspense it creates, than for the material injury it may cause to the fortunes of good Medical Government. Medical politics already complicated to an extent beyond description, become hourly, under present circumstances, more intractable, and less open to a satisfactory adjustment. The great difficulty—the College of Surgeons—augments each moment. The astounding hostility now felt against it, instead of diminishing, seems to discover unthought of means to reach greater intensity. One short month more, and the hate

worked up against it will be satisfied by nothing short of its destruction. It is the first time, perhaps, that governing imbecility in its most despicable extremes was made matter so little of contempt, and so much of hate. The Council's follies have been of so uniformly serious a character that ridicule is forgotten in indignation; and now even when the demented rulers have abandoned all attempt to right themselves, have treated their Government like an unmanageable wreck, to be drifted any where the storm may carry it to, no chance but in the providence of Sir James Graham, no hope but in the mercy of Parliament, we suspect that our brethren are yet so little touched by their wrong-doers' misfortunes, that they would see the criminals punished, with even more pleasure than themselves done justice to.

We have in this the secret of the partial favour with which the scheme of a new Incorporation has been looked on. Notwithstanding all that has been said and written on the "new move," we are convinced that no true love has been evinced for it by the General Practitioners of this empire. They have never given it more than that bastard kind of preference which hate of something else begets. There has been more pettishness in the fit than affection; the new flirtation has been less to please the heart than to pique a jilt, our hate of whose ill-treatment has been in proportion to our former love of her society. But Time that widens the breach on one side, may strengthen the connecting tie on the other; and every hour that an explanation is deferred, every moment that a satisfactory adjustment is delayed, increases the potency of those adverse influences that threaten at this critical moment to fling the Surgeons of Great Britain into permanent connection with a College subordinate to the third degree, and to make the confusion that now prevails yield to a regularity of degradation one thousand fold worse.

We confess that despite our undisguised dislike of a third grade of Practitioners (not only *third* but *isolated* in their tertiary condition), we continue to view with an all-absorbing interest the proceedings of the Hanover Square Association. At a crisis like this, a feather in the scale tells; and the question "will the influence of a body so speculating and so practical, so energetic, yet carefully deliberative? after all do us weal or woe?" offers a problem most interesting for solution. We must be excused if we consider that it is a subject on which doubt may fairly be entertained. They have, first, taken a perfectly erroneous view of their position. The Committee are not the Association, much less the Profession. The Committee are essentially self-elected—for convenience sake necessarily so. Certain gentlemen meet together—call a public meeting—propose themselves as the future guiding body, with power to add to their number—get the meeting's sanction, as a mere matter of course; and thus have we a Provisional Committee! Now for such a body to speak, without consultation, on behalf of every gentleman who shows his anxiety for the good of the Profession by enrolling his name in the Society is, in the first place, a liberty unauthorised, in the second an absurdity self-condemnatory. The Committee should act not for themselves, but the Association, and to put themselves in the place of the Association, is just the fault of a Surgical Council assuming to be a College. Hence, has it happened that the Provisional Committee are now falsely placed both as regards Her Majesty's Government and the Profession—and occupy a position which they must abandon with disgrace, or run the peril of

destruction. Their Association formed, mainly, to resist the aggression of the imbecile Council of Surgeons, the Provisional Committee have acted boldly in their name, and yet never said a word towards a remedy. From their public documents and acts, the College of Surgeons would appear not to have an existence, except as a College which they would have placed in an order superior to their own. While the Profession was in a state of complete doubt whether the College of Surgeons should be reformed or abandoned, the Committee boldly, without consultation, prayed Sir James Graham, in the name, of that Profession, to make them a new College. No meeting called, they dictate the terms of its Charter; and no notice given, follow up this step by naming themselves (with a tardy gracefulness) to the minister as the future Councillors—fixing, it is said, as secretary, on a Mr. Henry Ansell, a gentleman who is willing, for the public good, to relinquish his double functions of a retail druggist and surgeon, with all the "*otium cum dignitate*" they allow him, for the labours and emoluments of a corporate employment. Now, all this boldness might be admired, if it were politic or useful; but it is neither. The Profession, if showing themselves disposed for a new incorporation—an event that can happen only in an extreme case, not yet threatened—may possibly like to exercise some choice about the Council; and they have already proclaimed, in no equivocal terms, their dissatisfaction with the clauses of the Charter which the Committee had settled on without anybody's knowledge.

The Committee appear at length, we are glad to see, to think they have been going on a little too fast, or, at all events, too independently. The following document, received whilst we are writing, looks like an acknowledgement that they have made a mistake by over daring, which they are ready to rectify, with what many may deem, an over-submissiveness amounting to a forgetfulness of principle. We object alike to both extremes; for they seem to say—"we will make ourselves a Corporate Council under laws we like, if we can; but, in any case, we will make a Corporate Council." All this bad appearance would have been avoided, if they had honestly and confidentially thrown themselves on the Profession, floating the bark of the Association on the waters of public opinion. Here is the letter:—

THE ASSOCIATION OF GENERAL PRACTITIONERS
IN MEDICINE, SURGERY, AND MIDWIFERY.

(To the Editor of the Medical Times.)

SIR,—We are requested by the Provisional Committee of this Association, to call your attention to the fact, that the "Suggestions for Heads of Charter," furnished by them to the Right Hon. the Home Secretary, can only be considered as an outline of the main principles upon which, in the opinion of this Committee, a Charter of Incorporation for the General Practitioner ought to be founded, in order to give satisfaction to that numerous and important section of the Medical Profession.

The mode of electing the Council under the proposed Charter is a question of detail, open for consideration; and we are requested by the Provincial Committee further to state, that if voting by proxy, or by voting paper is, after deliberation, desired by their provincial brethren, it will be their pleasure to recommend it for adoption at the General Meeting of the Association.

We have the honour to remain, Sir,

Your very obedient servants,

JAMES BIRD, } Hon. Secretaries.
HENRY ANCELL }

4, Hanover-square, February 18th.

We ardently wish the Association will follow

up this humble homage to an opinion they have too much overlooked, by making their body more an exponent of the sentiments and feelings of their constituents and less an instrument for accomplishing their one-sided and somewhat interesting project of a new Incorporation. The new Bill is likely to be considerably improved. *The College of Surgeons*, it is said, *will be considerably affected*, and for the better; the suppression of empiricism much better carried out; but however amended, there will yet remain much that may be altered or added to with advantage to the Profession. Let us commend this point, then, to the consideration of the Committee, and let us trust that they will not lose sight of their true powers of usefulness in any absorbing pursuit of what may turn out a phantom—a mere *ignis fatuus*.

God made the country, and man made the town;
What wonder then, that health and happiness
Should most abound,
And least be threatened in the fields and groves?

We promised in our last article upon the subject of air and exercise, to illustrate the leading principles we had laid down, by referring to the habits of medical students. We mean such as are really students, and in more than the common acceptation of the term, devoting themselves with a reckless energy to the acquirement of knowledge, and to the gratification of an idolatrous ambition. We shall speak of the medical Students of Edinburgh—not that they present any features at variance with those of their tribe in general, for they are the same all the world over, possessing a sort of free-masonry, "intercommunion, intercommunicable,"—but we know more of the Edinburgh students than of any others, and have lived long enough amongst them, as one of their order, to be a sort of authority for their right representation.

We have often wondered, in our days of inexperience, and have as frequently heard the question asked by those who were as little informed upon it as ourselves, how does it happen that the men who have made the greatest figure in their university, are comparatively unknown, or altogether lost to notice, in after life? wherefore is it, that the brilliant genius, or the mighty acquirements, which were the observation and envy of all College competitors, are not in after life, as much the subjects of admiration, or of hopeless rivalry, for a world? Doubtless it is a fact, that with many, competition is the only inducement to industry, and after the attainment of academical distinctions and titles, they sink into supineness for want of a stimulus to exertion. The world does not present to them an object definite or tempting enough to stir them to enterprise, and they live satisfied with the remembrance of their past achievements. The lifetime of such men is a sort of intellectual hybernation, so long as they hungered after mental food, they sought for it and devoured it with gluttony and having satisfied the appetite of their ambition to the full, they never hunger again, but live upon the store of past acquirements. Whilst the flowers were fresh and gay, and their perfume tempting, they gathered honey everywhere—but in the afternoon of life, when those flowers are less attractive and gaudy, and yield their sweets more sparingly and not without bitterness, then are they forsaken, and the honey which industry collected becomes the nourishment of drones.

Others, who have attained to great distinctions at College, make little subsequent figure because a happy independence has placed them above the necessity of intellectual labour—and a third class

are so crippled by worldly difficulties, that in their anxiety to earn a livelihood of the most available means, they are driven from pursuits which, with all their lustre, are better calculated to reflect honour than profit. Many however are rendered prematurely aged and infirm by the toil and privation to which they have subjected themselves; and many more—alas! how many—find an early and an unexpected grave! Herein consists the secret of the question we started with. Most of those whom we have known, or of whom we have heard, as promising in a brilliant academical career a future lifetime of honourable distinction, have fallen in the dawn of their celebrity, victims of severe and protracted study; stimulated by hopes and expectations, and a false assurance of strength, they have taxed nature's powers to the utmost, and bartered even existence, for a fugitive fame! how calamitous have been the losses which this folly and indiscretion have entailed! how many parents rejoicing in the prospect of their favourite child attaining the summit of his ambition, and gilding their name with a celebrity himself had won, have had their hopes crushed, and their hearts wrung and withered, when that child became the martyr of anticipated distinction! And how great has been the loss to our profession, when a candidate for its highest honours, has grasped them with a dying head! In this haroek which death makes, there is a sort of sacrilege, and happy shall we be if the privilege may be permitted to us of humbly offering such suggestions as may in any wise restrict his triumph. The management and maintenance of health, even in the face of severe intellectual discipline, are comprised in a few rules, and these are simple and easy of application, pursued with regularity and constancy, they will preserve a sound mind in a sound body—but the neglect of them entails debility, disease, or death. Before the mischief has been completed, the unconscious victim of it lives in the flattering and fatal belief that he is taking his endurance with impunity, or at most that he is receiving only a temporary injury, which future rest will remedy; and the all absorbing passion which has seized his mind adds an unwonted impulse to his physical powers, and strains them to an effort of unsuspected danger. Tired and tried to the utmost, nature at last gives way, and either death closes the scene, or a sickly valetudinarian is all that remains of what was once an active vigorous man. Then comes, but too late, a retrospect of repentance—memory calls up the past hours that have been slavishly devoted to the purposes of ambition—and worlds would be given for the lost opportunities of restoring a shattered constitution.

Not only is a man in danger of becoming a sacrifice to protracted and unremitting study, but waiving this he is not a gainer in proportion to the number of days and nights he has successively passed in any intellectual pursuits. There is a relation which must necessarily obtain between physical and mental power, there is a chain of connexion between the two, which, injured in any wise, mars the beauty and usefulness of the whole.

In such a chain, whatever link you strike,
Tenth, or ten thousandth, breaks the chain alike.

Some men are capable of more endurance than others, but there is a certain point at which every man will tire, and the consciousness of having reached it, should prompt him to desist from labour. Any effort maintained beyond it, makes but a poor return, and the longer the effort, the more scanty will be the recompense. We have known men to study for two or three days and nights in succession, and not only have the last few hours been

employed to no purpose, but the brain has become so exhausted and bewildered, that the impressions received even in its more vigorous state, have been for a time obliterated. We remember a student, as well informed as any man in the university, who became excessively nervous a few days before his examination, and read night and day with the perseverance of a martyr; the consequence was, that anxiety, confusion of ideas, mental, and physical exhaustion, rendered him incapable of understanding or answering a question. A month previously it would have been no easy matter to have rejected him, but on this occasion he was unhesitatingly turned back. He forgot, as many others have, that his brain, like the rest of his body, was liable to tire, and that whatever efforts it might make in an enfeebled condition, must be for the most part abortive. A man who had a certain amount of physical exertion to undergo, would never think of commencing his task after having been tired by previous labour, but would come to it as fresh and as invigorated as possible, and if his toil were required to be protracted, he would take care to husband his strength with all caution, and avail himself of every seasonable opportunity of rest. Not so with the man who engages without thought in any intellectual task. He never considers that his mind requires to be treated with alternations of relaxation and labour: it does not concern him to enquire what are the periods most favourable to its exercise, but at any hour, and under any circumstances, he will spur it on to fruitless exertion. If he were engaged to run a given distance in a certain space of time, he would be mindful to slacken his pace up hill, and over heavy ground, and reserve his strength and speed for fitting opportunities, and yet he will act diametrically the opposite of this in trying the activity and powers of his mind. He expects it to have at night time all the vigour and freshness that possessed it in the morning, and he makes no allowance for the burden of a heavy meal, or for the anxiety and enervation of prolonged fasting. And thus, by not permitting himself to be reinvigorated in the proper seasons of rest, he is only a partial gainer in the seasons of labour. On the other hand, that man pursues his studies both with greater ease and with more certain success, who prepares his mind by timely repose and cheerful relaxation, for the heavier duties it may be required to discharge.

Quondam cithara tacentem
Suscitat musam, neque semper arcum
Tendit Apollo.

Take a survey of a medical class-room at the commencement of a Session, and see what ruddy faces, and rounded limbs, and flashing eyes, are arranged before you. Every man looks happy, and seems, as it were, an impersonation of "health and sweet content." These things speak of quiet homes, and regular living, and free exercises in country air, and absence of all wearying anxiety. Visit that class-room at the termination of the session. "What a falling off is there!" Every man contrasts with his former self.

Hec! quantum mutatus ab illo Heclore!

You now see pale faces, and languid eyes, and wasted limbs—no smiles, no laughter, nothing but listlessness and care. Look again, and you will find some vacant places. Six months back, these were occupied by men as busily anxious and as full of hope and expectation as yourself. But they have died, the victims of ill judged toil, and are honoured only in the mournfulness and memory of friends. Is this sad injury or sacrifice of constitution contingent upon a course of Medical study?

Must every man be thus martyred who aims at eminence in his profession? Is it not possible to preserve the bodily vigour unimpaired, whilst the mind is undergoing a course of strict and severe discipline? Demosthenes was naturally feeble, and yet, amid all his laborious pursuits after eloquence, he found opportunities to invigorate and fortify his frame. A voice that was constitutionally weak and imperfect, and lungs that were scarcely capable of exercise, he trained to a fitness for impassioned declamation. Plutarch tells us that Cicero in his youth was thin and weakly, and had so delicate a stomach that he could eat but little, and only late in the day, yet the discipline he underwent at Athens, not only rendered his system hardy and robust, but his voice, naturally harsh and disagreeable, was also made soft and sonorous. Thus, whilst fitting his mind for the duties of the forum, he was also preparing his physical powers for the same enterprise. In the like manner did Julius Cæsar overcome the bodily impediments which nature had thrown in his way, and made himself famous both in the senate and in the field. What the ancients did, we can do, and the tutorship which made them mighty, may make us also their rivals, in intellect and vigour. "I was," says Sully "always of the same opinion as Henry IV. concerning these sports and exercises. He often asserted that they were the most solid foundation, not only of discipline and other military virtues, but also of those noble sentiments, and that elevation of mind, which give one nature superiority over another." He who hopes to increase his mental, whilst he decreases his bodily strength, deceives himself with a false expectation. The judicious man, whilst cultivating his mind, improves, by the most natural means, his body also.

The wise for health on exercise depend,
God never made his work for man to mend.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. VIII.

Evidence of Dr. Guy.

Hitherto we have directed the attention of our readers chiefly to typhus fever, and scrofulous affections, due, the former to defective drainage, the latter to defective ventilation. The evidence of Dr. Southwood Smith, and the first part of Dr. Arnott's evidence referred to the one, the remainder of Dr. Arnott's evidence and that of Mr. Toynbee to the other. We now come to a new subject, but briefly and imperfectly alluded to in the evidence of those gentlemen—pulmonary consumption. By far the greater part of Dr. Guy's evidence is devoted to this subject, which is viewed in connection with the condition of the workshops and houses of the labouring class. Some of the results at which he has arrived are new, and others, which are in accordance with the opinions commonly entertained by the profession and the public, are sustained by more precise investigations than those that have hitherto served as the basis of such opinions.

Dr. Guy, as we are informed, has prosecuted his inquiries into the influence of employments upon health, and the prevalence of pulmonary consumption among different classes, in two ways. 1. By carefully entering the sex, age, and occupation, of several thousands of adults presenting themselves as out-patients of King's College Hospital, throwing the occupations into classes, and contrasting the results with the mortuary registers for 1838, and 1839; and 2, by a personal inspection of the workshops of the metropolis.

By the first mode of inquiry, he has arrived at the following results:—1. Consumption is relatively more frequent in persons working in-doors

than in those employed out of doors. 2. In those employed within doors, it is most frequent in men using little exertion. 3. It makes its attack earlier where it is of most frequent occurrence. 4. It is very common in the intemperate, and in those exposed to the inhalation of dust. 5. It is more frequent in men than women, at least in the metropolis.

By extending these inquiries to the gentry and tradesmen of the metropolis, by means of the mortuary registers for 1838 and 1839, Dr. Guy has ascertained:—1. That the proportion of consumptive cases in the three classes of gentlemen (including professional men), tradesmen, and artisans (including all classes of labouring men), are respectively 1 to 5, 1 to 2.60, and 1 to 2.39; or about 16, 28, and 30, respectively in the hundred. and 2. That the average age of death from consumption is earlier in the last two classes than in the first; but the artisan who dies of consumption dies at a somewhat later age than the tradesman.

It would appear then, that the tradesmen and labouring class are nearly twice as liable to consumption as the gentry—a circumstance which Dr. Guy attributes to the unwholesome state of the shops of the former, and the workshops of such of the latter as work within doors. The unhealthy residences, both of the petty tradesmen, and of the in-door and out-door labourers, also contributing to the same result.

This unwholesome state of shops, workshops, and houses, arises from defective ventilation. When asked to account for the great mortality from consumption among tradesmen, Dr. Guy states, that he thinks it "mainly attributable to their confinement during so many hours of every day in ill-ventilated shops," that "most of the shops of London are very hot and close, especially during the evening when the gas is burning," and that "many tradesmen are conscious that their health suffers from it."

A curious fact in confirmation of this statement is the intermediate position which the tradesman holds in respect of the age at which consumption proves fatal, between the in-door and out-door labourer on the one hand, and the sedentary and non-sedentary class of in-door labourers on the other. Thus, while the deaths from consumption under 30 years of age, among tradesmen, are 33 per cent of the total deaths from that disease, they are 37½ per cent among those working in-doors, and 25 per cent among those working out of doors; 44 per cent in men following sedentary occupations, and 31½ per cent in those using great exertion in their in-door employment.

It appears then, "that men who follow their employments out of doors, though exposed to all the inclemencies of the weather, are less subject to consumption, and that when they die of it, they die at a later age than men who work in-doors, and are protected from the weather." That "both men and women who follow their employments out of doors, possess this advantage; and it is not the labourer only who is comparatively exempt, but even the hawker who stands about in the streets and markets, and who probably uses little more exertion than the majority of those who work within doors. It is not, therefore, to exercise, but to the open air, that they owe this advantage." Dr. Guy confirms this view of the ill-effects of defective ventilation on the health of men following sedentary occupations within doors, by the following arguments. "The in-door labourers, as a class, have higher wages, and can consequently command better food, clothing, and lodging, than those who work out of doors. In this respect, then, they are more favourably circumstanced; their habits of life, too, are nearly the same, and it is probable (at least I have been led to form that opinion) that the out-door labourers, as a class, are more addicted to intemperance. There are only two things, then, in which the two classes differ. A considerable proportion of those employed within doors lead a sedentary life, and the whole of them breathe an air less pure than the out-door labourers. Now it is an acknowledged fact, that among literary and professional men, sedentary pursuits do not shorten life. Hence there remains but one cause to which to attribute the greater liability of the in-door labourer to consumption."

But, though the quality of the air inspired, and not the amount of exertion, constitutes the cause of the difference, between those who work in doors and those who work out of doors, it does not follow that exercise has no influence on the health of men using different degrees of exertion in their in-door employments. On the contrary, Dr. Guy states that sedentary occupations, as compared with those requiring stronger exertion, are decidedly injurious to health, and he confirms this statement, by a comparison of the two classes of persons working in the offices of the letter-press printers. "I have made" he says "very precise comparisons between the pressmen and the compositors, of whom the former use strong exertion in their employment, while the latter make many small movements of the hands and arms. Their rooms are generally warmed and lighted in the same way, and they both have but little space to work in, though the pressman requires more room. The comparison is greatly to the disadvantage of the compositor, who is extremely liable to consumption, and at a comparatively early period of life. This is the more striking, as the pressman is notoriously more given to habits of intoxication than the compositor." But here, as in most things, there is a principle of compensation at work; for in answer to the question, "are not men who use strong exertion liable to some diseases from which the more sedentary occupations are free?" Dr. Guy states, that, "towards 50 years of age, men who labour hard begin to suffer from hard work, and they become very liable to diseases of the air-passages of the lungs, and to some diseases of the heart. The fact, which I now state" he adds, "accounts for the greater number of very old men found among those following sedentary occupations. The few that can bear the unwholesome influences to which they are exposed, having reached that time of life when hard labour is injurious, still continue to enjoy the health of which such hard labour deprives other men."

Dr. Guy goes on to state, that he believes deficient ventilation to be more fatal, than all other causes of consumption put together; but that habits of intemperance hold the next rank, and after them, every cause which tends to debilitate the frame. Thus, consumption is very frequent among the dissipated of both sexes.

The next point which we take occasion to notice in Dr. Guy's evidence, is an estimate which he gives of the number of cases of pulmonary consumption occurring in England and Wales. Of the 60,000 cases entered under the title consumption, in the returns of the Registrar General, he believes only 36,000 to be cases of true pulmonary consumption, out of which number a very careful calculation founded upon the number of deaths from consumption occurring in the different classes, has led him to estimate that 5,000 adults might be saved, the annual sacrifice of life in the metropolis being about half that number, and the remaining half occurring among the labouring classes of 20 of the largest towns of England. The tradesmen, among whom, as has been stated, pulmonary consumption is very rife, are altogether excluded from this estimate, and it is assumed that the waste of human life occurs only in London and the larger provincial towns. If the tradesmen and the whole of England were comprised in this estimate, there can be little doubt that the number of unnecessary deaths from consumption would amount to upwards of 6,000, or one sixth of the total deaths. One sixth of all the unnecessary deaths are attributed by Dr. Guy, solely to the deficient ventilation of workshops, and the remainder to the unwholesome condition of the dwellings of the poor, and principally to deficient ventilation. This part of Dr. Guy's evidence concludes with the following answer to a question put by the commission. "There is an opinion abroad, that consumption is a national disease; that it is more prevalent in England than in other countries—does this opinion seem to you to be well founded?"—"No; I believe it to be a vulgar prejudice; it is altogether unsupported by facts; but, as we have at present no means of comparing one country with another in this respect, it is not possible to prove its fallacy. The opinion, whether true or false, has exercised a very injuri-

ous influence upon the public health—it has turned men aside from an inquiry into the removable causes of consumption, and led them to regard the disease as a sad necessity beyond the reach of prevention. Englishmen generally, seem to take a pride in making themselves out worse than they are. Not long since we believed ourselves to be the most suicidal nation in the world, and we were not easily convinced to the contrary. We are always croaking about something or other, and our extraordinary liability to consumption is a favourite topic with us. If we are more liable to it than other nations, I am convinced that it is because we have a larger proportion of our population engaged in manufactures, of whom a considerable number lead sedentary lives, and suffer from overcrowding and overwork, joined, in many cases, to habits of intemperance unknown abroad.

Dr. Guy's personal inspection of the workshops of the metropolis, completely confirms the results of his inquiries, based upon his hospital experience and the mortuary registers. "I have found," he says, "the ventilation of workshops very imperfect, even where the building was expressly designed for the purpose to which it is applied. As far as I have had an opportunity of observing, the history of a London workshop is this:—A man begins by employing a few hands in a house often but ill adapted for an ordinary dwelling-house, and, as his business increases, he contrives to add one low apartment to another, by knocking down partition-walls, and making such alterations as suit his immediate purpose. He contrives by this means to accommodate an increasing number of men, and the only practicable limit to that number is the want of more standing or sitting room, as the case may be. He warms these rooms by a stove, by steam, or by hot air, and lights them with gas: the consequence is, that the workmen are exposed at the same time to a high temperature, and a foul and stagnant atmosphere. This combination is carried to its highest degree in tailors' workshops, and I have been told more than once by the journeymen tailors themselves, that they have been obliged to strip to the very skin, that they might be able to bear the intense heat to which they are exposed. In buildings intended for workshops more space is given to the men, but they are usually constructed on very bad principles; the whole building often forming one space, divided by floors, perforated by a common staircase; if a steam engine is employed, it is generally to be found in a lower apartment of this building, so that the heat rises from this into the upper rooms, and, mingling with the foul air of the intermediate floors, ascends to the highest flat, where the hot and foul air collects in great abundance."

We have not space to notice at full length, a series of interesting comparisons instituted by Dr. Guy between the state of health of letter-press printers working in rooms similarly lighted and heated, and in which ventilation was equally neglected, the only difference being in the quantity of this impure air which the several groups of men had to breathe, this quantity being ascertained by actual measurement of the rooms themselves. As the results of the three comparisons are the same, we shall content ourselves with that which is founded on the largest number of facts. Among 104 men having less than 500 cubic feet of air to breathe, there were 13 who had spit blood, 13 who were subject to habitual catarrh, and 18 to other diseases, making a total of 44 invalids; of 105 men who had from 500 to 600 cubic feet of air to breathe, five had spit blood, four were subject to colds, and 23 to other diseases, making in all 32 invalids; while out of 100 men having more than 600 cubic feet of air to breathe, four only had suffered from spitting of blood, two from catarrh, and 18 from other diseases, making a total of 24 invalids. If these numbers are reduced to decimals, they will stand as follows:—

	Per Cent.
Less than 500 cubic feet of air . . .	12½ hæmoptysis.
" " " " "	12½ catarrh.
" " " " "	17½ other dis.

Total 42½ per cent.

From 500 to 600 cubic ft. of air..	4½ hæmoptysis.
" " " "	3½ catarrh.
" " " "	20 other dis.
Total 28 per cent.	
More than 600 cubic feet of air..	4 hæmoptysis.
" " " "	2 catarrh.
" " " "	18 other dis.
Total 24 per cent.	

Among the other diseases were cases of indigestion, debility, rheumatism, pain of the chest, headache, nervous symptoms, and varicose veins. The frequent occurrence of severe affections of the lungs in these ill-ventilated workshops is a fact placed by these comparisons beyond the reach of doubt. These comparisons were made in the offices of letterpress printers; but Dr. Guy states that he has reason to believe the newspaper offices to be still more unhealthy, and that several other workshops which he has visited are very badly ventilated, and very unwholesome.

The appearance of the men who work in these unwholesome rooms corresponds with the results of the comparisons just stated; but, we are told, that "there are remarkable exceptions to this as to all general rules. Though it is very rare to meet with a stout, or fresh-looking man in these rooms, they are occasionally met with; and, although there are comparatively few old men among the workmen, there are one or two: I have met, for instance, with a man of 72, who had been employed for the greater part of his life in the same workshop, and that by no means the most wholesome which I have visited. He was in the enjoyment of the most perfect health."

The beneficial influence of exercise in lessening the effect of foul air on the constitution is proved by a comparison of the average age of press men and compositors who began to work at the same age: the average of the former is 34 years, and that of the latter 28 years, being a difference in favour of the pressmen of six years. It is, however, somewhat remarkable, that while the maximum age of the pressman is 60, that of the compositor is 72. "Exercise, then, in some degree, counteracts the ill-effects of impure air?" To this question Dr. Guy makes the somewhat caustic reply, "Yes, and for this reason, it is better that people who are invited to breathe foul air in ball-rooms should dance, than that they should sit still."

Pulmonary consumption is not the only disease which Dr. Guy attributes to defective ventilation. He considers "the heated and impure atmosphere of workshops, and a similarly unwholesome state of the dwellings of the poor, as the cause of a large number of diseases, of serofulous diseases in childhood, of inflammation of the lungs, of the febrile affections to which the children of the poor are so subject, and of those chronic disorders of the bowels which are so apt to terminate in mesenteric disease. A great proportion of the deaths of children entered in the reports of the registrar-general as consumption are of this nature, and chiefly due to this cause. In adults the effect of the depressing atmosphere of places of work extends much beyond the production of pulmonary consumption; both the mind and the body are injured, the one is in a state to be excited by slight causes, and the other to require, or to seem to require, the aid of intoxicating liquors. Each ministers to the other's weakness, and each re-acts upon the other."

On the subject of intemperance, its causes and effects, Dr. Guy states that, as a general rule, men who work out of doors drink more than those employed within doors; they have more temptations, they are more in the way of it. But he adds his belief that the unwholesome state of places of work, by the depressing effect it produces, is a great cause of intemperance; and that it can scarcely be otherwise. Dr. Guy has also instituted an exact comparison between the classes most exposed to the temptation of drinking, and those who are not more intemperate than the greater part of the labouring class. He has compared, for instance, the drayman with the labourer, the pot-boy with the footman, and the licensed victualler with other tradesmen. All these comparisons are very unfavourable to the classes most exposed to

the temptation of drinking. He finds that before 35 years of age, more than twice as many draymen die as labourers; and that before the same period, the deaths among potboys exceed those of footmen by more than one third.

These are very striking illustrations of the baneful effects of intemperance, the monster evil of the present day, and one which is answerable for more disease, misery, and crime, than any circumstance over which individuals can exercise control. Seeing how fearfully the negligence of the public authorities in the matter of sewerage, of employers in the matter of ventilation, and of owners of houses in the internal arrangements of the dwellings of the poor, is reinforced by the intemperance of so large a portion of the labouring class, can we be surprised at the disease, misery, and demoralization which are fast sapping the very foundations of national prosperity.

On the subject of ventilation, of which the first part of Dr. Guy's evidence demonstrates the importance, we have some useful observations. It appears that the working classes are, to some extent, alive to the injury they sustain by the unwholesome state of their places of work; but that "the evil remains unredressed, for the simple reason that all the attempts made to introduce fresh air occasions draughts; so that no sooner is an opening made than the men who are working near it stop it up. The men cannot bear cold air, and are much more afraid of draughts than they are of the poisonous atmosphere, which, by enfeebling them, makes them so sensible of cold. So that, as Dr. Guy justly observes, "one of two things must happen. Ventilation must be enforced by law, or the means of procuring fresh air must be made cheap and of easy access. The great obstacles to improvement are the fear of draughts on the part of the men, and the expense and necessary alteration of the existing buildings on the part of the employers. No system of ventilation can come into general use which does not prevent draughts, which is not cheap, and which interferes in any great degree with existing structural arrangements." Dr. Guy confirms the statements of Mr. Toynbee, as to the good effects of ventilation, even where draughts are not prevented. He has introduced plates of perforated zinc into the windows of the poor and into some of the reading-rooms in printing offices, with the best effect. The draught is the only objection he finds to a much more extensive use of this simple means of admitting fresh air. The benefit, in many cases, has been very great, and the men are very grateful for it. Since this evidence was laid before the commissioners, Dr. Guy has invented a very simple and cheap contrivance for admitting air into buildings of all kinds, without producing a draught, and has thus applied the first desideratum pointed out in his evidence.

We will conclude this somewhat lengthened notice by two passages, which seem to us worthy of quotation. The first is in answer to a question put by the commission, whether employers are willing to do anything to improve the health of their men, provided it does not entail a very heavy expense.

Dr. Guy says "very generally; but I ought to add that when the greatest willingness has been shown, very slight obstacles have sufficed to prevent their good intentions from being carried into effect. This happened in the case of a poor water-gilder, suffering from trembling palsy, caused by frequent exposure to the fumes of mercury. I suggested to his employer a very simple plan of getting rid of these poisonous fumes, and he promised willingly and gratefully to adopt it. I called after a few days, and found that he contemplated some alteration in his premises in two or three months time, that he had thought of a plan that seemed to him preferable, and would then adopt it. Though evidently a humane and intelligent man, he seemed to think as little of this delay as if the health and life of a fellow-creature were not in question. Thus it is with all classes. They form a low estimate of the value of life and health. A man dies, and another replaces him without cost to his employer; but if it were a horse or a dog, the owner would have to pay for a new one. This makes all the difference. A man falls sick, and he, and not

his employers, has to pay for his illness. A horse or a dog would have cost something. And yet these persons, who would be more anxious about a horse or a dog than about a man, are not necessarily hard-hearted. They have never been roused to a sense of the surpassing value of health and life. Even the educated classes are rendered in some degree indifferent to human life by a false theory, which, I believe, originated with a religious and humane man, or if not, is certainly entertained by many such men, namely, that plagues and consumptions were intended by Providence to keep down a redundant population. We now know better; and it may be hoped that better feelings will spring up with sounder information. There is much ignorance to be removed, and much prejudice to be overthrown before the rich will do justice to the poor, and the employer to the workman. Those who use glazed cards, for instance, little think how many palsied hands are due to the glaze which the manufacturers use. As little effort is made to substitute some wholesome material for common paint as if there were no such thing as painters' colic or the dropped hand. So, also men are constantly breathing irritating fumes, and metallic particles, and poisonous air, with scarcely an attempt to get rid of them by ventilation or other efficient means. There is a general indifference on the part of the rich, and a corresponding recklessness on the part of the poor. A long time must elapse before either party will learn the true economy of health, and become duly impressed with the duty and gain of preserving it."

We have not space to notice an interesting ease in which a very simple and obvious plan for carrying off nitrous acid fumes, was suggested by Dr. Guy, and adopted with the best effects, and must content ourselves with referring the reader to the evidence itself for several points of minor interest. The second passage which we propose to quote concludes Dr. Guy's evidence, and our weekly labour of love. It is a summary of the principal points submitted to the commission.

"The result is briefly this. There is no sufficient reason for considering consumption as an English disease. A certain amount of consumption, probably about one in seven of all deaths above 15 years of age, which is nearly the proportion occurring in the higher orders and in the most healthy professions, may be considered as inevitable; but all beyond that proportion admits of prevention. The annual waste of adult life from pulmonary consumption alone may be safely stated at upwards of 5000, and this estimate is probably much below the truth. The chief cause of this great mortality is the defective ventilation of houses, shops, and places of work. Next to this, in point of importance, is the inhalation of dust, metallic particles, and irritating fumes. One cause, over which the poor themselves can exercise control, is the abuse of spirituous liquors, a very fruitful source of consumption. I will venture to add my own strong conviction, that the sacrifice of so large a number of grown-up men and women has the indirect effect of increasing the population, of substituting young and helpless children, for adults capable of earning their own subsistence, and of contributing to the wealth and greatness of their country; that this waste of adult life is, in every sense and view of the matter, a great calamity and very bad economy, and to the extent to which its causes are generally understood by individuals or by the public a great and cruel injustice."

[In our next number we shall endeavour to condense the evidence of Mr. John Liddle, Dr. Aldis, and Dr. Rigby, into the limits of one paper.]

CURIOUS COINCIDENCE.—The passing of the Apothecaries' Act, in 1815, was marked by the imposition of a heavy duty on glass. Its repeal, in 1845, will be accompanied by the repeal of the duty on glass.

Mr. Stanley will bring his case of supposed aneurism before the Royal Medical and Chirurgical Society, on an early occasion, in a paper, entitled, "On the pulsating tumours of bone, with an account of a case, in which a ligature was placed around the common iliac artery."

SURGEONS VERSUS SURGEONS.

An extraordinary trial took place on last Saturday, before Lord Denman and a special jury. The question mainly in issue was, whether constitutional Gangrene occurring in a robust and healthy person, was properly treated or not by stimulating internal medicines, and diet of the most nourishing kind, including wine and brandy. The patient, a gentleman sixty-four years old, submitted to this treatment for four or five days, had his toe then amputated, and, as the mischief was still diffusing itself over the foot, acquiesced in the recommendation of his medical attendant, Mr. Baker, to call in further advice. Mr. Liston now appeared on the scene, completely changed the treatment, but was obliged, notwithstanding his improvements, to amputate the foot. Mr. Baker continued his attendance, and subsequently sent in his bill for £193: £13 being for medicine, the rest for visits at 7s. 6d. each. The claim being resisted, Mr. Baker felt it necessary to support his plan of treatment by the evidence of Mr. B. Cooper, Mr. Partridge, Mr. Perry, Inspector of Prisons, and Mr. Liston, who swore that spontaneous gangrene was not the result of any previous external injury to the part affected, but the symptom and the consequence of a debilitated constitution, and that such debility may coexist with the appearances of health and vigour in the patient: that it may be, therefore, proper in such a case to administer stimulating medicines, and to allow stimulating diet to a person so affected, if in all the circumstances of his actual condition he seemed to require it; that the propriety of continuing that sort of treatment would depend upon the continuance of any circumstances which may have rendered it originally proper, and that the alteration of such treatment and the substitution for it of another would not of necessity imply that the preceding treatment had been wrong. With regard to the amputation of the toe, it was an act of which the propriety would depend upon the state of the disease at the time.

It is needless for us to enlarge on the delicacy under which these surgeons must have laboured while giving evidence, which, if of any value at all, is in such direct opposition to men whom, like Pott and others, it would well become them to think of with respect.* Mr. Lawrence, Mr. A. Key, and Mr. Skey, put the matter so plainly, as well as accurately, before the court and jury, that nothing remains for us but to give a brief abstract of their opinions. Mr. L. affirmed very properly, that the stimulating treatment adopted must have had an immediate effect in increasing the inflammation; that the amputation of the toe was unnecessary, and tended in the same direction. and that the foot might have been spared, if the toe had been left untouched, and a soothing treatment adopted. Messrs. Skey and Key gave similar evidence.

The jury, however, were not affected by this view of the case, and concluding, that as Mr. Liston swore in favour of the stimulating plan, he thereby attributed the mischiefs which arose to the foot, to the soothing system which he had himself introduced, and so transferred the blame from Mr. Baker to himself, gave a verdict for Mr. Baker, reducing, however, his charge for visits from 7s. 6d. to 5s. each.

We cannot dismiss this legal exhibition of warring medical evidence without an expression of the deep regret we have felt in noticing it. It is a most unseemly spectacle, reducing a science to the uncertainty and conflict of litigation, and this too, on matters, in reference to which, if medicine cannot speak with unity and certitude, it may as well depose itself from its chair of fancied dignity and utility. When surgical heads of our profession can be brought forward in braces, to oppose each other on any given question of medical treatment, the layman may well claim excuse for declining the services of either, and where art

knows nothing but division, trust to nature. It was a disgraceful scene—this court of justice, divided by such men, on such points, for the laughter of the world!

DR. OWEN ON MESMERIC EXPERIMENTS.

SIR,—As a journalist ostensibly occupying an impartial position, and whose success has been mainly owing to the liberal views you have advocated (besides, that you recount from time to time statements relating to the “obnoxious science,” which brings me more immediately before you), I may perhaps anticipate the concession of space for a few observations on a charge you have put forward against me, most seriously and falsely affecting my character. A medical friend had informed me that you had issued a paragraph consigning me, *sans ceremonie* to the care of a constable; but the abuse, and misrepresentations of my proceedings, constantly put into circulation by the press, and my knowledge of the ephemeral influence of such defamation, made me by no means uneasy under such information, but on reading the paragraph to-day, I feel that to permit it to pass uncontradicted, and not to hold up to contemptuous reproach such slanderous assertions, would betray on my part the want of due moral courage, and be further passively admitting the charge. I beg, therefore, to state, in language that cannot be perverted, that the statement of which I complain in your journal, is, in every line of it, a fabrication. The accusation that Jane Knowles, the clairvoyante, or myself, either contemplated, attempted, or succeeded, in any imposture, is a wilful and base libel, utterly without truth. The impartiality of your pages, indeed, forsook them when you admitted such *ex parte* information, nor was your editorial vigilance on the alert, to concoct a paragraph on a letter that appeared in a newspaper several months ago. The persons who signed that letter, I say advisedly, know that they therein issued a lie. The charges on which your really flippant remarks are founded, are therefore as false as the insinuations you threw out as to my own motives for advocating mesmerism. Is it, forsooth, an easy way of getting a living? Are the active and heavy duties of a public lecturer to be sneered at as trifles on such a subject—day after day to labour in producing evidence of the reality of the mesmeric influence in *fresh cases*, and night after night to stand forward, supported only by the truth, to resent and overcome the blind, impassioned, and rancorous opposition, too often designedly engendered. Surely there is some little labour, and virtue also in steadily pursuing your chosen course in the face of difficulties so great, and the necessary consistency of purpose and reliance in the good cause, may perhaps be taken as evidence of the intentions.

But, Sir, you know well that the opponents of mesmerism do not fight fairly; whether the experiments exhibited are true, and attended with success or failure, they are more usually, alike included in the category of impositions, and the strongest attested proofs are often most loudly vituperated. A little charity on your part would have saved me the injury of your strictures, and whilst not unbecoming even to yourself, it may be confessed that I am not so black as I am painted.

As a mesmerist, I have a right to pursue the investigation of its mysterious phenomena in the modes I conceive most conducive to that object. I have chosen to adopt the occupation of an itinerant lecturer, however humble my qualifications, for such a position, and which I cannot help; and I have lectured to a great extent; yet, so far as the use of the opportunities that station honorably affords me is concerned, I now, dare my maligners to affix to any portion of my career an unworthy reproach. I have deliberately weighed the cost of my promulgation of the science, and neither the vanity of professional prejudice, nor the sneers of the assumed “scientist,” shall be able to divert me from my purposes. Whilst I can hold hold before them phenomena so wonderful, and

of which they are so confessedly ignorant, I feel more than justified.

In mesmerism I am myself an enquirer; the experiments I set forth, daily present new phases for study, and what may be the final limit of the power is a problem I am seeking to solve. This surely offers a fair subject for philosophic research, and because I make it my profession, and live by it, if you will, the truth is not the less real, nor are my experiments less conclusive. I regret that your journal sanctions the cant against itinerant lecturers on mesmerism, because such persons receive money. Do you not receive money and live by the sale of the very articles which denounce these means? Is there anything derogatory in presenting two or three dozen of possibly the most intelligent persons, with demonstrations of a scientific subject for a fair recompence? Is the religion of the curate, who receives a fee of a sovereign for preaching a sermon, less orthodox on that account? Is an editor of a journal a degraded hireling because he receives a salary? But—extending the compass of reason a little further—is my occupation less worthy than that of the routine practitioner, who makes a living by systematic supplies of medicines, and goes a couple of miles for half-a-crown, or than that of the pauper surgeon, who contracts for medicine and attendance at a fraction a head? Yet you will allow these men respectively to be engaged in the honourable discharge of their duties, and would not for a moment question the integrity they give to their engagements. The itinerant lecturers of the present day supply the intellectual wants of the community, like the philosophers of Greece, who used to itinerate to Rome, and it is not because mesmerism is their subject that they less deserve their hire.

As relates to the charges you have advanced against me, I have no doubt they will be fully refuted by a medical gentleman, who is conversant with the whole proceedings at Bath—to him I leave my fame. But in justice to myself and as proof, that at least I am demonstrating clairvoyance, without any possible collusion to the patient, and also in justice to the little girl, Jane Knowles, a child, 12 years of age, who is so much abused, I submit the following testimonial from a man whose scientific attainments and whose standing in the profession, throw a shield over my humble reputation.

“During the past week, I have made several experiments on Jane Knowles, with a view to test her powers of clairvoyance, the result of these experiments has greatly astonished me, but of this result I offer no explanation, nor do I pledge myself to any opinion, until I have had further opportunities of investigation. At the same time, I feel it an act of justice to Dr. Owens to state, that his conduct towards me has been in the highest degree open, fair, and liberal, and he most readily has allowed me to pursue these experiments in the manner I proposed, and so as totally to exclude all suspicion of collusion—having repeatedly left me to conduct the experiments in his absence. It may be proper to add, that I am a member of the medical profession, and have been so more than 40 years.

P. H. BRABANT, M.D.

Cheltenham, February 10, 1845.

In this instance, having stepped out of my ordinary course in self-vindication, I now leave my conduct to the consideration of the less prejudiced of your readers, and to time in which, even I, may give my account, and, long as this communication extends, I believe I may lay claim to your pages, for I was amongst the earliest of your contributors—at a time when you had less power for good or evil, than you now possess, and as you have inflicted on me an injury, doubtless you will readily give my reply insertion, that it may circulate to secure the ends of truth.

I remain, Sir,

Your's most obediently,

J. D. OWENS, M.R.C.S.

Haymoor, near Ludlow, Feb. 10, 1845.

On the circumstances which elicited our remarks, and the above reply, Dr. Henry Storer, of Bath, sends us the following explanation:—“A certain set of experiments take place at the Pho-

* Of course we can give no opinion on the circumstances which introduced Mr. Lawrence to a court of justice to give evidence condemnatory of a brother surgeon. Once there, however, there was but one course.

tographic Institution here, (such as reading three times through the covers of both stiff and limp books when securely bound); at the conclusion of the experiments Mr. Freeman, the proprietor, expresses himself so satisfied with the results, as to *voluntarily declare*, that he shall feel it his duty to go to every medical man he knows and thus express himself. At the conclusion, four medical men call at the Institution, and hear what has taken place, and then one of them, Mr. John Barrett, retires with Mr. Freeman, into another room, and presently returns, saying, he has discovered how the reading has been accomplished. On now looking at the book, which was before firmly and skilfully tied, (it had knots at each corner, cut as close as possible, to prevent the chance of deception, and Dr. Owens requested that it might be sealed, but Mr. Freeman had no wax), we discover one of the knots has given way, and the cover is much creased! Mr. Barrett then says that makes no difference, for that was done in his second attempt to undo it; and, at a public meeting afterwards in the city, he declared he was so flurried he did not know what he did. And this is the evidence on which the medical men afterwards retire, and concoct the charge of fraud, or as it is significantly known here, as Barret's mare's nest. As I have before said, she might, by possibility, have read in the manner pretended to be discovered; but, judging from what she had done *that afternoon*, from what she has previously done when most *rigidly tested*, all I would say is, that there was no occasion for the attempt, nor do I believe it was made. Having seen Alexis and his brother Adolphe several times, and many other cases, I consider my opinion, with Dr. Owens, both being *present* during the experiments, fully equal to that of those who were *absent*, and who have paid no attention to the subject, and have further, openly declared, that they would not believe even the evidence of their senses."

[The case being far worse between Dr. Owen and his three accusers than between him and us, we leave his letter without comment. The charges against us resolve themselves into an accusation of believing respectable testimony. We trust we are sufficiently known to our readers to require no defence of our impartiality.—ED.]

THOUGHTS ON MEDICAL MOVEMENTS.

(To the Editor of the Medical Times.)

SIR,—I wish to ask, is it true that the Marylebone Association have sent to Sir James Graham their draft of a Charter, as representing the views of the Profession, without having even read it at a public meeting? A Charter they will get, I dare say, but as to the *sort* of one, I fear my prediction of last week will be verified.

I, for one, protest against the Charter altogether. Increasing Charters will only increase discord and confusion. The monopolists will not object to the Charter for General Practitioners, inasmuch as it will weaken the cause of reform, by dividing the forces, and will disparage more the General Practitioners, by making the distinction between them and "the pure" more marked.

I am glad to see that the ill-fated, well-draggled tail, of Mr. Wakley—the wretchedly small clique with a long name, that displays itself in a bye eloset of Exeter Hall—is protesting against the Marylebone Association for their closed doors private sittings, clique-ism, and their desire to make bye-laws, and form themselves into a Committee, when these self-same accusers, somewhat less than a year ago, not only made themselves notorious for perpetrating the same misdeemeanours, but excluded by dishonourable manoeuvres all those who were not exactly *Lancet* ridden like themselves. In their present plight, I have almost too much charity to tell them how greatly I pity them. When I, Sir, concurred with them, and the friends your vigorous pen drew around them—the Association was so flourishing, and promised to achieve such good results for the Profession, that Wakley felt it worth his while, at any price, to put his fingers on it. It has had the benefit of his distinguished patronage for twelve months; and now the man paying the best prices

for such things, would not give him sixpence for the whole affair. It is enough to have one's name mentioned in connection with that Assembly, to be held, to use the mildest terms, not quite the thing. I wish Mr. Wakley would say what he got by his move; if it be not more than I have heard of, it will do very little to hinder him from keeping his O'Connell promise of dying on the floor of the House. He has done nothing, and let nothing be done. No members have been seen—no Bill drawn out—no proposals for amending the new Bill suggested—and the Assembly has since Wakley enumbered it with his jugglery, done no one thing but eternally disgrace its members.

I speak feelingly upon this topic, because I am greatly interested in the matter. Mr. Wakley will readily see how the words which he uttered in the House of Commons, Feb. 6th in reference to the Board of Trade, will apply with very little exception to his *hole* and corner committees of last year, when he knocked up our truly practical proceedings, and since which he has diverted the profession from the latter by mere talk—He says—"what objection was there if the Board of Trade were acting honestly by the parties concerned and by the public to throwing the doors open, so that the public might see what transpired. If there were objections; if it was to be a secret tribunal; if there were insurmountable obstacles to making the inquiry public, he would say it was better for such a board to be at once abolished—for it would not only reflect injury upon persons who had done no wrong, but he was positive it would bring the *character of parties concerned, into irretrievable disgrace.*" Yet this man is the patron of *hole* and corner committees in his own profession, where he assumes the lead—is not only the originator of them, but now quarrels with some of his own *elique*, because they will not readily agree to unite their small party with the reputed "*hole* and corner" committees of the Marylebone Association, so as to allow the Medical Protection Association, now, on the point of expiring by diminishment of numbers, to die with grace.

Again, Mr. Wakley will know whence I got the following quotation, altering it a little, so as merely to adapt his observations to the Medical Profession instead of to Ireland. "The reform members (M. P's.) should have formed, without delay, such measures as they deemed best calculated to promote the interests of the profession, and then if they had been rejected, *the responsibility would not have been on their heads.*" Has he ever brought forward his proposition for Medical Reform in form of a measure before the profession generally, and much less before the House of Commons? Never—out of his own mouth will I condemn him.

I maintain that he, and his *elique*, have been the cause of wasting the whole of the time that should have been allotted to practical operations in trashy talk, and have sacrificed the profession—the responsibility as to the issue must rest on their own heads.

You, Sir, this time last year, roused Mr. Wakley from slumber, with the pretence of doing something—as far as talk goes—and if he *really* does some good at last, it will be in consequence of your flagellations.

I am, Sir,

Your obedient servant,

G. D. DERMOTT.

Charlotte-street School of Medicine,
Feb. 9th, 1845.

STRANGULATED FEMORAL HERNIA. — Mr. Thompson narrates the case of an aged female, who presented symptoms of internal strangulation, and also the appearance of suppurating glands in the right groin. Suspecting that there might be a strangulated hernia, he operated, and found no suppuration of the glands existed, that it was strangulated femoral hernia, accompanied by inflammation of the cellular membrane and surrounding glands, and that the bowel was very black, and somewhat adherent to the sac, the stricture being seated at the neck. The patient recovered.

MATICO IN UTERINE HÆMORRHAGE. — Mr. Butler has tried the infusion of matico, both internally and by injection, in two cases of abortion, succeeded by hæmorrhage with the best results.

PROVINCIAL FEELING ON "THE BILL."

(To the Editor of the "Medical Times.")

SIR,—Medical Reform has been greatly talked about latterly, and the inconsistency of the law respecting the practice of medicine has been much canvassed. We have also heard something of the wonderful benefits conferred on the profession by the Worshipful Company of Apothecaries. Now, let the dispassionate and disinterested mind take a retrospective glance at the performances of that body since the legislature heedlessly granted their impolitic Act, and contemplate their many scientific, noble, and amiable deeds. How many, and how valuable, have not been their contributions to the literature of our science? What rules and regulations have they enforced, as respects their *curriculum*, which they have not borrowed from the different Colleges whose members and licentiates (by their own Act) are prohibited from practising in England and Wales? How many educated qualified men have been punished, either directly or indirectly, by them, whilst the ignorant charlatan has been allowed to go unpunished? Is the profession, or the public, less pestered at present by quacks than it was in 1815? Have we not among us as many half educated men as formerly—men contenting themselves with half the course of study requisite for passing the Apothecaries' Hall, and in a great measure neglecting the more important branches of anatomy and surgery?—I know it has been the case in many instances, where the examination was anything but a scientific one. All are aware that the character of the general practitioner has been much improved of late years; but such improvement is due more to our own exertions to keep pace with the times, rather than to anything the Worshipful Company have done for us. Look at the chemist and druggist; has he not advanced, as regards social and scientific standing, in equal ratio, if not in greater, than ourselves? The Act of 1815 has done more for the advantage of the chemist and druggist than for the medical profession. Indeed, we are expressly informed that the Act does not prevent the former from compounding and dispensing drugs; whilst the latter, be he graduate in medicine or qualified surgeon of ever so high standing, cannot dispense his own prescriptions in England and Wales without first degrading himself by undergoing an examination before a Board of drug vendors, that they may declare that he knows the difference between Turkey rhubarb and white hellebore. As for their protection, it is all a farce; so long as the company pocket the examination fee, the licentiate may protect himself in the best manner he can. In my own immediate neighbourhood, a few years ago, two young men commenced practice about the same time and within a short distance of each other. The one styles himself "druggist and accoucheur," though he has had no medical education, except a bare apprenticeship; the other dubs himself "surgeon," but no diploma of any kind has he. The Apothecaries' Company were written to on the subject more than once, by one of their own licentiates; the parties were merely threatened, but nothing further. The consequence is, they continue to practice with impunity, to the annoyance of their qualified neighbours, and to the still greater injury of a deluded public. Were they qualified as physicians or surgeons, no doubt proceedings would have been taken forthwith against them. *So much for the Apothecaries.* Expunge the name altogether from our ranks, and let it be applied to the chemist and druggist, to whom by right it belongs.

A PROVINCIAL SURGEON AND
GENERAL PRACTITIONER.

Feb. 4th 1845.

From an anonymous Correspondent.—It is understood in well-informed quarters, that the Council of the College of Surgeons have abandoned their intention of having another 'Fellowship Examination' for some time to come, to allow the ill-feeling against them to pass away.

LANCET BLUNDERS.

To the Editor of the "Medical Times."

SIR,—In the list of the first batch of 300 fellows of the Royal College of Surgeons of England, published in the *Lancet*, of Dec. 23rd, 1843, p. 416, my name stands No. 114, and is correctly placed. The same journal for 19th October last, p. — contains a list of the second batch of 250 fellows, selected, as the Editor tells us, from the entire list of 550, and my name is again introduced, No. —; thus making it appear that I was twice chosen; this incongruity having been pointed out to me, I addressed the following to the Editor of the *Lancet*, on the 26th of October last:—

"SIR,—I have just learnt that in a number of your journal, dated the 19th instant, you have erroneously included me in the second batch of Fellows of the Royal College of Surgeons of England. To me it is of no great moment where I am placed in *your list*; but it is your duty to be accurate, and to correct this mistake on the first opportunity that offers.

"I am, Sir,

"Your obedient servant,
"J. G. CROSSE."

In the number of the *Lancet* for Nov. 2nd, it is printed, "We are requested by Mr. John Green Crosse, of Norwich, whose name was published in our list of Fellows of the College of Surgeons, to state that *he has not been made a Fellow of the College!*" More than one of my friends have informed me of their having addressed the Editor to set this matter right; but no correction has been made, nor have I observed any notice, save the following, in reply to some one who signs himself "A Norfolk Surgeon:—" "If the fact relative to Mr. Crosse has been misrepresented, it can only be adjusted upon his own authority. We fear that some silly person has forged that gentleman's signature."—No. 23, p. 271.

Not having myself committed any mistake in this business, I decline to answer the call of the Editor for another explanation; and being unable to determine whether want of candour, or of penetration has led to his continuance in error. I must leave some of your readers, who are also readers of the *Lancet*, to solve the difficulty, only remarking that there must be an *odd Fellow* somewhere, or a trifling oversight would long since have been righted.

I am, Sir,

Your obedient servant,
J. G. CROSSE.

By a decree of the *Cour Royale* of the island of Jersey, dated Oct. 22, 1832, which sets out by remarking upon the danger likely to arise to society, from allowing unqualified persons to practice medicine, it is enacted; that after Dec. 1, 1832, no one be allowed to practice medicine or surgery in the island without permission from the "Cour," under a penalty of 100 to 1000 livres for each offence. To obtain this permission, the candidate must be a member of some one of the English medical faculties, or of those of Dublin, Aberdeen, Glasgow, or Edinburgh, or must hold, or have held, a commission in the army, navy, or East India Company's service; or be a member of some one of the continental faculties of Paris, Strasburg, Montpellier, &c., or a licentiate of the English Apothecaries Company. Restrictions have also been placed upon the practice of pharmacy: from the above date, no person can vend drugs, unless he have permission from the "Cour" to practice as a medical man, or possess a license in pharmacy from some legal body in Great Britain or Ireland, or have served an apprenticeship of five years with a legally qualified apothecary.—Penalty for each offence, 100 to 1000 livres. The "Cour" empowers the medical men, practising in the island, to select from their number three physicians or surgeons to constitute a "Public Council of Health," to draw up reports upon epidemics and hygienic subjects. Should any doubt exist as to the legality of the diploma of any medical man practising in Jersey, such diploma is to be submitted to examination by the Council of Health, and their decision upon the matter to be final.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, Feb. 11, 1845.—Mr. Stanley, President, in the chair.

On *Extravasation of Blood into the Cavity of the Arachnoid Membrane*, by Mr. Prescott Hewett, Curator of St. George's Pathological Museum.—The author, for the sake of perspicuity, arranges these extravasations in four divisions according to their degrees of simplicity:—

1st. The extravasated blood may either be liquid, or coagulated; if in the latter state, it may be in clots, or spread out in the shape of a thin membranous layer.

2ndly. Sometimes the extravasation presents itself under the shape of a false membrane, possessing more or less of the original colour of the blood.

3rdly. The blood may be fixed to the free surface of the arachnoid, and there maintained by a membrane, which, to the naked eye, presents all the characters of the serous membrane itself.

4th. The blood is frequently found inclosed in a complete cyst, of various degrees of thickness, which may be removed unbroken from the cavity of the serous membrane.

The author having fully considered the various appearances put on by the extravasations mentioned in the first and second divisions, which were illustrated by cases and preparations, passes on to the more important subject of the third division, which he thinks derives an increased degree of interest, from the fact that these cases were for many years described as extravasations of blood between the dura mater and the parietal arachnoid. After having quoted a case thus described by Dr. Hodgkin, he states that the result of the investigations carried on within the last few years by several foreign pathologists, and by himself, is so directly opposed to the opinion adopted by Dr. Hodgkin, that he cannot but think that that author has been led into an error, of which the case itself bears internal evidence. All recent investigations illustrating this point tend to prove that the firm, delicate membrane, which covers these extravasations, is not a portion of the arachnoid stripped off from the dura mater, but a newly-formed membrane. This opinion is confirmed by the cases classed in the fourth division, which were also at one time described as extravasations of blood between the dura mater and its serous lining. The correctness of this opinion is made manifest by stripping off the cyst containing the blood from the parietal arachnoid to which it has become adapted. These points were illustrated by cases and dissections, of which two preparations were exhibited.

The author next proceeds to examine how this membrane is formed. He dissents from the generally received opinion, that it is the result of an exudation of lymph poured out from the arachnoid irritated by the presence of the blood, and thinks that the fibrine of the extravasated blood gives rise to the false membrane, independent of any inflammatory action in the neighbouring tissues. This he illustrates by various cases in which there were not any appearances of inflammation either during life or after death.

1st. Blood extravasated into various serous cavities, and covered over by a false membrane, without the least trace of inflammation in the neighbouring tissues.

2ndly. Blood extravasated into tissues also becomes surrounded by a membrane, dependent upon the fibrine of the extravasated blood.

3rdly. Even blood coagulated in the vessels at times is covered by a false membrane, also dependent upon the fibrine of the blood. Here are given two cases of large aneurisms cured by nature, in which the surface of the coagula was covered by a delicate membrane, similar to the membrane of the artery, and one case, in which a clot of blood was found in a vein, covered by a delicate membrane, in which were several large vessels as yet unconnected with the general circulating system. With regard to the source of the hemorrhage, the author thinks, that in those cases where no ruptured vessel has been detected, the blood must have been produced by an exudation from the

rupture of some vessels, so minute as to escape the ordinary means of investigation.

These extravasations the author has generally met with in cases where there has been a decided determination of blood to the head; he has met with them in cases of great and protracted anxiety of mind, in poisoning by opium, in drunkards, in delirium accompanying phthisis, in maniacal patients, and in aged people in whom the arteries have been thickened by atheromatous deposit.

The author having pointed out the difficulty of the diagnosis in these cases, which have been found to present the symptoms of disease of a totally opposite character, concludes by directing the attention of the society to the remarkable circumstances already observed in several cases, of an intermission in the symptoms, either of coma or even of paralysis.

Mr. Stanley observed, that among the many important points alluded to in the paper, there was to which he was particularly desirous to draw the attention of the society—namely, what was the proportion of cases of false membranes, which were referrible to simple effusion of blood, and what to inflammatory action.

Dr. Mayo suggested, that Mr. Hewett should mention additional diagnostic signs respecting the structure of false membranes, by which it might be ascertained, whether they were formed as the result of mere effusion of blood, or of effusion of lymph from inflammatory action.

Mr. Prescott Hewett replied, that the only distinctive mark he could mention, was, when they were the result of inflammatory action, the visceral arachnoid was thickened and injected. In the cases which had fallen under his notice, that membrane was not thickened, but only discolored by the contact of blood.

Mr. Stanley observed that there were several remarkable preparations of this kind in the museum of St. Bartholomew's Hospital, which were put up twenty-five years ago, when he (Mr. Stanley) knew little or nothing about the matter. In the first case, the false membrane adhered so closely to the dura mater, that Mr. Abernethy mistook it for the arachnoid; but when it had been separated from the dura mater, that membrane was found to be perfectly smooth. In another instance, where the patient was maniacal some time before death, the false membrane covered the entire surface of the dura mater; and in the third case, there was a double false membrane, and effusion into the sac.

Dr. G. Burrows must apologize to the author of the paper, for asking a few explanations on account of the shortness of the abstract read to the society. These cases of extravasation of blood into the sac of the arachnoid, bore upon the interesting physiological question, whether the blood retained its vitality after extravasation, and was capable of self-organisation? The formation of these delicate false membranes around masses of blood extravasated into serous sacs, was attended with very important results. These membranes became vascular, and thus acted both as secreting and absorbing surfaces. It was through the intervention of these membranes that the extravasated blood was absorbed: also by their development the irritating effects of the effused blood, which acted as a foreign body to the serous membrane, were much circumscribed. From the facts detailed by the author, it did not appear to Dr. G. Burrows to be made out, whether these delicate false membranes environing masses of effused blood, were the consequence of some mysterious vital action in the blood itself, or whether they were not the product of the vessels of the contiguous serous membrane. Dr. G. Burrows believed, that effused blood was capable of such vital actions; but as the effused blood acted as an irritant to the surrounding parts, their vessels, under the influence of such irritation, might throw forth lymph or fibrine, which subsequently became organised. The vascular action excited in the surrounding parts might be short of inflammatory. The author supposed these false membranes were not the result of vascular action in the arachnoid, because, upon examination of its surfaces, there was no discoverable injection of vessels or other signs of previous inflammatory

action. Dr. G. Burrows would ask the author, whether, in the course of his extended observations in morbid anatomy, he had not remarked, that upon stripping off layers of lymph the product of genuine inflammation, the subjacent serous membrane was not, sometimes, little altered from its normal condition, and without any increase of vascularity? Dr. G. Burrows had observed such a condition of the pleura, pericardium, and peritoneum, when they were thickened by effused lymph. If we looked to what took place around blood extravasated into the substance of the brain, we found these same false membranes, which were often highly vascular. Dr. R. Bright (*Medical Reports*) had given some excellent illustrations of these cysts formed around clots of blood effused into the substance of the brain. These membranous sacs appeared to be much more intimately connected with the surrounding cerebral substance, than with the effused blood.

Mr. Prescott Hewett observed, that he had found that to be the case in many instances; he had frequently had opportunities of separating false membranes resulting from the effusion of lymph on serous membranes, without discovering any injection in the latter membrane; but these cases were always of long standing, whereas the cases which he had described, were of much more recent date, and one indeed had existed only nine days. The patient had received a severe injury of the chest, and on examining the body after death, the cavity of the pleura was full of blood, contained in a false membrane, and nevertheless, the serous membrane was quite healthy and uninjected. Had the false membrane been the result of inflammation, it would have shewn some indications thereof, such as injection or else thickening, which was not the case. He had, therefore, concluded, and his opinion was strengthened by numerous dissections, that the blood alone could produce a false membrane from the fibrine which it contained, without the occurrence of inflammatory action. He had also mentioned in his paper a case where a clot of blood was found in a vein, enclosed by a false membrane, the coats of the vein not being either thickened or injected, but slightly adherent to the membrane containing the coagulum. In cases of aneurism, also, which had undergone the spontaneous cure, he had found the coagula of blood blocking up the opening of the vessel, covered by a false membrane, while no evidence of injection could be discovered. The same thing occurred in the ovaries, which he had repeatedly dissected, and found the false corpora lutea also enveloped by false membranes.

Dr. Webster agreed with Dr. Burrows in the statement that, from the brevity of the abstract, it was not easy to ascertain the opinions of the author on several points which were alluded to in the paper. He was anxious, therefore, to ask him whether he had found thickening of the arachnoid preceded by mania. In a paper, which the society had done him the honor to publish in a late volume of its transactions, he had shewn, that, in numerous dissections of maniacal cases, conducted very accurately by Mr. Lawrence in Bethlem Hospital, thickening of the arachnoid membrane, with effusion, had been frequently discovered. This opinion was strengthened by the case alluded to by the president, in which the patient became maniacal some time before death.

Dr. Cursham observed, that the first case mentioned in this paper, which was one of phthisis, was complicated with mania.

Mr. Prescott Hewett remarked that extravasation of blood had been frequently found in the arachnoid in maniacal cases. He had often observed this at the Salpêtrière; and two cases were mentioned in the paper, of mania occurring in phthisical patients, where the effusion had been found.

Mr. Henry Lee stated, that it appeared to him that the conclusions arrived at by Mr. Hewett were of the greatest importance, inasmuch as they involved the acknowledgment of an inherent power in the extravasated blood of generating vessels, and that, quite independent of any increased action in the surrounding parts. But, in estimating the truth of this proposition, much important evidence is gained by considering the analogous processes which take place, under similar circumstances, in

other parts of the body. Mr. Hunter, in his work upon the blood states, that when extravasation takes place, if the blood coagulates, presently vessels will be formed in the coagulum, which, intercommunicating with each other, and with the surrounding capillaries, will re-establish the circulation through the part; and Mr. Hunter also states, that where the coagulum is large, the whole will not become vascular, but that surface only which is in contact with surrounding parts. The analogy between this process and that described by Mr. Hewett, appears sufficiently evident. Another illustration of the same subject is, where blood has been retained for a considerable time in a vein by means of pressure. The exterior portion of the coagulum, as in an instance to which Mr. Lee referred, will form a thin, firm layer, distinct from the central and more uniform substance; this layer may be mistaken for lymph effused upon the lining membrane of the vein; the chief diagnostic mark between the two is, that whereas the lymph adheres to the whole surface from which it is secreted, the layer derived from the coagulum of the blood has very partial adhesions, and may be separated from the coats of the vein with the greatest facility.

A difficulty may present itself in considering in what way it is possible for vessels to form spontaneously in a coagulum, but, in granting this power to exist, we allow nothing more than that which continually takes place in the development of the fœtus, where the blood is formed before the capillary, the capillary before the vein, and the vein before the heart. But, from whatever source the vessels are derived, the mode of the formation of the false membranes would appear to be strictly analogous in all the cases above referred to.

Mr. Solly observed, that having paid particular attention to the structure of the brain, he had had opportunities of examining the bodies of several patients at Hanwell after death, through the kindness of Dr. Conolly, and had found, in every instance, effusion of blood on the surface of the brain. With regard to the diagnosis of cases in which this extravasation of blood had taken place on the surface of the brain, he had always found it preceded by severe pain in the head.

Mr. Prescott Hewett had observed the occurrence of severe pain in the head in only one case, and in that instance it seemed to resemble brow-ague. It continued for four hours at a time, recurring at stated intervals for eight days, and then it became continuous. The patient afterwards became typhoid, and died.

Dr. Dickson confirmed the accuracy of Mr. Hewett's observation with respect to the intermission of coma and paralysis in one case which he had been called upon to see. In that instance, the freedom of the arachnoid from effusion was very great, and it was difficult to believe that the false membrane could have originated in inflammation, as it was not adherent. With respect to aneurism, he had seen a case at the *Hôtel Dieu*, of a man who had two immense aneurisms in the popliteal spaces. As the arterial system was generally diseased, no operation was performed, and the man died. When the sacs were laid open, from twenty to thirty layers were found in the larger one, and twelve in the other. The oldest of these layers presented the appearance of serous membrane, those that were more recent, that of the buffy coat of the blood, after it had been subjected to pressure.

Dr. George Burrows observed that there was one point alluded to in the paper, and which had been afterwards mentioned by Dr. Dickson, namely the alternation of coma and paralysis. He thought the expression very vague, and he was desirous to know what was meant,—whether in fact the paralysis disappeared as the coma came on, and also whether this state of alternation was peculiar to this affection of the arachnoid membrane.

Mr. Prescott Hewett stated that the alternation was not with each other, but that at one time there was coma which disappeared, and at another time paralysis came on, and also disappeared.

Dr. Mayo referred to a case which he had published in the *London Medical Gazette*, as bearing upon the occurrence of brow-ague in the case mentioned by Mr. Hewett. The pain in his patient was decidedly periodic, and at one time he thought

he had been mistaken in regarding it as caused by pressure. It became worse however under the exhibition of liquor arsenicalis, and assumed the form of continuous pain. It was afterwards nearly removed by the use of calomel and antimony.

Mr. Prescott Hewett mentioned a case where extensive extravasation of blood had taken place between the arachnoid membranes after a severe injury, the patient dying ten days afterwards. Two distinct layers of coagulated blood were discovered after death, one lining the parietal, and the other the visceral membrane. The latter was perfectly smooth, and the parietal layer had a distinct membrane covering it, which could be pulled off. He thought this case was conclusive as to the formation of false membranes from the fibrine of the blood, as it was impossible in this instance to have been produced by inflammatory action affecting either the parietal or visceral arachnoid, as a layer of blood interposed between each and the false membrane.

On the Formation of the Buffy Coat of the Blood, By George Gulliver, F.R.S., Surgeon in the Royal Regiment of Horse Guards. Communicated by Robert Liston, F.R.S.

After noticing the well-known fact, that the corpuscles will sink much faster in the entire blood, while the buffy coat is forming, than they will do in the serum alone, the author remarks that two of the most eminent authorities on the physiology of the blood, Mr. Hewson and Dr. Davy, concluded that the rapid sinking of the corpuscles on which the buffy coat depends, is due to an attenuation of the liquor sanguinis. On the contrary, Professor Hermann Nasse and Mr. Jones, attribute the quick sinking of the corpuscles to their increased aggregation in inflammatory blood.—(*British and Foreign Medical Review*, No. 28.)

Finding that the blood of the horse regularly affords a buffy surface, measuring as much perpendicularly as the lower red part of the blood clot, the author made many experiments on the sinking of the red corpuscles in the liquor sanguinis, in the serum, and in these fluids variously altered in viscosity and specific gravity. The experiments were particularly detailed, in order that that they may be easily repeated, and that no errors may arise from the different effects which Mr. Prater has shewn may be produced by different quantities of the same substance.

The author is of opinion that if we admit that the sinking of the red corpuscles affords an accurate test of the consistency of the liquor sanguinis, we must also admit the improbability that the liquor sanguinis becomes thinner some minutes after the blood has been received in a vase, at which time the falling of the red corpuscles is most rapid.

The author asks whether the well known utility of saline medicines in inflammation, may not be explained by their effects in preventing, or destroying the aggregation of the red corpuscles, and in preventing or lessening the buffy, or inflammatory condition of the blood.

The author arranges some of his conclusions as follows:—1st. There is a remarkable acceleration, after a few minutes, in the rate with which the blood corpuscles sink in the liquor sanguinis. 2nd. This acceleration may be increased, by increasing the aggregation of the corpuscles; and prevented or reversed by preventing or destroying the aggregation of the corpuscles. 3rd. The sinking of the corpuscles is slower in blood thickened by weak saline solutions, than when mucilage is added with the salt. 4th. The sinking of the corpuscles, may be slower in serum artificially made thinner and lighter, than in serum artificially made thicker and heavier. 5th. In the cruor of horse's blood, the corpuscles are more aggregated, and with more appearance of agglutination between the corpuscles, than in very buffy human blood. 6th. There may be a buffy coat, or only a comparatively thin one, in the blood of the horse, when the blood has been made thinner, and its coagulation retarded. 7th. The corpuscles of the horse sink much more quickly in his serum, than the corpuscles of man do in his. 8th. Increasing

the proportion of corpuscles in the blood hastens coagulation, and prevents or diminishes the formation of the buffy coat, more than increasing the serum only.

TRAUMATIC TETANUS AND INDIAN HEMP.—

The *Provincial Medical and Surgical Journal*, for the 15th instant, contains an account of a case of traumatic tetanus, unsuccessfully treated by Indian hemp. The accident which brought on the disease was a comminuted fracture of the first phalanx of the middle finger of the right hand, caused by the fall of a grave-stone. The patient was a stone mason, who joined to his daily trade the nightly avocation of a watchman. From the loose manner in which the case has been drawn up, we are left ignorant as to whether the tetanic affection might not have been the result of the exposure of the patient to the influence of the atmosphere, combined with the irritation of the wound. That this may have had some share in bringing on tetanus, is strengthened by the fact, that for 11 days after the injury, he continued his duty as a watchman, without suffering from spasm of any kind. The injury was received on the 9th January, trismus set in on the 19th, and on the 21st he was seen by Dr. Inglis (the reporter of the case), in company with Mr. Swallow, of Halifax. The treatment, after the bowels had been evacuated by an enema of castor oil and turpentine, consisted in administering the extract of Indian hemp in grain doses, increased to two-grain doses every two hours. On the 22nd, the second day of Dr. Inglis's attendance, the finger was removed, and the dose of Indian hemp extract increased to three grains. The details of the case are minutely given up to the period of death, which took place on the morning of the 24th January. The scene was closed by a tetanic convulsion, which carried off the patient in full possession of consciousness. The reporter promises to give, in a future paper, the post mortem appearances, which we suppose, like those of most fatal cases of tetanus, will leave us just as ignorant as before of the *whereabouts* of this intractable disease.

CASE OF CHRONIC PERITONITIS PRODUCING ASCITES.—The journal from which we have quoted the foregoing case, records an example of chronic peritonitis, producing ascites, and causing death suddenly. The little patient (11 years old) was affected in August, 1844, with erysipelas of one leg, which soon yielded to aperients. Soon after she began to complain of pain in the abdomen, which was never of so severe a character, as to induce her friends to apply for medical advice. Some five or six weeks after the occurrence of the abdominal pain, she became ascitic, and lost her appetite. She continued so till December, when she left home, and returned on the 17th January, 1845, with her appetite improved, and the abdominal effusion *in statu quo*. During the 18th, she appeared better than usual, but four hours after a hearty dinner, was seized with an attack of acute peritonitis, marked by vomiting, and acute abdominal pains. Fomentations and aperient medicines were prescribed; but the patient died in 25 hours after the acute attack of peritonitis. Post mortem appearances.—The body was not emaciated: the viscera, with the exception of the peritoneum and mesentery, were healthy; the former presenting some reddish patches, and the latter being studded here and there with flakes of in-organized lymph. The abdomen contained several pints of lemon-coloured fluid. This case, according to the reporter, exemplifies the insidious nature of chronic peritonitis, and proves how great an amount of mischief may be present, before the constitution severely suffers. The post mortem appearances, however, would seem to denote that peritonitis could not have existed for a period of 5 months, without producing greater organic changes, than the presence of a few reddish streaks upon the peritoneum, and a few specks of inorganised lymph upon the mesentery.

ANEURISM TREATED BY PRESSURE.—A case of this disease, situated in the ham, successfully treated by pressure, is reported from the practice of Dr. Allan, at Haslar Hospital. The pressure was exerted by Liston's tourniquet, and was continued for two months, wanting five days. Tartarised antimony in one sixth of a grain doses with tincture of digitalis, was also exhibited during the treatment. In some remarks on the case, Dr. Allan observes that the first object to be obtained was to establish sufficient collateral circulation for the safety of the limb, which was effected only by time and constant pressure. Eight weeks after the commencement of the treatment, pulsation of a considerable sized artery was first observed at the internal part of the knee, and could be traced about two inches down the leg; being then convinced that sufficient circulation was established, both tourniquets were screwed up, so as entirely to obstruct the artery between them, with a successful result in about twenty-four hours. The calibre of the artery had evidently been gradually diminished for some time by the pressure, as evinced by the languid circulation of the limb; and, therefore, when both tourniquets were screwed up, the formation of a coagulum became an easy process.

GOSSIP AND NEWS OF THE WEEK.

The following is a list of all those who have obtained medical diplomas at Leyden, since 1826:—Falmouth, Richard Fox, June 29, 1826; Manchester, Edward Stephens, October 14, 1827; Stafford, Gerard Frederick Collier, December 15, 1828; England, George Witt, June 12, 1830, William Smith, September 11, 1830, William J. Crowfoot, December 19, 1830; Stourton, Thomas G. Wright, March 15, 1831; Manchester, Thomas Ashton, May 17, 1833; Demerara, Robert Easton, February 1, 1834; London, William Henry Arvet, April 10, 1837; England, William Hunt, June 23, 1837, Joseph Cox, June 5, 1837; Scotland, Robert Gray Mayne, October 26, 1838; Yorkshire, Parkinson Oates, October 8, 1839; London, John Salk, February 21, 1842; Scotland, Robert Anderson Balfour, March 9, 1842; London, Michael Jacob Godfrey, April 11, 1842.

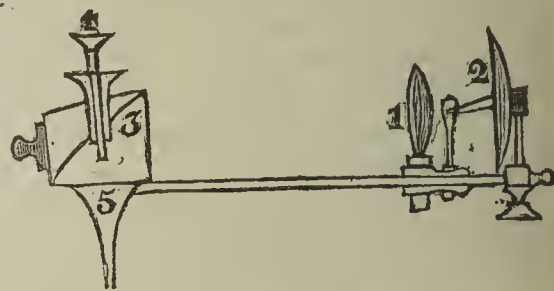
ESSEX MEDICAL REFORM ASSOCIATION.—A deputation from the above body, consisting of Dr. Rowe, W. H. Carey, J. S. Dobson, and F. Haylock, Esqrs., surgeons, waited, on Saturday the 8th instant, upon G. Palmer, Esq., M.P. for South Essex, to detail to him their opinions on the projected reform bill of Sir James Graham. Mr. Palmer received them courteously and hospitably; and after an interview of two hours, during which the hon. M.P. expressed himself decidedly opposed to that clause repealing the act of 1815, as tending to promote the spread of quackery, the deputation departed, impressed with a favourable opinion of their representative's talent for business, and willingness to attend to the wishes of his constituents.

We have received a copy of a circular, signed by 80 practitioners of Hampshire, and addressed to the Council of the College of Surgeons. Without making any remark upon the question of incorporation of general practitioners, it confines itself to impressing upon the Council the injustice of the proceeding, by which young surgeons, of comparatively short standing, have been promoted to the honour of the fellowship, to the exclusion of older men, as well, or better qualified, both by general and scientific information. From the calm and dispassionate style in which it is written, as well as from the sound reasoning it contains, it is deserving of all consideration.

ROYAL COLLEGE OF SURGEONS. Gentlemen admitted Members on Friday, Feb. 14th. 1845.—G. Coram, H. Heginbotham, G. Harris, C. E. Pratt, G. Hansbrow, J. Hayward, H. Campbell, T. Underhill, H. J. Gorenough, J. A. Magrath, G. M. Harrison, T. J. Ashton.

APOTHECARIES HALL. Gentlemen admitted Members on Thursday, Feb. 13th. 1845.—Philip Jolin, Samuel Probyn, Howell Morgan, Francis Parker Hoblyn, Richard Clarke, Frederick William Marshall.

Mr. Jordan, of Rome-street, Manchester, has forwarded, for our inspection, a wood-cut of what he calls an "Illuminative instrument," for the purpose of acting as a speculum, in exposing the mætus auditorius, the nasal fossæ, and other cavities. It has been submitted to, and received the sanction of Mr. Samuel Cooper, of University College; and we feel great pleasure in placing before our readers a description and wood-engraving of an instrument, which promises to facilitate our researches into the pathological condition of organs so much removed from inspection, as the ear, nostrils, &c., &c.



Description.—No. 1, is a wax candle, hinged on a joint, the flame of which is placed in the focus of No. 2, a concave speculum. No. 3, an oval concave speculum, at an angle of 45°, with a central aperture, through which No. 4, a tube, containing lenses, is made to slide into the centre of No. 5, a truncated tube.

Mode of using the "Illuminative."—The candle must be lighted, and the truncated tube applied to the part to be inspected. The eye must be applied to the eye-piece (No. 4,) when a distinct view of the state of the parts will be obtained.

The rays of light from the candle, passing through the speculum, are reflected, at right angles from No. 3, and again concentrated in a focus of about $\frac{2}{3}$ of an inch, by the lenses in the truncated tube.

The *Medical Gazette* in two recent sheets inveighs with much force against a new division of medical practitioners. It affirms that a third college would lower the general practitioners, and make them regarded as the "Officiers de Santé" in France. It denounces the scheme as especially schismatic, phisic as an art being "one," and can give no cause to justify the Incorporation, save a full and deliberate wish of self-destruction.

Professor Bonillaud, of Paris (a French deputy), is besieged daily with prayers to move for more stringent laws against quackery. French medical men are complaining that the law is not enforced, and that empiries are everywhere at their dangerous work.

Metropolitan Mortality for the Week ending Saturday, February 15th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1112	1039	963
Zymotic, or Epidemic, Endemic, and Contagious Diseases.....	178	172	184
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	120	111	106
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	175	167	159
Diseases of the Lungs, and of the other Organs of Respiration	368	347	292
Diseases of the Heart, and Blood-vessels	44	25	2
Diseases of the Stomach, Liver, and other Organs of Digestion	82	64	1
Diseases of the Kidneys, &c....	9	6	6
Childbirth, Diseases of the Uterus, &c.	15	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	14	6	
Diseases of the Skin, Cellular Tissues, &c.....	3	2	1
Old Age	86	89	70
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A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY.

Delivered at ST. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

(Reported by G. SAYLE, Esq., M.R.C.S., late Curator of the Museum of St. George's Hospital School.)

ON MORTIFICATION.

GENTLEMEN,—The two preceding lectures have been occupied by a consideration of those circumstances which increase the danger of operations. I shall now call your attention to a very different subject, but one of great importance—viz.: mortification. This may be produced by various causes:—1st, by inflammation; 2ndly, by ligature-strangulation; 3rdly, by actual or potential cauteries; 4thly, by disease of the blood vessels; and some other causes which we shall consider as we proceed. Any part of the body may die—may lose its vitality—whilst the rest remains alive. When this occurs, we say the part so affected has mortified; the process by which this loss of vitality has been wrought, we call mortification; whilst the part itself is said to be in a state of sphacelus; or we say it has mortified, or sloughed. The word "gangrene" properly signifies corroding, or eating away, but as it is commonly employed by us, it means the incipient state of mortification,—that state which immediately precedes actual death of a part; but, like many other terms, it is loosely employed, and in common language is synonymous with mortification. If you will consider mortification in connexion with the circumstances which lead to it, and the changes which follow it, you will find it one of the most interesting subjects in pathological science or practical surgery, and you will not think your time wasted if I draw your attention to it. I have already told you that mortification may be produced by various causes, which I shall again enumerate by-and-bye; it may affect vital organs, such, for example, as the intestines, or lungs, or even a portion of the brain itself. Whenever a vital organ is mortified, death is the inevitable consequence; this may be immediate, or after some little time, according to circumstances. If mortification takes place in a part not concerned in the performance of vital functions, if it be very extensive, it occasions so severe a shock to the system that death will speedily take place. The time which elapses between the mortification of any part, and the death of the patient, will vary according to the constitution and the extent of local mischief; but if the part affected be limited in extent the system will not suffer in the same manner; it will stand the shock, and after a time the mortification will stop and a new process be established, by which the dead part will be separated from the living. When this process occurs in soft parts we call it "sloughing," and the dead part is called a "slough;" but the same may happen in the hard textures, as in the bones or cartilages, and then we call the part separated "an exfoliation." Whether it be the sloughing of soft parts or the exfoliating of harder structures the process by which it is effected is exactly the same. It is simply the process of ulceration. The surface, of the living in contact with dead structure

ulcerates, a layer is absorbed, and then the dead part lies loose on the surface. The time required for the completion of this process varies much in different cases, sometimes it goes on slowly, at other times rapidly, and the same may be said with regard to sloughing and exfoliation. In highly vascular textures, it is more rapid than in those of inferior organisation, for example, sloughing of skin or cellular membrane takes place rapidly, that of tendon or ligament is slower; and the exfoliation of bone is a very tedious process. The time required will also depend upon the state of the constitution generally, and is more speedy in strong than in weak constitutions. It will also vary according to the state of the surrounding parts; where there is much inflammation surrounding a slough, it will be thrown off quicker than when there is but little; therefore it is that a slough will separate sooner from the use of one kind of caustic than another. So long as mortification is spreading, there can be no sloughing, the first process must be completed, that is to say, the part must be dead before the second process, that of separation, can begin. The reason of this is so obvious that I need not dwell upon it. I have seen an old man with mortification of one of his toes, it has spread slowly and gradually up the leg without any attempt at reparation; then the mortification has stopped, a red line has formed around the limb, marking the extent of the mortification, and the process of ulceration has immediately commenced. So, in one case, the process will be completed in a week, whilst in another it may require six months, and when there is dead bone it may occupy several years. A man may have necrosis of a portion of the tibia, the result of disease, and such a case may go on for years. Perhaps this is connected with syphilis, which may be extinguished by a course of mercury or sarsaparilla, and when the effects of the syphilitic poison are destroyed, the process of exfoliation will begin in the bone and the case will get well as soon as if syphilis had not existed in the first instance. First then, let us consider mortification as a result of inflammation; it is described as one of the terminations of inflammation, and so it really is, for violent inflammation of any part may end in mortification. But the degree or intensity of inflammation requisite to produce mortification will vary in different textures. Inflammation of the cellular membrane terminates in mortification sooner than that of the skin, in this latter, more speedily than in muscle, it will also depend much on the state of the constitution, a less degree of inflammation producing mortification in a weakly than in a strong person. Amongst the London gin drinkers, a very slight degree of inflammation in the cellular tissue produces this result. When inflammation of the skin produces mortification, you find the bright red colour of the former, succeeded by a dark livid appearance, then an effusion of serum, from the surface of the cutis, takes place, and the cuticle is elevated in the form of blisters. These occur before the skin is really dead, but they are speedily followed by actual mortification. If the mortification of the skin be not extensive, there may be scarcely any constitutional disturbance; but if it include a large surface the system will be much affected. When

mortification is completely and extensively established, the pulse becomes small and frequent, there is great prostration of strength and incapability of exertion, the skin becomes cold, then the pulse intermits, and the patient, after lingering for a longer or a shorter period dies; or if the shock be less severe, these symptoms will gradually decline and he may recover. I told you, inflammation of cellular membrane produced mortification more rapidly than that of the skin. In a former lecture I mentioned the case of a man who died of diffuse cellular inflammation and mortification caused by the sting of a bee; and another in whom the same result followed the bite of a gnat, and I dare say had I known then what I do now of these cases, I should have found on enquiring, that these persons had been dram-drinkers, or men of bad constitutions; perhaps however something may be attributed to the operation of animal poison. When cellular inflammation terminates in mortification, the cells become distended with serum, the limb is cedematous, and this infiltration may extend to the trunk of the body. This serum has a peculiar yellow tinge, and in some cases of diffuse, cellular, inflammation, the yellowness pervades the whole body, and is particularly observable in the tunica conjunctiva, so that the patient looks as if he was bilious, but that it is not bile is proved by your not finding it in the urine. The problem is not yet solved on what this yellowness depends. Mortification of the subcutaneous cellular membrane, is soon followed by mortification of the skin, but extensive mortification of the former affects the system as much as when the latter is the seat of disease. In mortification of the intestine there is an effusion of serum into the cavity in which the intestine is contained; in hernia, into the hernial sac, or the abdominal cavity. Now, how is it that inflammation terminates in mortification? To answer this question we should consider the nature of inflammation, but I do not mean to enter upon this extensive subject at present. Mr. Hunter has said that in inflammation, there was increased action of the vessels; now if by this he meant there was increased contractility of the capillaries, he was clearly wrong, for the microscope shows that these are not in a contracted but a dilated state. But we have no right to suppose this was what he meant, for contraction is not the only action of the capillaries; in inflammation, effusions take place, and new structures are built up, and this justifies him in saying that the vessels of the part take on a new and increased action. Some pathologists say the dilated state of the capillaries is owing to debility, for my part I could never see the necessity for such a hypothesis, because it is more easily explained in another way. A part when inflamed requires a greater supply of blood than in health, and the capillaries by becoming dilated, are capable of supplying this additional quantity. This was evident in some of the animals on whom I experimented with arsenic, for when the poison was introduced into one of the legs, all the vessels of the abdomen, and the mesenteric arteries, were dilated to two or three times their natural size. Other examples might also be cited. For instance, I have injected a diabetic kidney, and found all the minute vessels exceedingly dilated, and the crypts much larger

than usual. If a man lies in bed several months and then has his leg amputated, few vessels are seen in the gastrocnemius muscle; but if, in the full activity of life and health, he meet with an accident requiring immediate amputation, then this muscle is found full of vessels. Then we ought not to say the capillaries are weakened, but that they are dilated to admit of a greater supply of blood to the part. The microscope shows us that the red particles of the blood in an inflamed part, sometimes become agglomerated and stick to the sides of the vessel, arresting the circulation in it. The same thing takes place where there is suppuration going on. But suppose it goes on to include a large extent of surface, what must be the consequence? Why, the part must die. And this is the explanation of mortification as the result of inflammation. I have already told you, how inflammation of cellular membrane produces an effusion of serum before mortification takes place. Suppose a man to have an inflamed scrotum from phlegmosis or erysipelas, the cells become filled with fluid, and the scrotum is distended, and seems as if about to mortify, but puncture it freely, and you prevent this by letting the fluid drain off. What is the *modus operandi* of the remedy in this case? It would seem that in this state of tension, that there is pressure on the small vessels passing through the cellular tissue to the skin, sufficient to check the circulation in them; and the skin being thus deprived of its nutritious fluid, dies, but by puncturing, you relieve the pressure, and allow the blood to flow freely to the part, and thus preserve its vitality. Where there is a large abscess, the skin over it becomes red, and then, perhaps, it sloughs; but in such a case, I apprehend, the mortification is not the result of inflammation: but the process going on within the abscess, cuts off the supply of blood to the skin over it, and it in consequence dies. Now, with regard to the prevention and treatment of mortification. You may prevent it entirely or in part, and if you only diminish it, you do a great deal, or if you cannot do this, you may support the system under it. When inflammation ends in mortification, you may (sometimes with the greatest advantage) employ the same treatment which you would adopt to check inflammation under other circumstances, that is, to take away blood from the arm: I have done it repeatedly with the best effects—I have done it repeatedly, even when vesications have formed, and they have been checked, and so has the mortification. But there are cases in which the patient will not bear the loss of blood, and if either by this or any other means you lower the strength, instead of checking, you increase the mortification. If, then, blood-letting be sometimes advantageous, sometimes mischievous, what are the cases in which it is, or is not, to be employed? I can give no directions here; you must trust to practical observation, and, in such cases, the practical surgeon has great advantage over the scientific physiologist. If the patient be a strong, robust, individual, having no symptom of weakness about him, you may take blood with advantage, and perhaps it may be necessary to repeat it several times; but if he be of a bad constitution, or a gin drinker, or one broken down by the abuse of mercury, his pulse small, weak, and very frequent, his countenance anxious, and his powers gradually failing, I say, in such a case you should not venture to take blood, but resort to another plan. You will meet with many cases where you will be able to say *here I will bleed*, and with others, *here I will not bleed*; but there are, also, intermediate cases, where you cannot so easily decide; therefore, in such cases, if you take blood, let it be done cautiously; or begin your lowering plan of treatment, by diminishing the allowance of wine or other cordials, observe its effect, and then pursue the one or the other plan according to circumstances. When I speak of blood-letting in these cases, you will observe it influences also the other treatment. Where you employ blood-letting with advantage, there you may also give active purgatives, calomel and antimony, salines and antimony, and only barley-water to drink; but when blood-letting is not proper, then, in all probability, it will be requisite to support the patient by giving him ale or

spirits; this refers more especially to gin-drinkers, and in such persons these will actually diminish the inflammation, as well as check the mortification. You will see the effect of this treatment in two different classes in cases of sloughing of the penis. A man has a chancre, which he has neglected; the process of mortification is going on rapidly; he has a hot skin; white tongue; and a rapid weak pulse; give such a patient wine or stimulants, and he will be worse; but bleed and purge him, and you check the mortification at once. I have known cases where nature has cured the disease, while a timid surgeon was undecided whether or no he should bleed, because there was mortification going on. Perhaps in the course of the disease a large artery has been opened, and the patient has lost a pint of blood before it could be arrested; but afterwards has begun to recover immediately. Another patient comes to you in a bad state of health, with a pale, anxious countenance, and a small feeble pulse; give such a one wine and opium, and you stop the progress of the disease. I have already alluded to scarification and punctures, with a view to illustrate the pathology of mortification; but but these form an important part of the treatment in many cases. I said, if a slough forms in the subcutaneous tissue, the skin covering it, generally sloughs also; therefore wherever much fluid is effused into the cellular membrane, if it produces much tension you must let it out. I have frequently told the house surgeon to look to these cases, and if there was much distension, to relieve it either by puncturing or scarification, and I am sure that this advice has often prevented mortification from taking place. Acupuncture is not always sufficient: for example, when pus is formed; here you must scarify freely with a lancet. This plan is useful in all cases where the distension goes beyond a certain point. It is useful in erysipelas and in carbuncle, for here you have effusion into the cellular membrane, and pus is formed; and if you set it and the dead cellular tissue at liberty, the patient is cured. This treatment applies, therefore, in all cases of erysipelatous, phlegmonous, or carbuncular inflammation. But it is not always necessary to make extensive incisions, and I advise you never to make them larger than necessary, because these are a great shock to the constitution, as well as very painful. If we who are in good health, can scarcely bear these incisions, how much worse must they not be borne by constitutions already worn down by disease. Acupuncture is not to be employed till actually required, and then not more than necessary. Recollect that this operation is not sufficient, if performed but once; it may be necessary to repeat it several times. With regard to scarifications, you should recollect the longer the incisions the greater the number of vessels divided, and the quantity of blood lost; and when these scarifications are necessary, the patient cannot well afford to lose much blood. There you will find the benefit of a diligent assistant, who follows the lancet with his eye, and places his finger upon an artery the moment it is divided, for these arteries bleed profusely at first, although, generally speaking, they do not require ligature, as they soon contract, and pressure is generally sufficient to stop the bleeding. But if it is not sufficient, you must not leave them to bleed, but put on a ligature. There are some other circumstances which make incisions both useful and necessary. It is important to make incisions down to a slough, but sometimes round a slough there is lodged a quantity of putrid matter, full of sulphuretted and carburetted hydrogen gases, which is a poison to the system; and when it cannot be evacuated it is probably re-absorbed into the circulation; therefore, it must be let out by free incisions. I could tell you of many cases where the patient has been snatched from the jaws of death by this operation. Some years ago, I was called to a gentleman whom Dr. Warren had seen about half an hour before; he was lying apparently in "*articulo mortis*;" his hands were cold, his countenance pale, and it was doubtful whether he could understand anything that was said to him; just below the right hypochondrium there was a diffused redness; by placing my fingers upon it, I

could not feel distinct fluctuation, but a kind of emphysema. Well, I said to myself, we won't let him die without examining this; so I cut into it, and in an instant the whole place stunk as if all the nightmen in London had been emptying their carts there. In two or three minutes the patient said, "what have you done, to make such a difference in my feelings?" A complete slough was pent up there, and I could not tell what structures were affected; but one day a large gallstone came away, which appeared to throw some light upon the case. This gentleman lived up at St. John's Wood, and I assure you when I opened the abscess, the whole house and garden were filled with the stench. There is an important class of cases of phlegmonous inflammation, frequently met with in hospitals, which are not well recorded in any work, to my knowledge. This kind of inflammation occurs in particular, after injuries of the scalp. At first, the patient has an attack of shivering, the scalp is not red, but pale; there is an oedematous swelling over the whole head, a good deal of fever; and sometimes this oedematous state extends to the whole face. In some cases it runs on for ten or twelve days, and then the patient recovers, but in general, if no local treatment be employed, the patient does not get well, but sloughing of the cellular membrane first takes place, then sloughing of the skin to a great extent, followed by exfoliation of the bone; so that if the disease terminates badly, it is by extensive sloughing of all these parts; and in this way I have seen a large portion of the cranium exposed. How are these cases to be treated? Where the oedema is great, let out the fluid by acupuncture; next day perhaps, the disease has abated in that part, but has increased in another; do it there also, and so on, never letting the fluid accumulate in any part sufficiently to produce much tension. But this is not always sufficient; acupuncture alone may not be enough, and then incisions must be made, and, *a fortiori*, you must make them where the inflammation is running on to mortification. These incisions must not be merely through the scalp, but down to the bone, and then you will see something of the extent of the disease. There is slight effusion over the tendon of the occipito-frontalis, but a considerable effusion under it. This tendon, as you know, lies immediately upon the pericranium, being only separated by a very thin layer of cellular membrane, and this becomes distended to such a degree that I have seen it half, or three quarters, of an inch in thickness; you will easily understand how this soon produces mortification, and how incision prevent it taking place. There is still an additional reason for your keeping your eye upon these cases, for you may have extensive sloughing of the pericranium, and the dura mater and pericranium being supplied by the same vessels (indeed they may be considered as part of the same membrane), the dura mater is affected, becomes sloughy, and the patient is speedily destroyed.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

THERE are two diseases that have been called ischuria renalis and ischuria vesicalis; ischuria renalis is suppression of urine, and ischuria vesicalis retention of urine. Now, we find suppression of urine produced by inflammation, and by the various causes of granular degeneration. It is connected with anuria, and sometimes has proved suddenly fatal without any previous disease. Some poisons will produce it, such as corrosive sublimate, and it exists in malignant cholera and suppurative phlebitis. It seems to occur in most cases in connection with chronic disease of the urinary organs, or as an effect of nephritis. Suppression of urine is accompanied by restlessness, low spirits, nausea, increasing drowsiness, delirium, brown tongue, rapid pulse, and other typhoid symptoms, ending from two to six days in hiccough, convulsions, and death. Granular

degeneration may be found after death. The external treatment consists in cupping and blistering the loins; the internal in stimulants. Tincture of cantharides is sometimes useful. In ischuria vesicalis the kidney does its work, but the bladder does not perform its office; consequently, there is retention of urine. The general symptoms may be very much like those of ischuria renalis; but though the symptoms of both may be much the same, yet there is this difference:—In ischuria vesicalis there is a certain amount of tumour and fullness above the pubis, extending sometimes to the umbilicus, and it has been known to reach as high as the epigastrium; this tumour sounds dull on percussion, the dullness becoming more and more apparent as you percuss near the pubis. Here the catheter should also be tried, for you should not be content with percussion. The retention may arise from obstruction to the flow of urine from prostatic or other disease, or from paralysis of the bladder. Sometimes this latter is connected with other forms of paralysis, particularly paraplegia in its worst shape; it occurs likewise in hysteria and bad fevers. When the disease continues long enough to produce suppression, there is an urinous smell from the breath; but there is no dribbling from the bladder. This may progressively pass from stupor to lethargy and fatal coma; but, generally speaking, before it reaches this intensity, the neck of the bladder is paralysed and incontinence of urine ensues: so that, that which began a retention, and deficiency of power to evacuate the bladder, now becomes incontinence from paralysis of the same organ. It is a very common mistake to suppose, that because there is incontinence, retention of urine does not exist. The bladder contains a large quantity of offensive urine at the very time the urine is dribbling away; here the catheter is the only cure. The urine when drawn off, if it has been retained under these circumstances, is generally extremely offensive. It has become decomposed, and no wonder that it should have produced so much constitutional disturbance. If the disease arise from paralysis, and there is no disease of the bladder, produced by previous retention, the tincture of cantharides and oil of turpentine are useful in exciting the bladder to muscular action. This combination has been found useful in hysterical retention of urine; sometimes it may be continued for a long time before a slight degree of strangury is produced, when the bladder resumes its proper action.

I shall now proceed to consider the various diseases of the whole system, which are manifested by diseased states of the secretion of the urine. It is important to observe this secretion in disease, because it is an index of the state of the whole system. Healthy urine is a clear amber-coloured liquid, of a specific gravity from 1.015 to 1.020. This is below the averages stated by Dr. Christison and other Scotch authors; from their calculations, it would seem that Scotchmen make water of a greater specific gravity than Englishmen. Dr. Christison states it to be about 1.020, and the late Dr. Gregory states it as above 1.025; whereas, Dr. Prout brings it down to 1.012. There is, of course, a great difference between the water passed at different times of the day, and the various circumstances which, independently of disease, influence the condition of urine, are to be taken into account. For example, water made two or three hours after a meal is necessarily lighter, and it likewise varies very much, according to the nature of the food used. On the other hand, the urine which is passed in the morning after awakening is heavier, and its gravity is generally considered as that of healthy urine. The urine passed soon after a meal used to be called the "*urina pallida*," and that after sleep the "*urina sanguinea*," which was supposed to derive its colour from a secretion from the blood; but various other circumstances alter it. Warm and cold weather will affect it; in warm weather particularly, after exercise or profuse perspiration, the urine is scantier in quantity and of a higher specific gravity; in cold weather, on the other hand, it is secreted more abundantly, and is of lower specific gravity. Then there are other circumstances which we must notice, that alter the

condition of the urine. Increased exertion, for example; will diminish the quantity and raise the specific gravity, merely by dispersing the watery fluid of the body. Variations in diet, too, will cause a difference; excess of animal food and stimulating drinks will form the *urina sanguinea*, because they have the effect of increasing the solid constituents of the urine—the urea and uric acid. I state this in opposition to some of the statements of Liebig. It is the result of the observation of many—Dr. Prout among others—and I believe it to be quite true. Under these circumstances the specific gravity is high; the urine is high-coloured, and very apt to become turbid. On the other hand, an exclusively vegetable diet—more particularly diet selected from succulent and amylaceous, not glutinous vegetables; also spare diet generally cause the urine to be clearer and more watery, and of less specific gravity. Then there are various additional circumstances, too, that may affect the appearance of the urine. For instance, where animal food, stimulating liquids, or exercise, are carried to too great a degree, the quantity of water in the urine is much diminished; it does not retain in solution the proper proportion of solid matter, the uric salts are deposited, and hence the various sediments in the urine which are met with in connection with these causes. This deposition of saline matter takes place even in health, under extreme circumstances. Cold water, by bringing the urine down to a lower degree of temperature than natural, will also cause a deposit to take place. Now, we find these deposits are of two classes, and connected with comparatively opposite states of the system and urinary organs. One is of a reddish or yellowish brown colour, and consists either of lithic acid or lithate of ammonia; this occurs in conjunction with urine of high colour and considerable specific gravity; it is called red sand. The other class is of an opposite sort, consisting of pale deposit, almost white-phosphate of lime, and ammoniaco-magnesian phosphate. These occur with an alkaline state of the urine and a diminution of its specific gravity.

These are the two classes under which we shall make some observation on their causes, and the pathological state they indicate. First, with regard to the lithic acid deposit, called lithuriasis, or lithuria, that red deposit, which enters into the composition of various kinds of calculi. The colour of the sand is derived from some colouring matter taken up by the lithates at their formation. The relation has not been fully made out, but when the precipitates take place, the deposits carry a good deal of the colouring matter with them. The history of the matter has not been clearly made out. In these the lithic acid may exist in excess, or the lithate of ammonia may be in excess. Though the specific gravity is high, it is not always in proportion to the quantity of the deposit. These deposits of lithate of ammonia, super-urate of ammonia, and super-urate of soda, occur in great abundance at the termination of various febrile and inflammatory diseases, and constitute the litho-uric sediment. This is the commonest of any deposits that occur in the urine. Pure lithic acid is sometimes deposited in the form of a red crust on the vessel. In the greater number of cases, it is the lithate of ammonia that is precipitated; and this is sometimes mixed with earthy phosphates. Another modification of lithuria is presented in hectic fevers and low inflammations. This precipitate is pinkish, or of a lighter colour than the red sediment already spoken of. This seems to be merely a modification of lithic deposit, occurring sometimes in conjunction with the phosphates, by which it is rendered paler. This sediment is rather important, as an indication of a low febrile state of the system. Sometimes, there is a rose-pink sediment observed, in connection with some structural diseases of the liver. These deposits, if they occur independently of any affection of the urinary organs, are usually indicative of febrile disturbance; and their presence is often to be considered in severe fevers rather salutary, than otherwise, as they imply that the fever has begun to subside. Still there sometimes are red deposits, which take place in the urine to such an extent as

to constitute what is called red sand. These are common in infancy, and early periods of life; afterwards, they most commonly occur at, or above, the age of 40; more frequently in old age, than in infantile, adult, or middle life. Their presence may be traced to using a considerable quantity of animal food, which the power of the stomach, more or less impaired, is unable to digest. Lithic deposit and sand also occur from the excessive use (either as to time or quantity), of mineral acids, such as the muriatic or sulphuric acids. It has likewise been observed that indigestible articles of food, such as pastry, are pretty sure to produce it in certain persons, by the acid secreted. We know that indigestible articles of food, such as pastry, &c., will irritate the stomach, and cause it to secrete an excess of gastric juice. Perhaps it is for this reason, that indigestible matters cause an excess of acid in the urine. If, however, acid gets into the stomach, a great quantity of it is apt to be associated with excess of acid in the urine. In persons above the age of forty, generally speaking, in persons who lead sedentary lives, and use animal food freely, gastric irritation is very apt to prevail. This is one reason why the disease exists so much in such persons. That sedentary habits assist very much in producing lithiasis, may be known from the fact, that persons who have habitually taken a great deal of exercise, and who have discontinued it altogether, are attacked with this disease. Sir Benjamin Brodie has given a good illustration of this. Liebig has started a hypothesis, that the uric acid owes its origin to the urea, into which the fibrinous and albuminous matters become converted. This is his notion; but it is only hypothesis, not borne out by fact. There are other hypotheses, but, whatever the cause, the urine seems capable of causing the deposition of uric acid. Lithic acid deposits are not common in Ireland or Scotland, although atonic dyspepsia is prevalent there; hence Dr. Miller maintains that lithuriasis is not dependent on diseases of the digestive organs. In those countries the diet is poor and bad, and, as already said, atonic dyspepsia exists to a great extent, unaccompanied, however, by an excess of acid secretion, or if the latter be formed, it is of a vegetable, not a mineral, acid nature, such as the hydrochloric, or whatever other acid, enters into the gastric juice. Now, it is in connection with that form of dyspepsia occurring in plethoric habits, that this deposit is apt to be found; therefore the view of Dr. Prout, that it is dependent upon disorder of the digestive organs, such as inflammatory or gastritic and duodenal dyspepsia, is a correct one. It is caused also by all those complaints connected with imperfect action of the liver; or with the want of a due balance of all the secretions. Acid beverages are said to produce it; an exception to this occurs in cider and hock, which although they contain some acid, do not produce it. The reason of this is obvious; the acids they contain are not decomposed, are not carried through the circulation, but are digested. The acetic acid which they contain is less easily decomposed. The beverages observed to produce a deposition of lithic acid are: hard beer, and punch, in excessive quantity; these not only contain a certain quantity of acid, but, likewise, produce a low inflammatory state of the stomach, digestive organs, and liver. Accordingly we find the disposition to gravel occur very commonly in beer countries, more especially in Kent, Wiltshire, and Boston. Among the common causes that produce a disposition to lithuriasis are injuries to the back, interfering with the secreting power of the kidneys. Some injuries in the back lead to an alkaline state of the urine, but frequently an opposite state is the effect. Exposure to cold, where the action of the skin is interfered with, will produce attacks of gravel. This is more particularly observable on the coast of Norfolk, which is exposed to the prevalence of cold easterly winds, which check the perspiration. There appears to be, in all these different conditions, a general excitement of the whole nervous system; and we find, that there is, in some instances an increased action of the kidneys, as in the case of injuries to the back. So, likewise, at

a very early stage of nephritic inflammation, we find a very acid state of the urine; so that it would seem that wherever there is irritation in the kidney, it is accompanied by acid secretion: the excitement of the kidney appears to increase the acidity of the urine, these, in combination with a deficient quantity of water, seem to be the chief and immediate causes of this deposit taking place in the kidneys or the urine. The symptoms of lithic acid in excess may be those of uric irritation or disorder of the whole system or of the digestive organs in particular. The dyspepsia I mentioned as commonly accompanying it, is usually gastritic, accompanied by some pain or tenderness after eating, and fulness of the stomach. The acid may produce irritation in the kidneys themselves, and this is an intimation of calculus being formed. Where a considerable quantity of acid urine is secreted, the attack may be accompanied with nephralgia or lumbago. The nephritic or vesical symptoms may not exist alone; they are often accompanied, in persons disposed to be gouty, by rheumatic and gouty pains in various parts of the body. When the different causes I have adverted to, have been put into action, and red sand does not appear in the urine there frequently will occur various diseases in the system, such as gout, or rheumatism in some form, or sometimes diseases of the skin, especially those of an eruptive character. When the urinary organs are the seat of irritation, the deposit consists of minute crystals, causing pain and hæmaturia. But the bladder alone is not the seat of deposit, as a tendency to form it, exists in the kidneys and ureters. These attacks of gravel, with pain in the region of the kidneys, are brought on by any of the causes already mentioned. The "*modus operandi*" of such causes is either by increasing the quantity of acid in the system at the time, or by producing an excessive determination of blood to the kidneys.

Now, with respect to the treatment generally applicable to these cases of red sand deposit, the indications are to remove plethora or irritation wherever it exists. If the formation of red sand depend upon the state of the digestive organs, the treatment should be that applicable to gastritic dyspepsia, or congestion of the liver, to which I have already referred; but if the irritation be dependent upon injuries of the loins, or the use of stimulant drinks, &c., then blood-letting may become necessary. Evacuants, and moderate living are, likewise, especially indicated; avoiding much animal food, and those articles of diet which tend to produce indigestion, or secretion, of acid. Vinegar, and the more permanent acids, must be also refrained from; in fact, you must suit to the digestive organs the kind of food they can most easily master.

Farinaceous food, especially that which contains a large proportion of starch, barley, &c., with some succulent vegetables, and a small quantity of meat and fish, answer best. These are the chief indications of the general treatment. There is also another indication, that of getting rid of the acid already in the system. This may be done by keeping it as soluble as possible. The tendency to deposit arises from two causes: an excess of lithic acid being set free, which is insoluble, as pure lithic acid. The chief remedies are alkalies and diluents. There can be no doubt these remedies act not merely on the urinary organs, dissolving what is already deposited, and neutralizing the acid, but act through the system on the blood and on the digestive organs, soothing any existing irritation. The alkalies to be given must not be so strong as to irritate the digestive organs. *Liquor potassæ* should be given in proportion to the state of the stomach, not too much in quantity, for if given in excess, the alkaline state may supervene, and other deposits take place. In every respect alkaline carbonates seem preferable to pure alkalies; both because they irritate less, and can be given in larger doses without producing irritation. Some use alkalies in combination with acids, such as the citrates and the tartrates. The carbonates of soda and potash are given, but potash is generally preferred because it forms a more soluble compound with lithic acid than soda. It is useful for the sake of the digestive organs to vary them. Liquid magnesia is sometimes useful; any benefit it produces

is referrible more to its operation on the digestive organs, than the urinary system. Soda water is a good thing when it is pure. It is necessary to watch the effect of all these alkalies, and to test the urine from time to time. So long as it remains distinctly acid, the alkalies may be persevered in, changing them from time to time; but if it begins to become alkaline and turbid at the same time; it is a proof that the alkaline treatment is being pushed to excess. It is important to use diluents in the treatment of the lithic acid diathesis. Another indication to be attended to is, to produce a determination to the skin. This is best carried into effect by warm baths, warm clothing, and friction. Sometimes very severe symptoms are produced in the kidneys by a fit of gravel. When there is febrile disturbance with scanty and high-coloured urine, dependant upon nephralgia or lumbago, it is useful to employ stimulant diuretics, to assist the kidneys to get rid of the matter that is irritating them. Under these circumstances, it has been found useful to give turpentine or tincture of cantharides. A popular remedy in such cases, is leek broth or onion porridge. The diuretic remedies are to be combined with demulcents, and if there is much pain, it is necessary to give narcotics to soothe the pain. Sometimes the mineral waters, of Vichy, Carlsbad, and Cheltenham, are useful as acting on the urinary organs, and removing the congestion and plethora of the liver and others of the digestive organs. In cases of actual gravel or stone, it may be necessary to use narcotics more freely, and, at the same time, to continue the alkaline diluents. White sand, consisting of phosphate of lime and magnesia,—ammoniac-magnesian phosphate—and phosphate of lime, magnesia, and ammonia are usually found in connection with an alkaline state of, and a deficiency of acid, in the urine. They seem to be associated with a defective action of the kidneys, and general debility of the system, which produce the deposit in question.

HOSPITAL REPORTS.

ST. GEORGE'S HOSPITAL.

William Woodward, æt. 71, admitted under Mr. Hawkins; with large femoral hernia of right side, the skin covering the tumour is inflamed, and the inflammation is spreading in the direction of the crest of the ilium; the whole abdomen is very tense, tympanitic, but not tender, and evidently containing fluid, which gravitates when he lies upon his side; his bowels are confined, he has had but one small evacuation for the last ten days, and that about four days ago. His stomach has been sick for the past week, and he has now stercoraceous vomiting; his tongue is brown and dry; pulse 110, small, and his countenance anxious.

He has had hernia for 40 years, which has appeared to have increased after a fall he met with three weeks since, at which time the constipation appears to have set in. Attempts were made ten or fourteen days ago to reduce the hernia by the taxis, since then the constipation has become more obstinate; the redness of the skin first made its appearance about three days since.

Operation.—The cellular tissue below the integuments, fascia, &c., were all matted together by lymph and pus, and had become gangrenous, and were easily torn through by the director. The true hernial sac was found to contain a quantity of omentum with lymph and pus; at the bottom there were three inches of small intestine quite gangrenous, and firmly adherent to the stricture. An incision was made around the stricture to relieve the congestion, and the bowel was laid open. Before he was removed, there was a discharge of many ounces of green, liquid, very offensive matter. After being dressed in the usual manner, and placed in bed, a linseed poultice was placed over the inflamed parts.

6 p.m. Complains of much griping pain in the abdomen; sickness of stomach much the same.

R. Magnes. sulph. ʒj.

Aquæ menth. pip. ʒiiss. ft. haustus. 3tia q.q. hora sumend.

9 p.m. Sickness still continues; pulse 120. To have ʒiv. of brandy and soda water.

29th. The vomiting not much relieved, but the hiccough, which was constant yesterday, is now gone. Enormous discharge of very offensive matter from the wound; abdomen quite tympanitic; pulse 100, small; tongue brown and dry; he has passed a good deal of mucus from the bowel; some pieces of dead omentum were removed. Appr. cataplas. anthemidis. Continue brandy; to have in addition white wine ʒij and porter ditto.

R. Calomel gr. vj. pulv. opii. gr. j. statim ft. bolus. sumend.

The improvement from this date was progressive up to Dec. 2. The discharge from the bowels assumed a healthier character, the inflammation ceased to spread on the skin, the edges of the wound, which at the time of the operation were sloughy, began to secrete healthy pus; the pulse became strong and steady, and the discharge of *fæces per anum* was re-established. This amendment, unfortunately, was not permanent. On the date above mentioned, the sloughing began to extend from the edges of the wound, to which it had been previously confined, the pulse became smaller and more frequent, the voice weak, and the extremities cold. At this period the quantity of stimulants which he had been taking continually since his admission, was increased considerably. Applicatur cataplasma sem. lini vulneri; to have, in addition to his previous allowance, 28 ounces of white wine, and 10 ounces of brandy, with porter and beef-tea; to have arrowroot and chop if he wishes for them. Under this plan of treatment he appeared to rally for two or three days, when the unfavourable symptoms already detailed again set in, accompanied by drowsiness, vomiting, and discharge of coagula from the wound. This state of things continued until the 5th, when he gradually sunk, and died early on the morning of the 6th, ten days after admission to the hospital, and thirteen from the date of the fatal fall.

Autopsy, 34 hours after death.—The stricture was found within a very few inches of the *caput coli*. No trace of inflammation was perceptible on the peritoneum, and the intestines were equally free, with the exception of a small patch of lymph on the small intestine near the stricture. The opening in the bowel was perfectly pervious, the small intestine preternaturally large, and its mucous membrane highly congested, without, however, being actually inflamed.

John Mash, æt. 50, admitted under Mr. Walker, with oblique inguinal hernia of the left side, of three or four years standing. Four days ago it came down, when his unavailing efforts to reduce it, produced excoriation of the scrotum; up to the period of its last descent, the hernia admitted of easy reduction. He complains of sick stomach, and of pain in the tumour, extending thence over the lower part of the abdomen; the tumour feels firm and tense; the bowels have been twice moved. Since the occurrence of the stricture, nothing has been passed save a trifling portion of scybalous fæces.

The operation was performed at 10½ p.m. The subcutaneous cellular tissue is filled with blood; the hernial sac is exceedingly thick, and of a white fibrous appearance; no fluid in the sac, which contained omentum and large intestine; the intestine and omentum were firmly adherent; the omentum was behind the bowel, and descended much farther down, having contracted adhesions to the bottom of the sac; it was much injected with blood. After a free division of the stricture, the bowel and omentum were allowed to remain.

R. Magnes. sulph. ʒj.

Haust. salini ʒss. 2da. q. q. hora, sumend. si opus sit.

Oct. 19th. Bowels not open; pulse hard, and rather sharp; complains of pain in the lower part of the abdomen, principally on the right side; has had but little sleep.

R. Appr. hirud. x. parti dolenti.

Administr. enema oleosum statim.

R. Calomelanos gr. iij. ft. pil. 3tia q.q. hora ad tertiam vicem sumenda.

Rpr. haustus. Applicetur fœtus anthemidis vesperi.

Bowels have not been opened, the pain is somewhat relieved, the tongue is brown, and rather dry.

R. Haust. sennæ ʒij. s. s.

Rpr. enema; omittit. haust et pilul. calomel.

20th. Bowels not open, pulse very small, stomach slightly sick.

Rpr. magnes. sulph. omni hora. Habt. enema terebinth.

2 p.m. Cataplas. sinapis. abdomini.

R. Calomel gr. iv.; extr. colocynth. co. gr. viij. statim.

Ht. ol. ricini ʒss. post horas tres.

Beef tea qj.

21st. Bowels not opened; tongue brown and dry; pulse falling; extremities cold; slight delirium. Gut in the sac much distended, principally with flatus, which readily escaped with some fluid feces on an opening being made into it. Slight relief was produced by this means.

Died 1½ p.m.

Examination 12 hours after death.—The convolutions of the small intestine were glued together by recently effused lymph. The intestines were enormously distended with gas. The stomach was drawn down, and the left extremity of the transverse colon was pulled through the ring, along with the omentum into the scrotum. The omentum and intestine were in the tunica vaginalis, and the former was adherent to the testicle. By these adhesions, and by the strong ones existing between the portion of protruded intestine and the omentum, a firm band was formed on the left side, behind which were situated several convolutions of small intestine, and behind them the descending colon and sigmoid flexure. The bag of the tunica vaginalis, and cellular tissue of the scrotum, were filled with serum and purulent matter.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Feb. 20th,

On Vesico-Vaginal Fistula.—It may be considered as an axiom in medicine, that the more difficult of cure a disease, is the more numerous are the methods proposed to attain this end; in this respect, the affection mentioned above has been an object of incessant and extraordinary attention to modern surgeons. Before giving the details of the case operated upon by Professor A. Berard, which terminated so unfortunately, I will take a rapid review of this infirmity. 1. *Causes.*—Wounds produced by falls on sharp instruments; operations on the neck of the uterus; applications of the various instruments in difficult labour; lithotomy, *per vaginam*; of seven such cases, mentioned by Professor Velpeau, in his lectures, five were affected with fistula (1); pressure of the head in protracted labour; abscesses between the bladder and vagina; foreign bodies, such as calculi in the bladder, or in the vagina (ivory pessary, as in the cases related by Dupuytren); ulcerations of a cancerous, or syphilitic nature. Dr. Vidal de Cassis (2) states that he cannot admit the possibility of venereal ulcers producing this fistula, although numerous cases of chancre, &c., have been observed by him, he never saw one on that portion of the vagina corresponding to the bladder. II. *Seat.*—It is highly important, in order to determine the most appropriate mode of treatment, to ascertain the precise seat of the fistula. It may occupy the urethra, the neck, or the body of the bladder; sometimes, the two last situations are ulcerated, or, as in the case of Professor A. Berard, the entire vesico-vaginal septum may be destroyed. III. *Symptoms.*—Retention, followed by incontinence of urine: the urine may escape *per vaginam*, in a continual or intermittent stream, or may cease in certain positions; thus, when the fistula is situated in the urethra, it is discharged only during micturition; when in the neck of the bladder, none may flow out for several hours, and the opening is very small, a considerable por-

tion may pass through the urethra; when the fistula is above the insertion of the ureters, the urine is retained some time, especially if the patient is standing or sitting; this latter fistula, according to Professor Velpeau, is the most easy of cure (3); finally, if its seat be the body of the bladder, in this case the urine flows constantly. IV. *Complications.*—Owing to the non-distension of the bladder, on account of the flow of urine, the parietes of the bladder become more or less retracted, and the degree of retraction depends upon the length of time that the form of fistula under consideration has lasted (4). 2^o It may be complicated with stricture or obliteration of the urethra, as in the cases related by Fr. Hoffman (5), and Saucerotte (6). 3^o Or with inversion and protrusion of the bladder through the opening, as in the case of Professor A. Berard. 4^o Abnormal filamentous adherences, extending across the vagina. 5^o Stricture of the vagina: sometimes of all that portion situated below the fistula, at others times there is a species of perforated septum through which the urine after having accumulated, escapes as in the cases recorded by Chopart (7), Deyber (8), J. L. Petit (9). In this complication, the catamenial flux is accompanied by considerable pain and serious accidents, on account of the difficulty with which the blood escapes. 6^o Calculous concretions, not only in the bladder (Professor A. Berard's case), but likewise in the vagina, or fixed on the mucous membrane of the vulva, as in a case quoted by J. L. Petit (10). 7^o Vegetations: Henri van Heer's case, mentioned by Fr. Hoffmann (11). 8^o Recto-vaginal fistula, as in the case quoted by Fr. Hoffmann (observed by Hilscher), and that mentioned by Dupuytren; in the latter, there was also obliteration of the vagina. V. *Diagnosis:* When the urine escapes through the vulva, the disease is easily known; but as has been already stated, this does not always take place, it is therefore, necessary, as the following observation shows, to place the patient in various positions, in order to form a correct diagnosis. A person was brought to Dr. Vidal, who was said to be cured of this disease; while lying down she lost no urine, but when requested to get up and walk about, it escaped immediately, and in sufficient quantity to wet the floor. This author further remarks, that whenever the fistula is not deeper than an inch, or an inch and a quarter, it is urethral not vesical (12). Professor Velpeau states, that when the speculum and examination *per vaginam* have failed, it may be discovered by injecting a coloured liquid into the bladder, or introducing a bit of soft wax into the vagina (13). VI. *Divisions.*—According to the distinguished surgeon of the Charité, these fistulae ought to be considered under three heads: 1^o Urethral; these are easily cured, by employing the catheter each time the patient wishes to void the bladder; nature will do the rest. Another method is dividing the urethra from the meatus to the fistula; two cases were successfully treated in this manner. 2^o Those occupying the trigonus vesicalis; in all probability, the successful cases published by authors, were of this description. 3^o Vesical. No authentic case of cure of this species is on record, none therefore ought to be published as successful, without indicating the precise seat of the lesion.—VII. *Treatment:* this may be considered under the following heads—1^o Curative, and, 2, palliative measures.—1^o Curative Measures. When the fistula is complicated with obliteration, or stricture of the urethra, as in the cases of

(3) Jeanselme *Loc. Cit.*, vol. ii. p. 241.

(4) Michon Des opérations qui necessitent les fistules vaginales, 1843, p. 25.

(5) Fr. Hoffmann, Opera. De incontinentia urinæ ex partu difficili.

(6) Mémoires de Chirurgie, vol. ii.

(7) Maladies des Voies Urinaires, p. 483.

(8) Mémoires sur les fistules urinaires vaginales, (Repertoire d'Anatomie physiol. et pathol. de M. Bouchet.), vol. v.

(9) Traité des Maladies Chirurgicales.

(10) *Loc. cit.*

(11) J. L. Petit. *Loc. cit.*

(12) Traité de pathologie externe, vol. v. p. 567.

(13) Jeanselme *Loc. cit.*, vol. ii. p. 241.

Henri Van Heer Saucerotte, and Percy (14); or with diminution of the size of the vagina, as related by Chopart (15), Erhman (16), and Mr. Luke (17); or with calculi in the vagina, as mentioned by J. L. Petit, who, after making two incisions in this species of septum, removed the calculus piece-meal, and strove to dilate the opening by means of a bit of cork (18); or with calculus in the bladder, as in M. Gosset's (19), and Professor A. Berard's cases. These difficulties overcome, an operation may then be attempted, and the different methods proposed may, according to Dr. Vidal de Cassis, be divided into direct and indirect.—*Direct Means.* They comprise (a) *Plug:* Desault and Chopart recommended it combined with the catheter left constantly *in situ*. In speaking of this method, Boyer (20) states that in some few cases a gum-elastic catheter may be advantageous, but in general it cannot be borne, or becomes useless by changing its position, so that its internal extremity is below the orifice of the fistula, or passes through that opening into the vagina; that owing to the great length of time which elapses (in some cases months, in others years), ere a cure is effected in this disease, that we should rather attribute all the merit to nature; and that the plug, which by separating the edges of the fistula, prevents her curative efforts, should not be used. Sabatier (22) states that the catheter is useful, only when the fistula is urethral. Dr. Vidal de Cassis says (23), that when the fistula is small and recent, a cure may perhaps be attained by the catheter alone, but that such an event is impossible with the plug. Dr. Michon states, that catheters, employed alone, are not of any great benefit, but that they may be advantageous as adjuvants to other measures, and that when the plug is had recourse to, it ought to be against hæmorrhages, as recommended by J. L. Petit. Mr. Reid (25) proposes a gum elastic bottle, whose neck, introduced into the fistula, is distended with air, so as to entirely fill the opening. The urine no longer passing through it, the fistula contracts gradually; finally, the neck of the bottle is distended less and less, until the fistula is obliterated. Dr. Fabr (26): that Desault's method does not reckon in its favour any really au hentie cures, in cases of old perforations of the bladder. (b) *Cauterisation*, with the actual cautery, nitrate of silver, or a liquid caustic, by means of a hair-brush. The first is perhaps preferable, as it acts on the whole surface of the fistula. Dr. Michon (27) relates three cases in which Dupuytren employed the actual cautery. In the first, a cure was effected by two cauterisations, in the second, twenty-one applications were made in the space of ten months, which produced only an amelioration; in the third, a relapse took place, a second cauterisation caused the urine to cease to flow through the fistula, whilst the patient remained in the hospital (25 days). In a case operated upon by Delpech, the actual cautery was employed twice, the nitrate of silver once; the woman was cured. Another case is related in the London and Edinburgh Monthly Journal, January, 1842. Dr. Berthet (28) in a memoir read before the Academy of Medicine, advises as curative means, the actual and potential cauteries, a proper position, cylinders of cotton in the vagina, &c. diet in which little or no liquids are taken (c). *Suture and autoplasty after cutting off the edges of the fistula.*—Various methods have been proposed

(14) Percy, Réponse à Saucerotte, dans les mémoires de Chirurgie de ce dernier.

(15) Maladies des voies urinaires, p. 483.

(16) Répertoire d'Anatomie phys.-pathol. de M. Breschet, vol. v.

(17) The Lancet, vol. i. 1832-1833, p. 679.

(18) Michon. *Loc. cit.*

(19) The Lancet, vol. i. 1834-1835, p. 345.

(20) Traité des Mal. Chir. vol. ix. pp. 55 and 56.

(21) Médecine opératoire, vol. iv. p. 446.

(22) Traité de med. oper. vol. vi. p. 455.

(23) Pathologie externe. et med. oper. vol. v. p. 573.

(24) *Loc. cit.* p. 51.

(25) Bibliothèque du med. prat. vol. i. p. 154.

(26) Gaz. des Hop. 1837, p. 41.

(27) *Loc. cit.* p. 63.

(28) Medical Times, vol. x. p. 326.

(1) Jeanselme Leçons Orales, du Professeur Velpeau, vol. ii. p. 140.

(2) Pathol. Exter, vol. v. p. 568.

by M. Malagodi (29), M. Lewzinsky, by whom the suture was performed by means of needles, passed from the bladder into the vagina (30), M. Nœgelé (31) M. Deyber (32), Professor Roux, who employed the twisted suture (33); Dr. Colombat (34); Professor Lallemand. The instruments employed are, a large catheter, about four inches in length; a double hook, which may be pushed out of, and drawn into, the catheter *ad libitum*; a round plate on the catheter in order to prevent its penetrating too deeply into the bladder; a spiral spring, destined to pull the small hooks forwards when fixed on the posterior edge of the fistula. The catheter is introduced into the bladder, and the two hooks made to pass through the fistula into the vagina, when in this position, a little lint or fine cambric is placed between the plate and the orifice of the urethra, and the spring let loose, draws forwards the posterior lip of the fistula; and the inferior wall of the urethra being pushed back by means of the circular plate, the opening is obliterated (35). Dr. Laugier recommends a small forceps introduced *per vaginam*. By Dupuytren, a catheter, containing two small hooks, is introduced into the bladder, and both sides of the fistula seized by the hooks are brought into contact with each other. Professor Gerdy, before uniting the two sides, dissects a portion of the mucous membrane of the vagina, so as to cause the suture to act on a large surface instead of upon the narrow edges of the fistula; the case in which he tried this method, though ameliorated, was not cured (36). Dr. Leroy d'Etiolles (37) after denudating the vagina to the extent of about four lines, introduces an ivory pessary, to which is attached a semicircular metallic rod, whose centre is placed on the fistula; the vagina is then plugged with lint, covered with caoutchouc, or with caoutchouc itself, the septum is thus raised, and the raw surfaces unite below the rod; when this occurs, the apparatus must be removed as follows, so as to avoid destroying the adhesions: first, the lint, then the pessary without the rod; and finally the rod itself, by a semi-rotatory motion, so as to bring towards the posterior wall of the vagina, the convexity previously in contact with the fistula. Dr. Jobert de Lamballe (*vesicoplasty*) proposes closing the fistula by means of a portion of integument taken from the labia or buttocks, and, if necessary, from both; the flap though, ought not to be too large, and great care must be taken not to make it too small. A case of cure, by this method, was published in 1836-38. Professor Velpeau (*clitroplasty*), a flap is taken and allowed to cicatrize; then the surfaces of the flap and fistula are made raw by ammonia, and kept in contact by cylinders of lint introduced into the vagina; a sound is placed in the bladder, and the whole apparatus kept in place by a T bandage. (B) *Indirect means*. Dr. Vidal de Cassis, in 1834, proposed obliterating the vagina instead of the fistula, and says it is applicable to the three following cases:—1°. Where the loss of substance comprises the greater portion of the vesico-vaginal septum. 2°. Where the fistula cannot be cured by the other methods. 3°. When it is situated so far back that the uterus forms its posterior limits. (40). Professor A. Berard (41) admits its necessity but in the two first, where the fistula is very considerable, permitting the urine to escape freely, because it may happen that though the fistula has resisted the numerous methods employed, that

nature may effect a cure. Of this the following case is a proof: A woman who had suffered for years from a fistula of this species, and who had been under the care of several surgeons, and among the number, the Professor himself, discontinued all remedies, and on recent examination, a spontaneous cure was found to have taken place. As to the presence of the uterus, if, on the one hand, it constitutes a real inconvenience, on the other, it may, by descending, perform the office of an obturator, and obliterate the fistula. The case operated upon by Dr. Vidal, though it failed through the carelessness of a pupil, who, in sounding the patient, burst the cicatrix, still proves—1°. That the catamenia may flow through the urethra. 2°. That the urine may be driven forcibly out of the new cavity. 3°. That this liquid does not penetrate into the peritoneum through the uterus and Fallopian tubes. 4°. That the cicatrix lasted a sufficient length of time to arrive at the conclusion, that no calcareous deposit would have taken place (42). Dr. Faber (43) proposes an operation similar to that of *fistula in ano*, i.e., dividing the parts from the meatus as high up as the fistula.

Palliative measures.—These consist in great cleanliness, and the use of an apparatus placed so as to collect the urine as it escapes. Feburier, Messrs. Barnes, Guillon, and Duges, have invented instruments for this purpose; those of the two last may be considered merely as modifications of that of Mr. Barnes.

Case.—Mrs. —, ætat. 29, was received in the wards of Professor A. Berard, at the *Pitié*, affected with vesico-vaginal fistula, caused by the pressure of the head of the fœtus during protracted labour; soon after her delivery, the urine escaped *per vaginam*, excoriating not only the os-externum, but likewise the upper and inner part of the thighs. On examination, a round, red, soft, tumour, of the size of an egg, was observed, descending between the nymphæ; on reduction, it was found to be formed by the fundus of the bladder (pushed down by the abdominal viscera), through a fistula which occupied the vesico-vaginal septum, the trigonus vesicalis and the posterior wall of the urethra. When reduced, the finger was passed into the bladder, which contained several calculi; these were removed, and the local irritation calmed by appropriate remedies. A sound was placed in the bladder, and Viehy water was advantageously administered to combat the tendency to the formation of urinary calculi. These measures being but palliative, further means must necessarily be employed. Professor A. Berard after passing them in review, convinced of the impossibility of obtaining a cure by direct means, decided upon obliterating the vagina; which operation he performed as follows. The patient was placed as in the operation for lithotomy, two elliptical incisions were made somewhat within the nymphæ and behind the meatus urinarius; the mucous membrane was next dissected carefully for about an inch; the species of *diaphragm* thus obtained, presented externally a raw, and internally the normal surface; the *suture a points passes* (in which the needle is made to enter near the spot where it came out, so that the thread does not pass on the edge of the wound) was made round the small circumference of the diaphragm, commencing and terminating superiorly. Belloc's sound was next introduced through the bladder into the vagina until it appeared at the vulva; the ends of the thread passed into the openings at its extremity, were drawn through the bladder and urethra; the threads passed into the eyes of the female catheter, and drawn gently from before backwards as the instrument penetrated into the abdomen, so as to cause the bleeding surfaces to unite; finally, that portion of the vagina deprived of its mucous membrane was united by the quilled suture. The consecutive accidents were slight; there was little or no fever; and but moderate swelling of the parts; during three weeks everything seemed to promise a successful termination; cicatrization

was nearly complete, and the urine, quite limpid, flowed freely through the catheter, when the woman from exposure to cold, was seized with peritonitis, and died seventeen days after. The *autopsy* detected signs of inflammation of the peritonæum lining the hypogastrium, the right lumbar region and right hypochondrium; the vagina was nearly obliterated, two small openings existed superiorly and inferiorly, the former communicating with the bladder, the latter with the vagina, two probes introduced into these openings touched each other in the centre of the fistula; the adhesions of the vagina were about three quarters of an inch in length and four lines in thickness; signs of pleuritis likewise existed.

Academy of Sciences—Sitting of the 17th Feb. M. Elie de Beaumont in the Chair.—Received: Nautical Almanack and Astronomical Ephemeris, for the years 1846, 1847, 1848, presented by W. S. Stratford, Esq., Superintendent of the Nautical Almanac; Memoir of Francis Bailey, Esq., D.C.L., Oxford and Dublin, &c. &c., by Sir John F. W. Herschel, Bart. K.H., M.A., D.C.L., F.R.S.L. & E. F.R.A.S., &c., forwarded by the Royal Astronomical Society; Map of the boundary lines on the frontiers of Canada and the United States, by Major Graham, presented by the American Minister.

On an Artificial Arm; presented by M. Van Peterssen. Report of Dr. Magendie.—Though man's genius has enabled him to construct artificial noses, teeth, palates, hands, legs, &c., still they are far from perfection, and tend more to hide a deformity, than to perform the functions of the lost part. This is not astonishing, for the living organs solve such complicated problems of mechanics, produce such diversity of effects with such simple means, that few have attempted to imitate them. The artificial limb presented by M. Van Peterssen, is the more worthy of attention, as individuals deprived of their arms, are incapable of performing actions indispensably necessary, and are consequently dependent on others. The attempt, in a physiological point of view, is highly interesting: for the superior extremity, from the variety, extent, rapidity, and precision, of its movements, is one of the most remarkable portions of the human frame; consequently, an invention capable of restoring to the maimed person even but a portion of the advantages he previously enjoyed, is a *chef d'œuvre* worthy of our admiration. The Committee, composed of MM. Gambey, Rayer, Velpeau, and Magendie, after having examined the arm, had it tried upon five individuals: one of whom, an invalid soldier, had lost both arms during the wars which desolated Europe at the commencement of the present century. He was overjoyed at finding himself, after so many years deprivation of his arms, able to take a glass from off the table, carry it to his lips, without spilling a drop, drink off its contents, and lay it again on the table; to pick up a pin, and a sheet of paper, on the ground. Unfortunately, his joy was of short duration, and the grief he experienced on seeing the arms removed, was perhaps equal to what he felt on losing his limbs. This apparatus, applicable only to persons who possess a stump, is composed of three parts, representing the arm, fore-arm, and hand; the whole weight is not more than a pound. In order to make use of it, several accessory measures are necessary; a pair of stays to which are attached cat-gut cords, extending to the arm, fore-arm, and fingers. When the individual carries the stump forwards, the fore-arm is bent, and *vice versa*: movement is indispensable when one wishes to carry the hand to the mouth. The flexion and extension of the fingers are obtained by a mechanism not less ingenious: strings extend from the stays to the dorsal extremities of the fingers; when the stump is carried from the body, the fingers are extended, and when the object is within reach, the stump is brought near the trunk, the hand closes, and seizes the object the firmer as each finger acts independently of its fellows, and presses on the part it touches. The hand is then carried to the mouth by bringing the stump forwards. The conclusions of the report are: that this apparatus is preferable to those hitherto invented; that M. Van Peterssen be requested to endeavour to render it accessible to poor persons. M. Arago remarked that h

(29) *Racoglitore medico*, 6th July, 1829.

(30) Thesis of the Faculty of Paris, 1802.

(31) Michon. *Loc. cit.* p. 92.

(32) Thesis of Strasburgh, 1827.

(33) Michon. *Loc. cit.*

(34) *Traité des maladies des Femmes*, vol. ii. p. 487.

(35) Michon. *Loc. cit.*

(36) *Revue scientifique et industrielle*, June, 1841.

(37) *Gaz. des Hôp.*, vol. iv. 2nd serie, No. 9.

(38) *Gazette Medicale*.

(39) *Med. Operat.* vol. i. p. 704.

(40) Bouisson, of Marseilles, *Theses de Paris*, 1837.

(41) *Gaz. des Hôp.* vol. vii. 2nd serie, No. 7, 1845.

(42) Vidal de Cassis, *Traité de pathologie externe*, p. 15.

(43) *Bibliothèque du Med. Prat.* vol. i. p. 186.

readily conceived how sensibly the poor invalid soldier must have felt his loss, consequently, he proposed purchasing the arms, and making him a present of them. This proposition was sent to the *Conseil d'Administration*.

On the Cholic caused by Copper.—Mémor, read by Dr. Blondlet. This memoir is destined to prove the existence of that species of cholic, and to indicate the best prophylactic and therapeutic remedies in this affection. The author combats the opinion of Christison and others, that the accidents are owing to the presence of lead, and states that this cannot be, since not an atom of the latter is present, and that, therefore, the accidents can only be attributed to the copper. He thinks this disorder far more frequent than is generally supposed, and concludes that the number of patients labouring under this disease is about one in 1,500 of those received into hospitals. Several cases are quoted, in which the fæces were analysed and found to contain copper, and whose symptoms differed greatly from those given by various authors. The best prophylactic measures are avoiding all excess in drink—as drunkards are more frequently, and more seriously, affected with this cholic than others, and making use, during meals, of a liquid containing albumen. As to the treatment, it consists of a solution of alumen, narcotic enemata, and poultices sprinkled with laudanum; and saline purgatives when constipation is present.

The same practitioner read a memoir on the accidents originating in zinc manufactories.

On the Action of Compressed Air on Man: by M. Friges.—The effects produced are: a pain of the ear, more or less intense, increased when the patient is drunk, or when he has been in that state but a short time previous. The reservoir of the air being increased in size, the workmen complain less of pain in the ears, but much more of cold, produced by the distension of the air; this causes a cold mist to exist, which augments with the capacity of the reservoir. Every one speaks more or less through the nose, and under a pressure of three atmospheres, it is impossible to whistle; the sound produced by the strings of a violin was diminished one half under a similar pressure. Two workmen, after remaining seven hours in the compressed air, experienced violent pains in the articulations, which lasted half an hour after they were removed from its influence: one complained of severe pain in the arm; and another, of pain in the knees and left shoulder, which disappeared under alcoholic frictions.

Lusus Naturæ.—M. Joly, Professor at the Faculty of Sciences, Toulouse, gave the description of a double lamb, called by him *derodyme*. After mentioning the structure of the various parts, he compares the animal with those similarly formed. Among the organs, the most curious were the genito-urinary apparatus, which were composed of: two kidneys, situated on the outer side of each individual; two ureters proceeding from them to the bladder, which was single; urethra, opening in the rectum; two other kidneys much smaller, nearer the centre of the body, and situated below the former, each furnished with an ureter, ending, not in the bladder, but in the rectum; two ovaria; two flexuous Fallopian tubes; a uterus divided in two by a septum; a double vagina ending in a valve, which performed the office of the anus. One head was affected with hydrocephalus; almost all the cavities of the heart communicated with each other.

On the number of Deaf and Dumb Persons.—M. Eng. Garay de Montglave, in a letter, informed the Academy, that though there were 22,000 persons in France affected with this infirmity, not more than 700 are instructed in the two Royal Institutions, consequently he solicited the support of the Academy to the request he makes of forming other establishments.

Academy of Medicine. Sitting of the 18th February. M. Caventon in the Chair.—Discussion on the case of vesico-vaginal fistula operated upon by Professor Aug. Berard. Professor P. Dubois after recapitulating briefly the different phases of the case, continued thus: The operation, in my opinion, is irrational; inasmuch as it was performed without the hope of success; for Professor Berard himself,

owns, that the result alone could decide as to the utility of the operation. As to the incomplete obliteration, it was considered as of little importance. I cannot coincide with this opinion, as I consider it to be produced by the nature of the disease, since it is impossible to obliterate a cavity constantly wet with urine. Again, the death of the patient was caused, though perhaps indirectly, by the operation. To establish the contrary opinion, Professor Berard stated that the neighbouring organs were quite healthy, and that he could not discover the slightest connection between the diseased portion of the peritoneum and the organs operated upon, from which it could be inferred that the inflammation was propagated from the latter to the former. I do not consider this propagation as absolutely necessary, since those who have attended women during the puerperal state, know full well that inflammations sometimes affect organs at a distance from that primitively attacked. To assume, with Professor Berard, that the result alone would enable practitioners to appreciate how far the operation was useful, is, in my opinion, far from being encouraging, for the obliteration was incomplete, and the patient died. Professor Blandin's weighty objections have been made to this operation, proposed and executed for the first time by Dr. Vidal de Cassis, and the case now under consideration is far from proving them ill founded. In my opinion, the complete obliteration of the vagina, if not impossible, is at least very difficult; what means can be employed so as to prevent the urine flowing constantly through the vagina and preventing its union? I therefore, do not think the present fact, as far as concerns the possibility of union, is favourable to the operation. On the other hand, the woman died, and here I coincide in opinion with Professor Dubois, and consider the operation as one of the causes of the development of the peritonitis, and that the woman died of purulent absorption. This can easily be anatomically explained, as there exists in the vagina a venous network, which renders all the operations on this part highly dangerous; the period at which the patient died confirms me in this opinion that purulent absorption had taken place. Thus, I do not think that the results are such as to encourage surgeons in any further trials. Professor Gerdy considered the operation as the chief cause of the fatal result, but did not admit the existence of purulent absorption. In his opinion, the mucous membrane ought to have been dissected much more, in order that the needles might act on a larger surface. Moreover, he considered this operation inopportune, since it would lead to the conclusion that vesico-vaginal fistulae are incurable, on the contrary, he was convinced that were greater attention paid to the form and direction of the fistula, more frequent cures would be obtained. Professor G. then described his method, and quoted two cases of cure by it. Professor Moreau next rose, and said, what Professor Gerdy has just said, however interesting, is quite foreign to the present subject. Professor A. Berard:—The remarks of Professor Gerdy are not applicable to the case, and none of the measures indicated by him could have been employed. As it may be remembered, the loss of substance was enormous, gangrene had destroyed all the inferior parietes of the bladder, corresponding portion of the vagina, and the posterior part of the urethra, so that Professor Gerdy's method could not be attempted. As to the objections presented by Professors Dubois and Blandin, they may be comprized under two heads:—1^o *The complete obliteration of the vagina is impossible.* Why impossible? I readily admit that it is difficult, very difficult, but not impossible. The fact observed by Dupuytren of recto-vesico-vaginal fistula with obliteration of the vagina; and that recorded by Dr. Cartaux in the periodical published by Dr. Lucas Champonet, where after protracted labour, a vesico-vaginal fistula was produced, and three months after, the vagina was found to be obliterated, the catamenia escaping through the urethra, are proofs of the possibility of the obliteration, and shew that the operation is not, as Professor Dubois stated, irrational; 2^o *That the result was fatal.* Certainly, this is a misfortune, but ought it to be attributed to the operation? I do not think so. In the first place, the accidents came on the 23rd day after

the operation, and, therefore, there can be no affinity between the two. Admitting for a moment that the peritonitis was caused by the operation or by purulent absorption; is this a reason why it should always be so? Had Professor Roux, the first time he performed perineoraphia experienced, similar accidents, would he have been deterred from repeating it? In no wise. But I cannot even concede thus much to my adversaries, for I can see no connexion between the peritonitis and the operation: it was not, as in the puerperal state, situated in the pelvis, but near the diaphragm. As to the absorption of pus, it is not more frequent in operations on the vaginal than on any other tissue. I have performed five different times the operation proposed by Marshall Hall in prolapsus of the uterus, and if I have not repeated it, it is not because it gave rise to any accidents, but because the disorder relapsed. Professor Velpeau, Was there really absorption of pus? Professor A. Berard. There were no symptoms of it during life, or traces after death. The discussion was postponed to the next sitting: and the Academy, after Professor A. Berard had presented a patient, on whom he had employed the autoplasmic method in an operation for cancer, performed a year ago, met in *comité secret*.

GARLAND DE BEAUMONT, D.M.P. B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M. D.

Cynanche submaxillaris. From November, 1843, till May, 1844, this affection appeared at Bonn with cynanche parotidea, and other anginose affections. In this affection, the cellular tissue in the neighbourhood of the submaxillary glands, was more inflamed than the glands themselves. In no instance were there any accompanying scorbutic symptoms. Whole families of children, whose ages averaged from 3 to 15 years, were attacked by it. The youngest suffered particularly. Soon after the appearance of the primary symptoms, such as lassitude, rigors, headache, evening fever, and perspiration, difficulty of moving the mouth, and painful swelling of the glands set in. During the day the children felt pretty well, but at night were restless. The perspiration was greater on the head and neck than the other parts of the body. The pulse was accelerated but weak. The swelling generally increased till the fifth or seventh day, when it decreased by abundant stools and perspiration, which seemed critical. The fever disappeared when the glandular tumour had reached its maximum. Sometimes, however, the disease was protracted till the fourteenth or eighteenth day. Ultimately the swelling of the cellular tissue disappeared entirely, but the glandular tumour remained. In other cases the swelling supplicated, discharging good pus, with shreds of cellular tissue, and leaving a hard glandular swelling, which was discussed by purgatives. Opening the abscess retarded the cure. Metastases and complications of the disease, with the exception of catarrhal cough, were rarely observed by the author. It never proved fatal. The above angina also frequently occurred in the environs as well as in the town of Bonn; and also seemed infectious. Scarlatina simplex, and acute rheumatism, were at the same time, prevalent among adults.—Dr. Albers in Rhein. Correspondenzblatt.

Rupture of the vena azygos. A healthy hussar, ætat, 38, while on parade on a hot, summer day suddenly fell from his horse, screamed, and died immediately. At the post-mortem examination, all the organs save the liver and mesentery, were found to be healthy, but exsanguinated. Four pounds of black coagulated blood were found in the posterior mediastinum, owing to a transverse rupture of the right side of the "vena azygos" between the seventh and eighth dorsal vertebrae. The vein was enlarged in its whole course, and the fatty degeneration, of the liver, and mesentery would seem to prove, that the deceased was an habitual dram drinker. The rupture of the vein was attributed to impeded circulation caused by the tightness of dress, and particularly to the pressure of the abdominal strap usually worn by

Hungarian soldiers.—*Dr. Flögel in oesterr. Wochenschrift.*

On the Semeiotics of Urine. English observers have frequently referred to the different combinations of ammonia, with which urine is impregnated in nervous affections as, in typhus, and lesion and atrophy of the spinal marrow. In the latter cases, the ammoniacal salt present in the urine, is that known as "the triple phosphate." It is not yet ascertained, as has been assumed, whether the brain directly occasions the presence of carbonate and triple phosphate of ammonia in urine. The author thinks it unlikely, because the urinary secretion solely depends upon the spinal marrow, and believes, that in cases of brain disease where ammoniacal salts occur in the urine, that the spinal marrow must be secondarily affected; but it must be allowed, that the spinal disease effects but the first stage of the alkalinity of the urine: it is finally completed, by obstruction of the bladder. An unusually large quantity of carbonate, urate, muriate, and triple phosphate of ammonia was contained in the urine of lunatics, which was analysed by the author. The urine of such persons is very rarely found acid. The author twice found the impressions of the Bellenian urinary canals, described by Henle and Simon, as occurring in certain renal affections, particularly in Bright's disease; once in the urine of a hysterical young girl, addicted to onanism, and suffering frequently from acid vomiting; and again, in the desquamatory stage of scarlet-fever. In the urine of a girl of 4 years old, labouring under hæmaturia the author found the upper stratum of liquid yellow, and transparent, the middle layer contained a floating coagulum, while the lowest stratum consisted of blood-red tessellated stripes. Microscopic examination proved the red sediment to be composed of normal blood corpuscles, 2°. of a quantity of yellow globules, probably coagulated fibrine, 3°. crystals of triple phosphates in considerable quantity, 4°. single fat globules, 5°. vesical epithelium. The triple phosphates seem to have been formed from the action of blood globules upon the fibrine. The urine is valuable as being the indication of pregnancy. In the last six months of pregnancy as well as after birth, and during lactation, the urine contains much fat besides a peculiar combination of proteine and an organic substance, which like fat, must have a very near relation to the lactic secretion. *Ryestrin*, distinctly developed in urine, is one of the surest signs of pregnancy, but its want does not prove the contrary.

Character of the Fæces in Diabetes.—The excrements of a lunatic suffering under diabetes, consisted of two different and distinct parts. The usual fæces were covered with about six ounces of a gelatinous greyish mass of fatty waxy appearance, composed of single globules in the form of grapes, and interlineated by single blood-stripes. The liquid, surrounding this mass, displayed an acid reaction and contained many dull-coloured oval corpuscles, probably swelled mucous globules. The examination of the solid grey mass showed albumen and fat to be its chief chemical constituents. Some sugar seemed also to be present. The microscope showed 1st., yellow, generally oval, (but sometimes angular) corpuscles of 1-50-1-100, the smallest of 1-400 of a line in diameter; few being nucleated. They seemed to be swelled mucous globules. 2nd. Crystals of triple-phosphate in great abundance. 3rd. Black, elementary, kernels, strewn between the above mentioned mucous globules, and crystals. Simon obtained similar results from the examination of the excrements of a diabetic patient. These excrements are thus to be considered as fatty wax, and it is certainly of importance, that the fat received with the food, if not properly saponified in the duodenum, through want of bile, cannot in this disease be dissolved and transmitted to the chyle, to be thence discharged with the stools in the form of fatty wax. Pus has been observed more rarely in the excrements than in the urine. Though purulent urine does not prove the existence of a suppurating surface in the urinary organs; yet the presence of pus in the excrements always indicates local suppuration, unless perhaps the pus proceeds from a neighbouring organ. But this could be easily recognised by the quantity of

the suddenly-discharged matter and other symptoms. Great abundance of fat in the excrements shows the existence of a consumptive disease; it is particularly found in pulmonary phthisis, Bright's disease and diabetes.—*Dr. Heinrich of Bonn in Haeser's Archiv.*

Paracentesis Thoracis Performed with a Favourable Result.—The subject of the operation in this instance was a young labourer. He had been ill for a long time, previous to being seen by the reporter of the case, who found him almost suffocated by dyspnoea. The left half of the thorax was elevated, and fluctuation could be perceived in the intercostal spaces. The empyema was pronounced as the result of pleuropneumonia, with which it was conjectured, that he had been at first affected. Danger being imminent, the author performed the operation, which gave exit to about a quart and a half of unhealthy pus mixed with blood. The patient was relieved, but his respiration still remained difficult, he had troublesome cough with little or no expectoration. This state lasted upwards of a month, when hectic fever appeared, which would not yield to internal remedies. During this time, the patient lying on his left side, matter was freely discharged from the wound, which was covered by a *plumasseau*. A new pointing appeared in some little time, about an inch and a half below the wound. This also was opened, when the upper wound spontaneously closed. Pus was abundantly discharged through the opening, the quantity diminishing day after day. The appetite soon improved and under a gently tonic treatment, the patient completely recovered in three months.—*Dr. Thortson in Preuss. Ver. Zeit.*

Pathological Changes of the Sympathetic Nerve in Tuberculosis.—*Post-mortem* examinations of persons in whom tubercle has been developed, generally exhibit some abnormal appearances of the sympathetic nerve, though they may not have died of tubercular disease. In some cases it is rigid and dry, in others the ganglia are found in a state of gelatinous *ramollissement*; while, again, they are found with a collection of reddish serum round their sheaths. In some persons who have died of tuberculosis, no irregularity was found in the trunk and ganglia, but the plexus cardiacus (between the arcus aortæ and arter. pulmon.) was found partly atrophied, and partly changed into hollow cells or tubes, surrounded by a red exudation. Tuberculosis, based upon an abnormal reproductive tendency, exerts a highly deleterious effect on the whole process of transformation. Tubercles formed by the excretion of an unorganised substance from the blood, are first deposited in a liquid form and are gradually consolidated and hardened. (*In Rhein ad Westphal. Corresp.*)

A Pulmonary Gangrene cured by large doses of acetate of Lead and Opium. A slater, ætat 30, of rather robust frame complained on the 30th April 1841, of lancinating pains of the right side without cough; he had head-ache, tendency to vomiting, great thirst and lassitude. His pulse was but little accelerated. The physical examination of the chest elicited no abnormal signs. The patient received an emetic which operated on the stomach and bowels, without affording any relief, on the contrary the lancinating pains were rather increased. Twelve leeches and subsequent linseed poultices, applied to the painful spot had no better effect. The anxious expression of countenance was unaltered. On the evening of the 2nd May he was attacked with slight cough; accompanied with expectoration of a stinking mucus; the pulse was also accelerated. The respiration already obstructed became so difficult, that the patient could only breathe in a sitting posture, with the head inclined upon the breast. Percussion on the left side below the scapula, now elicited a dull sound, auscultation, in the same region showed *bronchophony*. Notwithstanding a large venesection and the internal use of antimonials, the respiration remained unaltered, and the pulse was 105. Frictions of tartar-emetic ointment, on the left side of the chest, were equally useless. On the evening of the 3rd, the patient expectorated dark-coloured and coagulated blood of a very bad smell, and on the 4th, besides the above, a quantity of greyish-black stinking mucus. At

the same time, the bronchophony extended on the scapular region of the left side: *distinct crepitation* with a *strong mucous rhonchus*, could be heard. Matters remained stationary till the 9th, the odour of the expectoration, however, becoming worse every day, and the patient was reduced to a mere skeleton. On the 10th, cavernous respiration could be distinctly heard in the last mentioned region, and the expectorated masses had a putrid smell. Colliquative perspirations and stools, together with insomnia, were quickly exhausting the patient. Perfectly despairing of recovery, and for the mere purpose of affording temporary relief, the author ordered, a grain and a half of sugar of lead, with five drops of tinctura thebaica every three hours. Contrary to all expectation, the diarrhoea and lancinating pains of the side had subsided on the next day, some sleep had also been obtained. The dose of these remedies was now doubled. On the 12th, the improvement was very marked, the cough was less teasing, and the expectoration less stinking, more consistent, greenish, and free of blood, the diarrhoea and perspiration were also diminished; this improvement progressed steadily, and on the 13th, the patient exhibited a calmer expression of countenance, and after a refreshing sleep of 4 hours, felt much stronger. Auscultation elicited no crepitation, little mucous rhonchus, and bronchophony was confined to the original situation. The dose of acetate of lead was now increased to three grains and three fourths, that of tincture of opium to fifteen drops. On the 14th, he was able to lie on his back, without coughing being excited, looked cheerful, and ate with an appetite, the diarrhoea was quite gone, and the perspiration was inconsiderable. The expectoration had lost all bad smell, and bronchophony was becoming less audible, and extended. In consequence of the decided improvement, a diminution of the remedy seemed indicated. He now slept quietly, had regular stools, was without cough, expectorated only a whitish mucus, and gained strength every day. He was soon after able to leave his bed, and then got a more strengthening diet, and some claret mixed with water. Ultimately Iceland moss, ass's milk, and Seltzer water, were recommended. The man lives to this day, and enjoys perfect health. The above case tends to show, 1st. that pulmonary gangrene may appear independently and without previous pneumonia, 2nd. that the strongest persons are not guaranteed against it, 3rd. that it may be sometimes cured, by acetate of lead and opium. In the above case, one drachm and thirteen grains of acetate of lead and four drachms of tincture equal to 24 grains, of opium, were used, without any sign of lead-poisoning or of narcosis. The case seems also to confirm the observation of Laennec and Lawrence, according to which, only male adults are affected by the disease in question. (*Dr. Szerlacki of Muhlhausen in Bayr. Correspondenzblatt.*)

B. Pulmonary gangrene cured by Creosote and Gummi galbanum. A locksmith, ætat 24, complained for the last ten years of asthma, cough and pain of the chest. The left side from the 4th to the 7th ribs was prominent; on percussing over the 4th, the sound produced was cavernous or like that, from an empty tub, but deeper; backwards it was dull. On the right, the sound elicited was normal as low as the 6th rib, and backwards Posteriorly the regions sounded naturally. Respiration was puerile on the right; weak on the left and accompanied over the whole side by *fremissement*, except in the space from the 5th to the 7th ribs. Between the 5th and 7th rib, *ægophony* was heard; higher up, *pectoriloquy*, was well marked, the sounds of the heart were normal, the pulse was full and uniform, the liver hardish and enlarged, abdomen distended but not painful; the tongue was covered with a whitish fur, and the bowels were confined. *Diagnosis.* Pleuritic adhesion of the upper portion of the left lung, accompanied by hepatization most probably the result of pleuritic effusion. Under these circumstances the following mixture was prescribed. R. Tartar. tartaris. drachmas sex. tinct. rhei. aquos. drachmam; extr. taraxac; unciæ dimidium; aq. fœnic. uncias sex; cap. coch. amp 2 dis horis. Notwithstanding this treatment, violent fever set in on the 27th, accompanied with pain in

the right shoulder and elbow. Fox-glove with nitre, was now prescribed, and the fever abated, leaving behind, however, head-ache, and partial deafness. On the 29th, venesection to 16 ounces was considered necessary on account of a relapse of the fever. The partial turned into complete deafness, and a very foetid odour was exhaled from the scanty and purulent expectoration. The fever assumed an asthenic type, dropsical symptoms occurred: to combat these was ordered, benzoic acid with *arnica montana*, liq. ammoniac, and syr. senegæ. These were discontinued for a trial of sulphuret of antimony. On the ninth of October, his strength was greatly diminished, the spitting became abundant, reddish grey, and blackish brown, and so foetid, that the suspicion of pulmonary gangrene appeared confirmed. After camphire had been tried in vain, the author administered, R. Kreosot. guttas duas, pulv. rad. alth. gumm. galban. aa drachmam dimidiam, ft. pil: vj. quorum capiantur duæ ter in die. Some improvement being observed from the remedy, the quantity of creosote was increased to four, five, and six drops per diem. On the 19th the patient was able to leave the bed. From the 22nd the creosote was discontinued, and a nourishing diet ordered. From the 2nd November, colliquative perspirations appeared for several days, which ceased in a few days under the administration of three grains of acetate of lead per diem. On the 22nd December the patient was dismissed, cured.—(*Dr. Zurkowski in Medic. Zeitung Russland's*)

Obstinate alvine Obstruction. A woman, 59 years old, suffered for 12 years from constipation to such that a degree for the last two years, she was obliged to abstain altogether from solid food. To this state of the bowels, incontinence of urine was joined. She complained at the same time of a constant pain in the back, was emaciated as a skeleton, and obtained no relief from the strongest drastic purgatives. On examining the rectum, it was found unusually distended, and a hard substance was detected at its superior extremity. This, when extracted by means of a screw, was found to be a biliary calculus of the size of a walnut. Great hæmorrhage which was restrained with great difficulty, followed its extraction. On the second day after the extraction, an abundant alvine evacuation ensued, the incontinence of urine disappeared and the patient recovered.—(*Dr. Ehrlich of Taroczyn in Caspar's Wochenschrift.*)

Case of a Rare Invagination. A man 60 years of age, had suffered for a long time with abdominal distension, swelling of the left iliac region, fever, nausea, vomiting and complete obstruction. The author on examining the rectum found, about three inches above the anus, a large tumour of the size of an egg, hanging into the rectum, which might have been mistaken for a polypus, did not its seat and laxity of structure, contradict this supposition. The patient died; at the *post-mortem* a portion of the ileum of two hands breadth in length, was found invaginated in the cæcum. This bowel and the invaginated part, were bent inwards, the colon was contracted, the cæcum which had descended as far as the rectum, was injected with dark blood, and a small abscess of the ileum, was detected above the invagination. (*Dr. Perotti in Schmidt's Jahrbuchern.*)

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

SEVERE INJURY OF THE SHOULDER.—A case of severe injury of the shoulder, terminating fatally, is reported in the *Provincial Medical Journal*. The accident happened by machinery. The head of the humerus was fractured obliquely, downwards and inwards, and the whole of the articular surface, to the depth of a third of an inch in the centre, retained in situ, along with the lacerated capsular ligament. The long and short tendons of the biceps were uninjured, and the other fractured extremity of the bone, along with a third of its shaft, was forced through the integument of the axilla, beneath the belly of the biceps, and rested on the skin covering the pectoral

muscles, in a position obliquely inwards and upwards, so that the arm being approximated closely to the ribs, and forearm bent at right angles across the abdomen, the dislocated bones rested immediately beneath the humeral third of the clavicle. The wound was barely large enough to admit of the passage of the bone, and the latter was so firmly constricted by its edges, that its reduction could not be effected until the integument was divided to the extent of about half an inch, and then extension being used, at first backwards, and afterwards obliquely downwards, the reduction was effected with little difficulty, and the contour of the limb perfectly restored. The coraco-brachialis appeared to be much lacerated, but the rest of the muscles seemed to be uninjured. The reduction was effected in about fifteen minutes after his admission. The axillary artery, vein, and nerves, were nearly isolated, and the displaced bone rested on them; but they were apparently uninjured, and the vessel pulsed with the natural force, as likewise the radial artery at the wrist. There was very slight oozing of blood from the wound before and after the reduction of the bone, and he was enabled to walk to the infirmary directly after the accident, which occurred close by, and did not feel at all faint, and the pulse was full and vigorous when admitted. The pain was much mitigated by the reduction of the bone; the shoulder was slightly swollen; the edges of the wound were brought in close apposition by a single stitch; straps of adhesive plaster were applied, and cloths, steeped in an evaporating lotion, spread over the whole shoulder, and the arm laid in a semiflexed position on a pillow. Temperature of the limb rather diminished in the forearm. An anodyne was exhibited, and repeated at night. For a few days he seemed to be going on well; but afterwards the edges of the wound became sloughy, and the discharge was unhealthy. The constitutional symptoms were those of general irritation. These were relieved for a time, but the shoulder swelled, became very painful, and thin reddish serum was discharged; arterial blood oozed away continuously, the pulse at the wrist of the injured limb could not be felt, erysipelatous inflammation set in, and he sunk a week after the occurrence of the accident. On examining the body after death, which was done very hurriedly, a large quantity of coagulated blood, of a somewhat fetid odour, together with a good deal of serum, was evacuated on slightly pressing the margins of the axilla, and none at all was found extravasated in the cellular tissue below the wound. When the coagulum of blood which plugged up the wound was removed, the brachial artery was found to have been ruptured transversely across at its lower margin, and the inferior cut extremity appeared to have contracted a good deal, and was turned outwards. The upper extremity of the artery had retracted high up in the axilla, and was surrounded there by coagulated blood in large quantity. The brachial vein and nerves were uninjured. The fractured extremities of the bone appeared to be in the same state as at the time of accident, no provisional callus being thrown out, and a small quantity of serous fluid contained in the joint. No attempt at union had taken place in the wound.

OSSIFICATION OF THE CEREBELLUM OF A HORSE.—Mr. Sewell has described in the *Veterinary Record* a singular instance of ossification of the cerebellum of the horse, which occurred some years since in the practice of Mr. Child, then a veterinary surgeon at High Wycombe. The horse during life laboured under what is termed "mad staggers." On examining the head, the cerebrum and medulla oblongata contained granules of ossific deposition pervading their structure; the cerebellum, however, was solid, and so dense was it, that it had been sawn through into two nearly equal portions. A small piece of it was analysed by Dr. Prout, who found the earthy part to consist of phosphate of lime, and the rest was animal matter. When burnt, the earthy matter retained the shape of the original fragments, and, on examination with a magnifier, appeared to have a structure somewhat analogous to bone.

SYNOVIAL DISCHARGE FROM THE JOINTS.—Mr. T. King uses Macintosh's solution of Indian rubber, as an external application, to prevent the

escape of synovia from wounded joints in animals. He lays a good coating of the solution upon the skin surrounding the wound, regularly for the space of a couple of inches or so; he then places upon it a thin pledget of dry tow, and over that another coating of the solution; then a second pledget of tow, a little thicker than the first; and lastly, in cases where the situation admits of it, a good cotton roller bandage well put on, and then smeared with another coating of the solution. The paper is published in the *Veterinary Record*.

POISONING WITH CANTHARIDES.—A case is recorded in the *Annali Universali di Medicina*, of a man who took a scruple of powdered cantharides, which caused a sense of burning and constriction in the mouth and throat, nausea, shiverings, and tremors; pain and formication in the limbs, scalding on passing the urine, tenesmus. &c. The day after, paralysis of the lower extremities, and bloody micturition having occurred, Dr. Podrecca was summoned, and prescribed stimulants, with laudanum, by which relief was soon afforded, and the patient ultimately recovered.

PERCHLORIDE OF CARBON IN CANCRUM ORIS.—Mr. Robinson states in the *Forceps* that he has used the perchloride of carbon locally in several cases of cancrum oris with great success.

APHONIA.—A singular case of aphonia is reported in *Il Raccoltore Medico* occurring in a woman who could not raise her right arm, especially in supination, without producing aphonia. After an attack of erysipelas of the face, she could move her right arm without inducing aphonia, the cause of the attack being transferred to the left arm.

INFILTRATION OF URINE IN THE PERINEUM.—A case of infiltration of urine in the perineum is reported from the practice of Mr. Eves at the Cheltenham Hospital. The man, a labourer, 48 years old, had been the subject of a neglected stricture for fifteen years; about seventeen weeks previous to his admission into the hospital, he had a blow on the perineum, which was followed by great pain and swelling of the scrotum, and difficulty in passing water. This state continued to increase in severity, the penis and scrotum became livid, a foetid discharge issued from beneath the prepuce, the perineum was indurated, and a fistulous opening formed at the lower part of the scrotum. Under these circumstances Mr. Eves made a free incision in the perineum, and opened the urethra, but could not reach the bladder, either by the wound, or *per vias naturales*. The perineum was so thickened, that the scalpel passed in an inch and a half before it reached the urethra. Some water was passed both by the wound and the penis, a few hours after the operation. Erysipelas set in a few days afterwards, succeeding the passage of a wax bougie, and the man at one time was in considerable danger, but by appropriate treatment he ultimately recovered so far that full sized bougies could be introduced; the wound in the perineum healed, and the man was able to walk about, œdema of the parts only remaining.

SPECULUM VAGINÆ.—A correspondent of the *Lancet*, signing himself "Censor," thus writes: "if all objection to the use of this instrument were removed, it would become at once more applicable than it is at present, and, consequently, of greater, because of more diffused, utility. I would suggest that this instrument be closely and firmly fixed in the centre of a large handkerchief or shawl, that it be inserted into the vagina under the bed-clothes, whilst the shawl is spread over the patient's person, and that she be then placed in the proper position for examination. *Not the slightest exposure need be made.* If "Censor's" suggestion were adopted, the practitioner would have the advantage of carefully inspecting the pattern of a shawl or handkerchief in a very unusual situation, but as to any knowledge of the condition of the vaginal parietes or of the uterus to be acquired, it needs very little thought to perceive that it will amount to *nil*.

THE BETEL-NUT.—Mr. Hagger states in the *Veterinary Record*, that no other remedy than the betel-nut is used in India for horses affected with worms. From one to two drachms of the powdered nut are added to half the usual dose of aloes, with a little more ginger, and, to use his

words, "it turns out the worms like a broom in a gutter!" He thinks it has only to be known in England to come into general use. The betel is a climbing plant, the leaf in shape and appearance resembling ivy, but more tender and full of juice. It belongs to the same tribe of plants as the peppers.

FILARIE OCULI IN THE HORSE.—Mr. Clarkson mentions in the *Veterinary Record*, the case of a pony, at Trichinopoly, from whose eye he extracted one of these worms, which had been seen rolling about and curling itself within the organ, and the next day another was discovered, which he also removed two days afterwards, with perfect success.

FILARIA MEDINENSIS IN THE HORSE.—Mr. Clarkson also mentions a case of guinea-worm in a horse, which was successfully treated in the usual manner.

REPRODUCTION OF THE HOOF.—Mr. Cartledge, of Sheffield, gives the details in the *Veterinary Record* of a very interesting case, where the hoof was entirely torn away by mechanical force, and afterwards reproduced. The laminae on one side and a small portion of the sensitive sole were lacerated, but not to any great extent. The coffin bone was uninjured. The formation of the horny crust began a fortnight after the occurrence of the accident, and of the insensible laminae at the same time. The new sole or frog did not begin to form until three weeks after the first visit. Six months after the receipt of the injury, the growth of the wall or crust was not quite complete, and the sole was also imperfect at the part where the sensitive laminae were lacerated.

(The following articles have been abstracted from two recent numbers of the *Lancet*.)

MELAMINE, AMELINE, AND AMELIDE.—Liebig says that these bodies may be regarded in a manner as cyanurates of ammonia, from which the elements of water, or those of water and ammonia (as in the instance of ameline) have separated: according to this view of the constitution of these substances, which at once evidently points out the relation existing between them and cyanuric acid, it did not seem at all improbable but that one or the other of them might be produced directly from cyanuric acid and ammonia—and this supposition has been verified by fact—the distillation of urea yielding a substance which bears the closest resemblance to amelide, and which may properly be considered as intervening between that substance and cyanuric acid.

URIC ACID.—Pure uric acid is most conveniently prepared from the excrements of snakes; for this purpose the solid excrements are reduced to the state of a fine powder, and this is then projected into a boiling dilute solution of potash, as long as it continues to dissolve readily; the solution is of a brown colour; it is kept in a state of ebullition until all smell of ammonia has disappeared; it is then concentrated by evaporation, and allowed to cool, when neutral urate of potash crystallizes. On transmitting carbonic acid through the remaining mother liquor (which is of an intensely brown colour), the latter solidifies gradually, forming a thick white mass, consisting of urate of potash; all the urate of potash thus obtained is washed with pure water upon a cloth or filter, until perfectly white. It is then redissolved in boiling water, to which some caustic potash has been added, and this solution is poured into a corresponding amount of pure hydrochloric acid, by which the uric acid is precipitated. A saturated cold solution of urate of potash, containing caustic potash in admixture, becomes thick and pasty upon the addition of hydrochloric acid. In this process the uric acid separates as a hydrate, and in the form of jelly; but this gelatinous mass becomes gradually crystalline, forming needles of several lines in length, and interlaced. At 212° they lose 17.5 per cent of water. Acids precipitate uric acid from its hot solution in the form of a white crystalline powder of silky lustre, which after having been dried in the air, loses not a particle of its weight at the boiling point of water. Pure uric acid is of a brilliant whiteness, inodorous, and tasteless; it is soluble in 15,000 parts of cold, and in 1,932 parts of boiling water; from its

solution in boiling water the excess of uric acid dissolved, is deposited upon cooling in shining scales like mother of pearl. The aqueous solution of uric acid has a distinct acid re-action; uric acid is insoluble in alcohol and ether; it dissolves somewhat more readily in hydrochloric acid than in pure water; it dissolves copiously in concentrated sulphuric acid at a gentle heat, and from this solution it precipitates again upon the addition of water; it dissolves in all alkaline fluids, in solutions of the phosphates of soda, in borax, but not in the bicarbonates of potash and ammonia. The following is the formula of uric acid, dried at 212°, $C_{10}H_4N_4O_6$; but Liebig thinks that it contains one atom of water, and, therefore, that its real formula would be $C_{10}H_4N_4O_5 + HO$. The dry distillation of uric acid yields as products, cyamelide, hydrated cyanic acid, and ammonia, which two latter substances combine in the neck of the retort, forming urea; a dark brown carbonaceous mass is left as a residue, containing a large proportion of nitrogen. All substances capable of yielding oxygen, or acting as a means of oxydation, decompose uric acid readily in the presence of water, such as peroxide of lead, or manganese, hypermanganate of potash, nitric acid, or chlorine. In all these cases products are formed which differ from each other, according to the nature of the substance acting in conjunction with the oxygen upon the uric acid. Uric acid combines with the metallic oxides, forming sparingly soluble urates; the salts formed by it with potash or soda are much more soluble, if they contain an excess of the alkali. Urate of ammonia is the least soluble of the alkaline urates; it requires for its solution 1727 parts of cold, and 243 parts of boiling water. Urate of magnesia is one of the most soluble; it dissolves in 3,593 parts of cold, and 263 parts of boiling water.*

HEREDITARY INSANITY.—M. Baillarger states, that the development of hereditary insanity may be feared in children, if the father or mother were insane at the period of conception, or previously or since; when either parent have been remarkable for oddity, originality, weakness of mind, violence of character, or irregularities of imagination, or have suffered from dementia senilis at an age but little advanced; or from diseases of the nervous system, or have been long addicted to excessive drinking, or if the mother have experienced any violent moral emotion, or convulsions during pregnancy, or if one or more relatives have committed suicide, or if the children were begotten by parents in extreme old age.

PUERPERAL CONVULSIONS.—Dr. Powell narrates a case of this disease supervening after delivery, to shew its connexion with cerebral congestion. The treatment which he adopted consisted in the employment of cold affusion, cold lotions to the head, free venesection, and the exhibition of calomel, camphor, and hydrocyanic acid.

HÆMORRHAGE FROM LEECH-BITES.—Mr. Hogg mentions a case where the matico failed to arrest the bleeding from leech-bites, and he was of necessity obliged to have recourse to the actual cautery, with which he succeeded. Dr. Jeffery in a subsequent communication states, that Mr. Hogg used the green and not the yellow matico.

SNUFF-TAKING.—At a meeting of the Medical Society of London, Mr. Pilcher mentioned the case of a medical student, an immoderate snuff-taker, who presented all the symptoms of phthisis, which disappeared on his leaving off the use of snuff. Mr. Pilcher had seen a similar case in which recovery also followed the abandonment of snuff-taking.

OVARIOTOMY.—Mr. Liston says, "wounds of the abdomen are dangerous; patients perish from trifling openings where the viscera are not at all involved, and yet of late years the belly has been opened intentionally, with the view of ascertaining the existence of tumours, and of taking them out. These incisions have been made sometimes of limited extent, and sometimes from the ensiform cartilage down to the pubis. Some people do not hesitate to make a hole in the abdomen, put in

their fingers, and feel what is there, strangely enough exemplifying what Hudibras says—

As if a man should be dissected,
To see what part is disaffected.

These operations are, in Mr. Liston's opinion, exceedingly unjustifiable; he has always set his face against them, and he thinks he always shall. In the first place the diseases are not always—he would say very seldom—of a dangerous character. Women labour under encysted tumours connected with the uterus and ovaria, and under solid tumours too, and yet enjoy perfect health; the disease does not kill them. Sometimes—though very rarely indeed—malignant diseases are met with, but it is impossible to ascertain their nature through the parietes of the abdomen. If there be malignant diseases, you cannot expect to cure the patient by any known means, and you are not warranted in having recourse to the removal of the disease; for even the operation itself is attended with the most imminent risk. You are told how many patients recover where the disease is not of a malignant character, but many people write disingenuously; they do not tell the whole truth. When they have an unsuccessful case they do not bring it forward, but every successful case they advertise most unblushingly. Out of thirty-one cases in which the operation has been performed by what is called the greater incision—that is, from the ensiform cartilage to the symphysis pubis—sixteen died; in some of them there was no tumour, and in some it was not removed. There is an immense difficulty in the diagnosis; the nature of the tumour cannot be ascertained, and in some instances the practitioners engaged could not say whether there was a tumour or not.

DISEASES OF THE TONGUE.—Mr. Maclure narrates the case of a young clergyman who was affected with deep, ash-coloured, and painful ulcers on the tongue. He was cured by the internal exhibition of iodide of potassium and sarsaparilla, alterative and aperient medicines, and an alum gargle. Another case is mentioned by Mr. Maclure of frightful salivation, with consecutive ulcerations of the tongue and cheeks, and the tongue very much tumefied. When the effects of the mercury disappeared, the tongue was found to have contracted adhesions to the cheek, which were, however, readily broken through.

INJECTION OF TANNIN FOR THE CURE OF ANEURISMS.—Mr. Varicas recommends the injection of a solution of tannin for the cure of aneurism by effecting the coagulation of the contained blood. It appears, however, that his recommendation is based only on theory.

PREPARATION OF AROMATIC WATERS.—Mr. Warrington recommends the essential oils to be diffused through the waters by means of perfectly insoluble materials, such as fine porcelain clay, powdered glass, pumice stone, or calcined flints. Thus prepared they are found to be quite equal to the distilled waters, and to keep very well.

ON THE PHYSIOLOGY OF THE BRAIN, AND THE CHANGES IT UNDERGOES IN INSANITY.

By W. B. COSTELLO, M.D.
(For the Medical Times.)

It would be impossible to obtain even a faint idea of the mental operations, either in health or disease, without the aid of anatomical and physiological knowledge, and we may state at once that it is to the advances made in these branches of the natural sciences, that we are indebted for the corresponding ameliorations that distinguish our times, in reference to certain social and moral questions of great importance. Prior to the time of Willis the anatomist, it was the custom to regard the brain as a pulpy mass possessing distinct forms, but the nature of whose functions in reference to intellectual acts was a mystery, which it would be rash to attempt to penetrate. This feeling prevailed so strongly up to our own day, that I remember a quarter of a century back, when making a dissection of the brain with a teacher, then of some celebrity, his observing that as far as regarded practical knowledge, the brain was a mere mass of pulp, of which it was proper to study

* See in *Lancet*.

the parts and their names, if for no other reason than the possibility that some one might at last discover their other special actions and uses, beyond their production, of what was called the nervous energy. Willis was in fact one of the earliest to assert that the development of the brain, especially in regard to the convoluted surface, bore a close relation to the development of the intellectual faculties. The great advances however that have been made are of modern date and have sprung from multiplied experiments in physiology, by far the greater number of which have been conducted in other countries, but some of the most important of which belong to a few of our own physiologists.

Let us take a hasty sketch of our subject in some of these bearings. The brain presents on its external surface a series of convolutions, divided by furrows, over which is spread a delicate vascular membrane; their color is of an ashey grey, and their substance is divisible into laminæ or leaves. Penetrating deeper into the cerebral mass, the color changes to white. If we cut both hemispheres on the level of the corpus callosum, we find the whole portion presents a regular oval, bounded all round by the grey substance. Behind these hemispheres and beneath we come on the cerebellum, which is prolonged into the medulla oblongata and spinal marrow. From the great mass above and from the sides of the attenuated prolongation, nerves are proceeding to their distribution to parts and organs more or less remote, but to every part of the animal economy. These nerves are the channels of the external senses, as well as of the internal sensations; the modifiers of vitality in the organs, and the messengers from the external world to the enthroned intellect.

The mechanism of their action is capable of explanation. Take any one of the senses, the sight for instance. Light, the appropriate excitant of the optic nerve, paints with various shades the images of external objects on the retina, which are at once transmitted to and perceived in the brain. In a similar manner all the nerves of the senses transmit the impressions of their peculiar excitations, not solely to the point of their origin in the brain, but to all its great centres, and throughout the expansions of the white substance, and in this manner what is special in function is also general in report. In effect, these cords are continued in multiplied fasciculi that extend throughout the cerebral lobes without the possibility of distinguishing their motory, from their sensitive cords; and again their action is repeated to the lobe of the opposite side through the corpus callosum, and its large and numerous commissures.

What purpose do these transmissions through the external senses serve? What is the *ultima ratio* of the sensations so transmitted? Their purpose is not to report merely, but to excite the cerebral functions. In the cerebral lobes these sensations are the motives to volition: they excite the general function of the brain, which answers to their excitation by acts of determination, will, expression, and memory. The sensations are in fact the starting point, and foundation of all the cerebral operations, and without them, life, as in the automatic condition of some idiots, would be destitute of ideas, of memory and of will.

On this point, physiologists are fully agreed, that the brain is the organ of the sensations, and that these are the sources of the intellectual faculties. They are also agreed that the organs of these sensations are the cerebral convolutions upon whose laminæ the impressions coming from the senses are made and retained, after the manner (as some have described by way of illustration), in which images remain on plates subjected to the daguerriotype; and, indeed, such condition of impression cannot be doubted, for without it there could be no memory, no call of the images of the past; man would have wanted the power of registering the lessons of experience; life in the simple actuality of sensation would have been gross and selfish, without memory of the past, or hope of the future, he would be alike indifferent to the happiness of doing good to his kind, and unconscious of that immortality to which he is destined by an intelligent and Almighty Creator.

Sensation, then, is the source of intellectual life, and from it flow, through the instrumentality of

the brain all impulses, all propensities, and all passions. These may have distinct seats, and may depend on special or isolated portions of the encephalon, but the brain works also in its entirety—its grey and its white substance—its convolutions, and its ventricles—its commissures and lobes, are all related and connected, and, besides, such special functions concur also and share in the great acts of the brain. The great physiological functions, motility, sensibility, and sensation, are here presented to us inseparably bound together, just as the structures on which they depend are themselves aggregated without any line of demarcation; complex, delicate, and regular, and indicating in the highest degree, the great purposes of an inimitable and all-wise Designer. Are we then to separate affections of the brain that are not naturally disconnected, because at one time, the symptoms shew a lesion of the motile, or sensitive faculties, at another, those of the intellectual? And how, where all is so wonderful, shall we be less impressed with the wisdom and goodness of the Creator, in observing general paralysis in connection with a lesion of the corpus callosum, than a partial or general abolition of the intellectual faculties in connection with such an alteration of the substance of the convolutions as is sufficient to impair or destroy its sensibility to its appropriate stimuli?

But the brain on the application of stimuli is not restricted within the limits of a mere acknowledgment of their presence and power. It is moved by them and must act; and must will according to the nature of the impulses; it must determine, and execute its determination. In this view, the brain, passive in reference to the external senses, and the internal sensations, is an organ of reciprocity, of registration, but when these have told upon it, the co-ordinate powers, motility, sensibility, and intelligence are called up, and it at once forms determinations, judgments, volitions; it puts forth its miraculous powers as an organ of manifestation; it sits upon a throne that omnipotence alone could have built up, and from which it governs, as the creature and representative of omnipotence, the whole physical and moral world.

Let us now endeavour to trace some of these wonderful operations. The central white substance we know to be formed by the expansion of the spinal marrow into fasciculi or bundles of fibres, some sensitive, some motory. These reach to the convoluted matter, to the base of the brain, and to the ventricles at all their points. On the other hand, these fasciculi, through the cerebral and spinal nerves, communicate with the organs of the senses, nutrition, locomotion, and reproduction, throughout all parts of the body. Experiment, and pathological investigation, have, in our own day, proved beyond a doubt, that the white substance is one of the chief sources of the power of motility. Nay, further, it is admitted to be physiologically correct to affirm, that cerebral motility, and the will, are convertible terms, or mere modes of manifestation of a power that is identical, and this will and motility extend over all the organs that receive directly their nervous influence or innervation from the brain. The action of the white substance for either volition, or voluntary motion is commensurate, and co-extensive; when directed to the convolutions, it reproduces images and ideas of the past, that had been long treasured on their leaves, and when exercised upon the muscles, it excites and sustains the action of these organs, and thus, the will, dwelling on recorded sensations, gives birth to memory, and, by exciting the muscular organs, engenders motion.

Its action is no less manifest on the modes of speech and gesture. The corpora olivaria have been supposed to be the source of our power to form articulate sounds. The lower animals do not possess these organs, while in man, they are large. The white substance is largely connected with the olivaria, and thus forms contact with the origin of the nerves distributed to the tongue, larynx, pharynx, and face, over which it extends the influence of the will, and hence is it, that as a consequence, any lesion of the white substance affecting the olivaria, will shew itself in a corresponding impairment in the functions of these organs. In the state of intoxication, the congestion of the

brain which began in the surface of the convolutions, giving rise to a rapid and lucid flow of the ideas, as the potations become deeper, is extended to the white substance—the will loses its power over the ideas, and they flow no longer freely—it loses its power over the muscles, and the man staggers and falls—over the sphincters, and they are relaxed—it loses its power over the organs of speech, and the voice thickens, and becomes inarticulate. Sleep, profound and stertorous, follows, during which, the brain becomes slowly disengaged, and resumes, languidly at first, the plenitude of its functions, but leaving for our contemplation, a vivid image of that gradual extinction of the cerebral functions, that stealthy death so often to be observed in asylums for the insane, under the forms of progressive paralysis, depending on lesions, more or less extensive and profound, of the central white substance.

How extensively have modern researches and experiments disturbed the vague ideas, and the speculative language in which metaphysicians and psychologists were wont to enshroud their subtle distinctions of mental operations. The will and voluntary motion are impaired by lesions more or less extensive of the white substance, and as a consequence of such lesions, memory as well as the other mental operations, may be utterly extinguished. The consequence of such lesion in the first degree is slight, and may be but temporary, as in the instance of profound intoxication: as it extends, voluntary motion becomes impaired, tremor, sluggishness, and relaxation of the muscles are observed, and the tongue is tremulous. But is the power of voluntary motion alone undetermined? By no means; with the inertness of motion there is also inertness of will, and bluntness of the sensations; the sensibility is impaired also, and, as the disease advances, will and sensation are impaired and gradually abolished. These lesions purely physical in their essence, are also physical in their effects. Then, while the voluntary and motile powers are thus gradually crumbling away, do the mental remain vigorous and unclouded? Are they so shielded at all points as to be secure from the surrounding, impending dangers? Testimony to the contrary abounds, dementia is in fact one of the commonest characters of this species of paralysis, beginning in confusion of ideas and momentary loss of memory, and ending only when the magnificent temple of the intellect has fallen into a heap of ruins, beyond restoration or reparation. We shall look in vain for any interval, any line of separation circumscribing within it the lesions of the will and of movement, as distinguished from those of the intelligence. These powers, one and all, are in reference to the encephalon, as functions are to their organs, and the line that would distinguish in the brain the cerebral affections as cerebral, from the lesions of the intelligence, as intellectual is indeed ideal, and not founded on what is observed in those diseases, although a legal and social value is imparted to it when there is question of depriving a human being thus afflicted of his liberty, and of protecting him against injury from himself or others. But long before this, the lesion (or the unsoundness, to use the popular name) wherever it may have originated, has begun for the physiologist, although it may yet obtain no recognition from the legislator.

Physiologically therefore, soundness or sanity as distinguished from insanity is less a question of opposition or difference than one of degree. The condition of the one state or the other as it respects the organization, is no more distinct in essence than are the degrees marking the extremes of cold and heat in a thermometer. In the one, the functions being undisturbed, they are in harmony with the organism and with surrounding objects. In the other, through the instrumentality of the same organs, the harmony of their action being disturbed, perversion of one or all the powers succeeds, and the intellectual operation so long characterized by rational tranquillity and business-like deliberation, are now all hurry and confusion, or depression and enfeeblement, and the mastery of the brain as an organ of determination is partially or wholly overthrown.

In its simplest expression then, the cerebra

power in its unimpaired plenitude depends on the integrity and perfect condition of the organs, the entire agreement between the senses and the sensorial recipient; break but a link of this chain, weaken but a cord of this wondrous mechanism, and the power falters. Its physiological harmony is no longer complete, and if the lesion extend, we shall have progressively presented to us, the pathological alteration and degradation of the organs proceeding *pari passu* with the phenomenon of the motile, sensitive and intellectual faculties in all their saddening phases of exaltation and decay.

In this rapid sketch of the actions of the several parts of the brain are we to infer that the foundation of the ruin is invariably laid in the white substance, and that the order of its progression is from the great nervous centres to the periphery? By no means, we have the most peremptory evidence that the lesion of the intellectual faculties takes the precedence in instances without number. The congestion and irritation of the pia mater, and of the substance of the convolutions is amongst the every day phenomena of organic life, and when unduly kept up, and at a certain degree of intensity, will be inevitably followed by such a disturbance of function, as will betray itself in acts of irrationality or delirium. The intellectual operations so disturbed produce by combination secondary effects on the white substance, and in their connexion, mutual dependance and responsibility, the acts of the will and of motility are involved in the general commotion.

Much, very much, remains to be said on the general and special functions of the various parts of the nervous system, but it will perhaps be felt that for the object in view, which is to take a glance at the pathological alterations observable in connection with cerebral disease, that we should address ourselves at once to the important portion of our subject.

The field upon which we are now about to enter has been enlarged, and fertilized by the labours of Gall, Bell, Arnold, Miel, Haslam, Esquirol, Foville, Calmeil, Pritchard, Ferrus, Flourens, Marshall Hall, Gredius, Delaye, Majendie, Leuret, Cazauvielh, Courbé, Georget, Parchappe, Duges, the two Pinels, and many other able and persevering fellow-labourers, one and all of whom proclaim, on the clear authority of physiological experiment, and clinical observation, that structure and function, alteration, and morbid symptoms hold in regard to each other the unalterable relation of cause and effect, in all the affections and in all the manifestations of the cerebro-spinal nervous system. In all the forms and degrees of these affections,—whether incipient only or in an advanced state—whether temporary or incurable—whether slight or serious,—these investigators believe that they depend on a corresponding material modification of the cerebral pulp, wholly and completely subjected to the ordinary laws of the organism.

(To be continued.)

The thirteenth meeting of the French Scientific Congress is to be held at Rheims some time between the 1st and 10th Sept. next, and to last, as usual, ten days. Mr. Gousset, archbishop of Rheims, and president of the Academy in that city, is to be president of the managing committee.

A petition from George King, surgeon-accoucheur to the Dorcas Society for the Relief of Lying-in Women; Hugh Massey, senior surgeon-accoucheur to the Charitable Society for the Relief of Lying-in Women; William A. Cox, surgeon-accoucheur to the Abingdon and Bethesda Lying-in Charities,—was presented on the 20th ult., in the House of Commons, by Lord Duncan, praying, that in any contemplated measure of medical reform, that care should be taken to promote the advancement of the science of midwifery. The petitioners stated that they felt themselves called upon to take the above step by a careful perusal of Sir James Graham's Bill of last Session, which contained no provision to regulate the practice of Midwifery.

By an error in last week's report of the names of those gentlemen who had passed the College of Surgeons, on Friday se'ennight, the name of G. Harris was given instead of G. Havers.

REVIEWS.

On the Theory and Practice of Midwifery. By FLEETWOOD CHURCHILL, M.D., M.R.I.A., &c. &c. Illustrated by upwards of one hundred highly finished wood engravings, by Bagg. London, 12mo., 1 vol., 479 pages.—Renshaw, Strand, 1842.

We lay down this beautiful little work with regret at parting with it, and pleasure that we can conscientiously recommend it to our readers. Amidst the innumerable treatises now pouring from the press on every subject, it is no small praise for an author that he can produce a work sure, as it is worthy, to keep afloat on the stream of time. In the work before us, we know not which to admire most, its convenient size, the excellency of its typography, the beauty and number of its illustrations, or the pains-taking and eminent cleverness of its authorship. As a "manual," this work shines with more splendour than as a work of theory; it is replete with the best, and most recent information. The student will find it a treasury of obstetrical knowledge, whilst the active practitioner will seldom fail, in referring to its pages, to find the object of his search well defined, and the best modes of procedure carefully laid down.

In the early part of the work one or two points occur on which we do not exactly agree with the author. On the question of relaxation in the pelvic symphyses during parturition, it is well known that there has been a decided difference of opinion; by some it has been pretty generally denied, whilst others of considerable celebrity have claimed that it is a well attested fact. Now, certainly, if mere opinion is to settle the matter, the decision against the relaxation would be carried by a large majority, but if deep research, and proofs by *post-mortem* examinations are of any weight, we think physiologists, admitting a limited relaxation, stand on the best ground. Dr. Churchill, who very ably adduces the evidence *for* and *against*, is inclined to the views of the older writers (*viz.* that no relaxation takes place), and uses the old argument, that "if the pubic symphysis be separated, even to a considerable distance, no advantage is gained in the diameters of the apertures." We think this abstract easily refuted. Suppose a ring of unyielding substance, as metal, of any given diameter, divided in one place to the extent of the 8th of an inch, thus:—



Very little is added to the diameter of the ring, scarcely any appreciable advantage is gained, in allowing bodies to pass through it; but, suppose the ring divided in three places instead of one, the ends in each division separated only to the extent of the 24th of an inch, altogether no more than the one division above portrayed, a ring thus divided presents many more advantages in its capacity of allowing bodies to pass through it thus:—



It is not separation, but simply relaxation that takes place. The former is a disease, or accident, the latter natural. Where separation has been tried at the pubis, it must be recollected that the pelvis was not only deformed, but the sacro iliac symphyses were hard, perfectly unyielding, so no advantages arise from it. The above diagrams are exactly analogous to the pelvis. The advantage gained by dividing one place only, is confined to one part, where it is of no service, when divided in three places, or simply relaxed, the advantage is general, and, therefore, beneficial. We have had some very startling proofs of relaxation by perhaps, the most eminent anatomist of Europe, Dr. Knox, of Edinburgh. They may be found in our last volume, in some papers on this question, by Dr. Clay, of Manchester. Among domesticated animals this relaxation is very well known to extensive farmers and cow leeches; it is an important question in midwifery and deserves more attention than it has hitherto obtained.

When speaking of the uterus, Dr. Churchill leaves the question of muscularity, or non-muscularity of that organ in the same position in which he found it, without venturing even his opinion, and his statistics of menstruation are chiefly taken from Mr. Robertson's papers, which have been shown to be incorrect, both as to the commencement and decline of that function. But we have said enough of the theoretical, we will now touch the practical. On the subject of natural labour, we are glad to observe Dr. Churchill adopting as a general axiom the "making the examinations with the right hand, the patient lying on her left side." That this is the most common and most decent position every one will allow, and we wonder Dr. J. Ramsbotham should ever have advised the left hand when the patient is on her left side, as it could only be used under unusual circumstances, and at all times must be most inconvenient to the attendant. Dr. Churchill very properly denounces the system pursued by Smellie, Hamilton, and Burns, in tedious labours, of dilating the os uteri (a practice which cannot be too strongly condemned), and substitutes venesection, with nauseating medicines, as more safe and certain. Under the head of Tedious Labours, the author speaks favourably of the secale cornutum, and, we doubt not, if medical men would only be a little more attentive in selecting a good preparation, the ergot would be found generally a very efficient remedy. The author prefers the infusion in water or milk to any other preparation. We have used it in that form since 1824, and always felt satisfied it was the best mode of exhibition, and the result has generally been satisfactory. The following are rules on its use:—1st. When the pains are inefficient, without especial cause; 2nd, if the os uteri be soft and dilatable; 3rd, if there be no obstacle to a natural delivery; 4th, if the head or breech present and be sufficiently advanced; and, 5thly, if there be no threatening head symptoms, nor excessive general irritability. On the other hand, it is not to be used:—if the os uteri be hard and rigid:—if the presentation be beyond reach:—if there be a malpresentation:—if the pelvis be deformed:—if there be any serious obstacle to delivery in the soft parts; and, lastly, if there be head symptoms, or much general irritation.

Turning to the chapters on the use of various instruments, Dr. Churchill gives an immense display of evidence *for* and *against* the lever, but is himself a decided advocate for its use, both as a *lever* and *tractor*. On the long forceps we expected more than (to speak frankly) we found. The kind preferred by the author does not, in our opinion, equal those of Davis and

Radford, to the latter of which we give the preference. We find it impossible to notice even a tithe of the good points contained in this work, for there is not a question of importance throughout the whole volume but is amply illustrated by statistical tables, such as Cæsarian sections, malpresentations, retention of placenta, puerperal fever, &c. A point not to be overlooked is, that Dr. Churchill's book is illustrated in a style far superior to any we are acquainted with. At page 40 there is one of the most superior wood engravings we ever saw of the pelvic viscera, and scarcely less admirable are the views of the distorted pelvis, pages 22 to 25.

In conclusion, we cordially recommend the work to our readers, with the assurance, that a small sum for a good work cannot be spent better.

The Anatomy of Sleep, by EDWARD BINNS, M.D., Member of the Society of Antiquaries, Scotland, and author of "Prodromus to a Philosophical Enquiry into the Intellectual Powers of the Negro," &c.

This interesting work has reached a second edition, and is *enriched*—we believe that is the word—by various oral and written communications from the author's titled acquaintances.

The Medical Almanac and Medical Student's Guide for 1845. London: Henry Renshaw.

This is really one of those books which to appreciate properly we should, on an occasion or two of need, not find at hand. It contains information on subjects nowhere else to be obtained, and on which there is no medical man in the course of a twelvemonth who has not occasion to make enquiries. We have noticed with especial approval the careful account it gives of the Continental Medical Institutions—those of Germany being very distinctly spoken of.

A Thermometrical Table of the Scales of Fahrenheit, Centigrade, and Reaumur; comprising the most remarkable Phenomena connected with Temperature in relation to Climatology, Physical Geography, Chemistry, and Physiology. By ALFRED S. TAYLOR, Lecturer on Chemistry, &c. in Guy's Hospital.

A most laborious compilation, comprising into a small compass a vast number of facts, easily referred to either of the three scales of temperature. It is likely to save much troublesome calculation, and to be very useful to any one blessed with good eye-sight, or in possession of a strong lens. The small and somewhat indistinct type, and the necessary crowding of a great number of abbreviations into a small compass, would lead us to prefer several smaller tables to one; but the plan is a good one.

TRANSACTIONS OF LEARNED SOCIETIES.

LONDON MEDICAL SOCIETY, FEB. 10. Dr. Theophilus Thompson, President.

The discussion on Dr. Forbes Winslow's paper on the "Incubation of Insanity," was resumed by Dr. Costello, who expressed his great surprise that any member of the Society should have boldly asserted, that in every case of insanity after death, no morbid appearances were discoverable in the brain. He wished to know whether any gentleman present in reality entertained so preposterous an idea—one so directly at variance with the extended experience of every pathological anatomist.

Mr. Headland said that Dr. Costello had put an erroneous construction upon what he had said at the last meeting. He then observed, that in by far the greater number of these cases, no appreciable change in the condition of the brain could be detected after death.

Dr. Costello still expressed his astonishment that such an opinion should be expressed among persons who certainly were expected to be conversant with pathological anatomy. The experience of every man who had opportunities of examining the brain under these circumstances, was against Mr. Headland. Would Mr. Headland seriously maintain that there was no appreciable change in the colour, in the consistence, and the weight of the brain, of persons who died insane? If he asserted this, he could know little or nothing of the researches of the most celebrated anatomists of this country, or the continent.

Mr. Headland persisted in the maintenance of his opinion.

Dr. Chowne ridiculed the idea of insanity being a purely functional disease. He considered that in every case it sprung from a physical cause, and was to be met by physical, conjoined with moral, treatment. It was absurd and unphilosophical to suppose the immaterial mind to be capable of being disordered, independently of any alteration in the physical condition of the brain.

Dr. Clutterbuck agreed with Dr. Winslow, that little or nothing could be done for the cure of insanity when it became chronic. He thought that it was most important to attend to the incipient indications of the disease. He considered that in the first stage of insanity, the brain was in a condition somewhat allied to inflammation, and antiphlogistic measures were necessary.

Several other members addressed the Society, and the discussion was again adjourned.

Feb. 17th.—The discussion was resumed.

Dr. Wigan referred to his view of the duality of the mind. He maintained that there were two minds developed through the two hemispheres of the brain. Unless this doctrine was understood, no rational views could be entertained of the pathology of insanity.

Mr. Headland had come down to the society expecting that Dr. Winslow would open the debate. He was anxious that he should do so, as he (Mr. Headland) had some further remarks to submit to the Society.

Dr. Winslow complained that the object which he had in view in bringing forward his paper on insanity had been misunderstood. It was not his purpose to enter upon the consideration of insanity in all its forms, or to point out at length the treatment necessary to be pursued in such cases, but his observations referred to the subject of incipient insanity, to the premonitory signs and precursory stage of mental disease. He considered that this subject had been much neglected by the profession, and he was desirous of bringing the matter under the notice of the Society, with the view of ascertaining the opinions of experienced men on a question of such vast importance. He still asserted that in every case of insanity there was a well-marked period of incubation, during which, the patient's mind was hovering between sanity and insanity—a stage of consciousness when the patient knew that he was suffering from an altered condition of mind, and struggled against morbid delusions which were trying to force themselves upon the imagination. He maintained, in opposition to the views of Mr. Headland, that in every case of insanity the brain was the seat of the affection, although no obvious or "appreciable" alteration of structure could be detected after death. It was most important to establish this fact, it was a first principle in connection with this subject, unless they admitted the brain to be the seat of the disease in insanity, it would be useless for them to investigate the pathology of the disease, or attempt a cure or alleviation. It was extremely illogical for any person to assert that because no "appreciable" alteration of structure could be found in the brain of some who have died insane, that therefore this organ had undergone no organic changes. How unscientifically, how carelessly, was the brain often examined after death—how little was known of the healthy organization of the brain, and of the ultimate structure of nervous fibre; and was it not great presumption in any one boldly to assert that because he could not perceive by the naked eye, any obvious disorganization in the nervous mass, that the brain was in a healthy condition? He (Dr.

W.) could not suppose insanity to exist without some alteration in the physical structure of the brain—he scouted as a dangerous and unphilosophical doctrine, the idea of insanity being a functional disease, a disorder of the mind abstracted from organization. In every case he considered the mental impairment but an effect—a symptom of disease of the brain whether recognizable to sense or not. Instances had been cited in which after death, extensive disorganization of the brain had been discovered, whilst during the life of the individual no mental impairment had been perceptible. The same phenomenon was occasionally observed in diseases of the lungs, liver, and stomach. But he (Dr. Winslow) believed that in every case in which the brain was in a disorganized condition, should the convolutionary portion be implicated in the structural disease, the mind would be found to have been affected. The person may not have laboured under any delusive hallucination or illusion, but if the mind be tested with the view of detecting whether any disorder was present, some diminution of intellectual vigour would have been obvious. The experience of every person who had had extensive opportunities of examining the brain in cases of insanity, was against the obsolete notion entertained by Mr. Headland. Dr. Winslow then referred at length to the recorded account of the 72 most recent dissections at Bethlem Hospital, performed by Mr. Lawrence, in every one of which the brain was found to have undergone some structural alteration. In 400 dissections made by Mr. Davidson at the County Lancaster Lunatic Asylum, the brain was invariably found disorganized. M.M. Foville and Delaye had paid more attention than perhaps any other two morbid anatomists to this subject; and they state that they have always been able to detect organic changes in the brain after death, principally in the cortical or grey part, which was frequently found to be of an intensely red colour, resembling erysipelas. If the grey substance in these cases be dexterously pared, and very thin slices of it cut off, so as not to lay bare the white part of the brain, a preternatural redness, varying from that of red to lilac colour, will be seen. In some cases of acute mania, the brain will be found of a marbled appearance, in which patches of still deeper red hue and of preternatural softness are detected. Mr. Headland said that little was to be done by means of physical treatment for the cure of incipient insanity. Dr. Winslow expressed his surprise at the expression of such an opinion. It was opposed to the experience of every man who had a practical knowledge of the subject. In cases of acute mania and during the early stage of the malady, physical as contradistinguished from moral treatment was all-important.

Mr. Headland again asserted, that in by far the greater number of these cases, no change in the structure of the brain was to be found. Did Dr. Winslow believe that a structural alteration of the brain took place in intoxication (which was a temporary insanity), in delirium tremens, in puerperal insanity?

Mr. Dendy expressed his concurrence in the view taken by Dr. Winslow. The idea of insanity being a moral disease was perfectly absurd and unphilosophical. He believed that in all these cases the brain had undergone structural alterations, although that organic change might not always be appreciable.

Mr. Hancock related a case in which the whole brain had been reduced to the consistence of pus, without affecting the healthy manifestations of mind during life.

Mr. Pilcher thought that insanity was invariably but the effect of some organic change in the delicate structure of the brain.

Dr. Bennett entertained a different opinion. He considered that it was possible for the mind to be diseased independently of the body.

Dr. Theophilus Thompson (the president) thought that the society was extremely indebted to Dr. Winslow for the communication which he had read on insanity. It was a paper of great value. He (Dr. T.) had been much struck by many of the author's views, particularly with the distinction which he drew between pathological

and legal insanity, as well as with the notion, of insanity being in the first stage an affection of the moral powers, the alteration in the intellectual faculties being but an advanced stage of the moral malady. After some further observations on this point, Dr. Thompson congratulated the society upon the spirit which animated the discussion—upon the thunder and lightning which had been exhibited by various members in defence of their opinions—it afforded a most favourable contrast to the tone in which these debates was generally carried on.

It was then proposed and carried, that the discussion upon Dr. Forbes Winslow's views should be again adjourned till next Monday (the 24th), when Dr. Costello is to open the debate.

Feb. 24th.

The discussion upon Dr. Winslow's paper on insanity was again resumed by Dr. Clutterbuck, who objected to the term "incubation." He thought that it did not sufficiently express what the author of the paper means by the early or incipient stage of insanity. He also thought that a proper distinction had not been drawn by several members who had spoken on the subject, between organic structural, or functional, disease of the brain. He did not wish to undervalue the importance of attending to the early period of insanity, for he agreed with Dr. Winslow that it is often only in this stage of the malady that we were able successfully to cure it. Insanity was not a disease, but merely a symptom of a disease. It was, in the first instance, of an inflammatory character, and was to be cured by antiphlogistic measures.

The President called upon Dr. Costello to read the paper which he had promised on the last occasion.

Dr. Costello, after justifying the use of the term "incubation," then read a communication on insanity, which we publish entire in another part of our Journal. At the conclusion of the paper, Dr. Chowne said that the Society ought to feel much indebted to Dr. Costello for his erudite paper. It shewed great research. He differed with the author upon some points, but, nevertheless, he considered him entitled to much praise for the ability displayed in the paper in question. Mr. Pilcher concurred in the view taken by Dr. Chowne. He dissented, however, from some of the physiological positions advanced by the author.

After a few remarks from Mr. Headland, and Mr. Clark, Mr. Roberts proposed a vote of thanks to Dr. Costello, which was put from the chair, and unanimously carried.

NOTICES TO CORRESPONDENTS.

The letters of a Resident Physician to an Asylum have been received, and will be used.

An Enemy to Quackery, &c., presents us with a very sombre picture of the medical man under the new Bill. Our correspondent thinks that the effect of the Act (along with favouring the spread of quackery), will be to prevent any gentlemen from entering the profession in future; and that before long, the science of medicine in Great Britain must give way again to mediæval ignorance. Want of space precludes us from giving his letter at full length.

We do not know of any situation likely to suit I. K., D's friend. He should advertise: we know no other remedy for his ailment.

In reference to a letter which we have received from Norwich, complaining of the manner in which some persons there give gratuitous advice to patients who are able and "willing" to pay, endeavouring thus to win the "sweet voices" of the public. We can only now say that the practice is unjust, and productive of very great injury, especially to the young medical man. This malpractice, however, is not confined to Norwich; there is scarcely a town in the United Kingdom, in which some Lady Bountiful in pantalons does not ply the gratuitous system, sending her prescriptions to some favourite chemist; the dirty work after all being done "for a con-si-de-ration." We hope to see a change introduced in this matter speedily.

Doctor Tunstall's letter and pamphlet have been

received. The latter shall be noticed as soon as we can find an opportunity.

We are at a loss equally with A General Practitioner to fathom the meaning of a passage in a letter of Mr. Liston's, which appeared in the Times of last week. The letter itself is a defence of the treatment adopted in the famous "Lowe" case, and winds up with the statement that "nineteen cases out of twenty practitioners would have adopted the same plan of treatment." What a case of practitioners may be we know not, but imagine it to be an illustration of the old Scotch boast, that John Bull's "vernacular" is spoken with greatest purity in Caledonia. In our humble opinion, a re-perusal of Lindley Murray and Percival Pott would be of use in a quarter we will not more clearly hint at.

Aliquis seeks to throw a very invidious task upon us. We cannot pronounce judgment upon the parties he has named. It is not for us to say what their intentions are; if dishonest, he has the remedy in his hands. And if we in present circumstances were to take up the matter, we should be involved in the worst of all libels, one that would do neither us, nor perhaps the public, good.

Dr. Murphy, in answer to some strictures which appeared in our Journal of January 25, in a review of his "Obstetrical Report," &c., has sent us a letter, which contains proofs sufficiently convincing, that in the interesting cases of protracted gestation, recorded by him, there was after all no mistake. The additional evidence adduced by him in that letter appears to prove Professor Murphy's calculations, as to the duration of pregnancy in both the cases suspected by us, correct in every particular.

The Report of the Carlow Fever Hospital will be noticed in an early number.

A Reformer, Dublin.—Next week, if we have space.

Dr. Lewin's valuable paper will be inserted as soon as possible. His wishes with regard to it shall be complied with.

Dr. Hornblowe's communication shall be attended to.

Chirurgus on Medical Reform is cleverly written, but the remarks scarcely apply to the new Bill.

We have received copies of Jerrold's Magazine and Cruikshank's Table Book for March, and we can warmly recommend both works to our readers.

Communications from Dr. Rigby, Dr. Clay, Dr. Knox, and Dr. Jobert de Lamballe, Surgeon to Louis Philippe with any others are unavoidably delayed till next week.

Dr. Hoffmann's note shall be answered immediately.

Mr. Horsford's Sketch of Liebig has been received.

Several correspondents have sent complaints to us at the non-appearance of a Medical Directory, to be published in the Strand, to which they have respectively contributed seven postage stamps. We cannot answer any of the questions put to us except on one point—that it was the Editors of the other Directory (published by Mr. Mitchell, in Fleet Street,) that communicated to us their names, and to whose respectable standing in the profession we testified. We see that the work enquired about is advertised as in the press. Viator, Quisling, and other anonymous communications inadmissible.

Our readers will observe that ours is a special report of Sir James Graham's Speech—the fullest, probably, published.

THE MEDICAL TIMES.

SATURDAY, MARCH 1, 1845.

Tu ne cede malis.

THE amended, or rather the altered Bill of Sir James Graham, is at length before the public. After mature reflection on it, we are compelled to agree with the editor of the Morning Chronicle in doubting whether it be on the whole—with all its supposed changes—better or worse than the measure of last year. The alterations certainly cut both ways, yet the incompleteness which we affixed as the main characteristic of the former scheme is perpetuated in, and adheres with equal

tenacity to, the latter. Some really useful reforms are made, as last year; while others, of equal or greater importance, are again, as in the last bill, as wholly slurred over as if they were never to have a legislative existence. Indeed the Bill's main defects are a second time its omissions, and if ultimately damned in its progress through the house, it will be actually entitled to the designation which in half irony was applied to Mr. Wakley—"the innocent Abigail that went sinless to H—l!" Its fault will be its innocence—its short-comings rather than its transgressions.

The three main principles of the Bill remain exactly as they were before. The Council of Health undergoes no change. Two—perhaps more—General Practitioners will form a part of the six Members to be nominated by Government; but last year Sir James Graham announced the same provision as a part of the arrangements. One important point which we had hoped the long recess would have resulted in altering to our satisfaction remains, we regret to see, as it was; the Members to be sent to the Council of Health by the Colleges of Surgery and Medicine are not to be elected by the Colleges, but by their ruling juntas. The Profession's Court of Appeal will contain those whose acts are appealed against; the very body to which we shall have to bring our grievances will be composed of the men who cause them. From Lawrence and Brodie of the Council of Surgeons we shall go to Lawrence and Brodie of the Council of Health. This is a very unfortunate degree worse than the Macedonian's appeal from the drunken to the sober Philip! It must be altered.

The second principle, suppression of quackery, undergoes no change, except in our receiving a clearer wording of that clause of last year's Bill, which punished the fraudulent assumption of the ordinary recognised Medical titles. Quackery is left to do all it can in the way of business, if it will but decline to clothe itself with designations which intimate its identity with, what the *Lancet* used formerly to sneer down as, "the Legitimate Profession." Sir James Graham has not thought it necessary to enact against its ordinary exercise any penalty, and has even declined to adopt the suggestion which would best have solved the difficulty of repressing wrong, while exciting for it no sympathy, viz., to require from all quacks—no matter whether Jew speculators or Crone herbalists—a yearly contribution to the state as license money for a practice distinctly avowed as empirical, and to punish every quack skulking from the badge of his disgrace, or the tax levied on his wrong-doing, as an offender, not against the Profession but the Government. We confess we were in hopes that the strong expression of Professional opinion made during the recess to Sir James Graham, at his own invitation, would have produced legislation considerably more stringent; and disappointment is the least forcible word that expressed our feeling, on hearing that the Home Secretary had nothing better in his quiver for us against the enemy, after so prolonged an interval spent at the legislative forge. It is true, indeed, that the new Bill leaves the Apothecaries' Company their old privilege of punishing quacks, if, with the field of Medical practice universally open to all persons and all nations, they will specially devote their funds—for the first time in their history—to the repression of quacks at the price of three hundred pounds a piece! We do not wonder that Graham's intellectual countenance was observed to twist its features into an expressive sneer, when mentioning his benignity in

perpetuating this privilege so much stiekled for, and so little used. He knew, what we have again and again protested, that the Apothecaries had shirked the expensive duty in more favourable times, and would most certainly never mind it now. It was a mere factious war-cry about nothing, and to appease it, he gave — nothing!

The registration clause seems to be exactly as it was. It was a valuable improvement; it is allowed to remain so. We thank Heaven there is no change here.

The only matters in which there have not only been changes, but changes for the better, are first, the Institution of a National Board of Midwifery; and secondly, the concession to the Colleges of the power of expelling discreditable members. The former is clearly a most acceptable boon, and we trust that by making the board an integral portion of the Council of Surgeons, Sir James will not only avoid adding to the numerous institutions that already pester us, but foreo into that Boetian j unto a little common sense. The expelling power will be also a boon—on one condition—that the body using it possess the confidence of their constituents. In the hands of our London Surgical Council, it might possibly prove a curse, injuring individually, and aggregately repressing that independent resistance of wrong at this moment so peculiarly and usefully the characteristic of the Surgical portion of the profession. The great and striking peculiarity of the new Bill is its prolongation of the reign over the Profession of the Apothecaries' Company. The compulsion to join the body is removed it is true, but there is no other *medical* body to supervise the young doctor's education unless he intend to become a Physieian. This is saving the company at a terrible price. "The Licentiate of Medicine and Surgery" is necessarily not a Physieian—and compulsion being removed, will not be an Apothecary. Whence, therefore, shall we obtain our Licentiates of Medicine? This yielding to all parties, dedicating a bit of the Bill to the pleasure and will of each corporate section, may end in doing a serious mischief to the profession. The interests of the different corporations can only be reconciled at the expense of their different members. It is a renewed triumph, whose union must be built on the proserip-tion of their mutual friends.

Another ungrateful proof that the recess has not been turned to that advantage to the improvement of the Bill which we had so fondly expected, is the omission of any provision for the important body of druggists. As the law now stands, any unprincipled and ignorant person, may establish himself as a druggist, without any let or hindrance, and the mistakes ending in violent deaths, which are constantly reported for us in the papers may be fairly traced, in a great measure to this cause as to their source. We do not ask for any retrospective legislation, though if ever justified it would be surely here, where a social anomaly exists in the very teeth of morality, and with the certain result of destroying life; but we do say, that a medical bill is most defective, which makes no provision that the rising generation of druggists, shall be of a respectable order and thoroughly acquainted with the technical names, and chemical and medicinal qualities of the various drugs and poisons they live by vending.

It would, of course, be impossible to conclude without one word on the College of Surgeons of England. It has been well designated the monster grievance of the English Profession, yet as far as we have read the intentions of Sir James Graham, he proposes in

it no alterations. It is not included, as many erroneously have supposed, in the Bill, empowering her Majesty to grant certain Charters; and though Sir James Graham admitted that there were defects in the measure, now so universally protested against, he thus appears to make no single step to repair them in his final measure of Medical Reform. He expects—he said to the House—that in a short time the great dissatisfaction of Surgeons will disappear, and that in a few years, the present Government of the College will be viewed with general approval and gratitude. He never was more mistaken in his life. It is the old story of the fatuous rustic waiting the rivers' flight.

"Rusticus expectat dum defluit amnis; at ille
Labitur, et labetur, in omne volubilis ævum."

We who had predicted, and have since carefully watched the course of the present agitation, tell him that the strife now waged will cease with its causes—not one instant earlier; and the only effect of wasting time in the expectation, will be so to encourage, corroborate, and make resistless, that movement for a new Incorporation, which the Home Secretary tenderly deprecates, that he will be compelled ultimately to destroy the College he would not amend. There really does seem some infatuation in men—forcing them into action or inaction so equally imprudent and ill-timed, that they appear to have no other tendency than the destruction of the doomed edifice in Lincoln's Inn-fields. Councillors and ministers appear equally at fault, and nothing but a FORMIDABLE ASSOCIATION OF SURGEONS CAN POSSIBLY SAVE THE PROFESSION FROM THE WORST OF MIS-CHANCES. We had, last week, urged delay in achieving the new organization intended to protect the College alike from itself and its enemies; but the Bill we awaited, now showing itself on this grand cardinal point—so wholly unsatisfactory, we must press on our brethren with our utmost influence, and force the urgency, the all-over-powering necessity, for a National Association of the Surgeons of Great Britain. Not a day, not an hour, should be lost. It is the time of settlement; and if it slip by unused—we shall find no small difficulty in making the cause subsequently a full reparation.

In spite of Mr. Roebuck's indignant accusation in the House of Commons the other evening, our distinguished contemporary, the eccentric Coroner and garrulous M.P., (who is said to have uttered more words and less sense than any other member during the session) is perfectly consistent with himself in one point at least. The abuse, which formed the rotten foundation of his fortunes, continues to support them, albeit at second hand, and though he rarely suffers himself to play second fiddle in a line in which he has been in the habit of taking the lead all his life, he will do so upon occasion rather than mortify his natural propensity. A week or two since, he condescended, by deputy—for they say he is above staining paper for the *Lancet* himself—to follow in the wake of the *Gazette*, and under the influence of the *genius loci* of Princes Street, made an attack upon Dr. Guy, which we may safely pronounce to be a very unsuccessful plagiarism. He opens his trenches like the *Gazette*, with a parallel, ushered in by the flourish of trumpets with which Mr. Taylor is in the habit of announcing the approach of his commonplaces. "The following appear to me to be the principal points which demand the attention of a medical jurist in all cases of suspected poisoning." This is of course the prelude to a long array of original suggestions, which Dr. Guy is of course

supposed to appropriate. Very original truly, but original only in being prolix beyond endurance. No less than thirty-four distinct rules, as familiar to us as our alphabet, and which are just as much capable of being plagiarised as the function of respiration. Dr. Guy uses these same commonplaces, and treats them as common-places, making no parade or fuss about them, and in place of thirty-four "discoveries," gives us four summaries of commonplace memoranda. If Dr. Guy stole them from Mr. Taylor, where did Mr. Taylor get them? He could not have discovered them if he had wished it, for they were in every man's mind and practice already, and an industrious man would find no difficulty in compiling them from Christison. This parallel, as the *pièce de resistance*, and sundry *entremets* of tit-bits of originality, a la Taylor, served up with some of the deputy's own *saucée piquante*, constitute the dainty meal with which the *Lancet*, of a former week, regales its readers. After all, perhaps, we do our distinguished contemporary injustice. It is quite possible that he may merely have inserted the review, which Dr. Guy informs us was rejected by a provincial journal too honest to be made the cat's paw of jealous authors or mercenary booksellers, but which was secure of an asylum in that foul receptacle of abuse, the *Lancet*, a journal that has fallen on "evil days" when even a publisher's hackship becomes an acceptable distinction. If Dr. Guy stood in need of any consolation we would remind him that the censure of which the versatile speculator in Bedford Square, orders to be written for him at so much, or rather so little per page, passes current as praise, and we congratulate him on the honour of an unfavourable notice. If Mr. Taylor, whose industry and perseverance are highly praiseworthy, would allow us to offer a bit of advice, we would say, "take care of your friends; they are doing that which you are in some danger of doing for yourself, they are making you ridiculous; give up that bad habit of prefacing your common places with "it appear to me," and still more avoid the eccentricity of running about town representing yourself as an aggrieved discoverer because the ordinary facts of medical jurisprudence are to be found in other manuals as well as yours, you will thus obtain a greater advantage over your accomplished and erudite rival, than all the partial or unnecessary reviews in the world can confer upon you. You have, as we have said, advantages to which Dr. Guy can lay no claim. Trust to them and make the most of them."

By the way, amid all the squabbles about originality, how happens it that the extremely interesting medico-legal points decided on in the case of Wakley v. the Hope Insurance Company have not yet taken their place in any work on Forensic Medicine? We may ourselves—in if tempted—in an early day give them the development their peculiarity so eminently calls for; but in any case Dr. Guy will be quite unpardonable after this notice if he overlooks them in his next edition.

The *Times*, in a leading article condemnatory of the new Bill, insinuates that Mr. Wakley is not to be trusted, and that medical practitioners must first trust to themselves alone.

At Apothecaries' Hall, on the 20th February, 1845, George Cleveland, Lawson Fleck Crummey, and Peter Thornton, were admitted Licentiates.

Royal College of Surgeons.—Gentlemen admitted Members on Friday, February 21st, 1845: J. Haynes, C. Andrews, G. Ayton, F. R. Gibbes, A. B. Allen, S. Le Brun, G. J. Macklin, R. S. Rogers, D. H. Gabb.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. IX.

Evidence of Mr. John Liddle, Dr. Aldis, and Dr. Rigby.

Mr. John Liddle, as the medical officer of the Whitechapel Union, has enjoyed favourable opportunities for becoming acquainted with the condition of the poor of the eastern parts of London. His evidence opens with the statement that the average age at death of all who die of the class of artisans, is not more than 25 years, and that about one-half of their children die before 10 years of age. The poorer classes seem, from his statements, to be very badly lodged. There is rarely more than one room to a family, and the subdivision of rooms is a very common occurrence. The number of persons living in a room may average about 5, and the average quantity of air to each person is about 153 cubic feet, or about one-fourth of the quantity usually stated to be necessary to health. In many of the garrets it is impossible to stand upright; the staircases are dark and offensive, and the rooms themselves foul from over-crowding, joined to the odour of privies, dirty water, and dirty clothes; few of the houses have water laid on in the yards, and they are commonly supplied with water from a tap or stand-cock. The consequence of this absence of water is, that their clothes, instead of being washed, are passed through dirty water, and the smell of their, so-called *clean* linen is most offensive.

The over-crowding which previously existed has been increased by the metropolitan improvements; some of the larger houses are now converted into lodging-houses, which, for the most part, are shamefully over-crowded; and the houses in many places in the district are more closely inhabited.

We have already commented on that very questionable, and certainly very one-sided, proceeding, dignified with the sounding title of metropolitan improvements, and we cannot resist the temptation of urging a word or two more on the subject in this place. There can be no doubt that a broad and open street is, *per se*, better than an assemblage of miserable courts, alleys, and cellars, and that when the one is substituted for the other, certain advantages are gained. The intercourse between the several parts of a crowded city is facilitated, the pure air has freer access to the districts traversed by the thoroughfare, and a large and disorderly population is broken up into smaller and more manageable masses. All these effects will doubtless follow the improvements which have cut through St. Giles's. But in the meantime, what has become of the poor inhabitants whom we have turned out of doors? If we could analyse the motley group which inhabits the lowest and most wretched districts of the metropolis, we should probably find it to consist of the very poor, the very careless, and the very wicked; with a residue of hard-working men attached to the locality from its proximity to their place of work. The very poor can inhabit none but the meanest neighbourhoods; the very careless—the dirt-tolerating, pig-loving, half-civilized Irish—never stray far from the place where they first pitch their tent; the thieves, prostitutes, and beggars, find themselves at home only in dark, narrow, and intricate courts and lanes; and those whose choice is regulated by their place of work cannot wander very far. The consequence is, that when we turn this motley group out of doors, instead of finding their way to the suburbs, they are thrown *en masse* upon the surrounding districts, or on places recommending themselves by the same unhappy peculiarities. Thus St. Giles' has overflowed on the filthy and low courts and streets leading out of Drury Lane, and the worst parts of Westminster. Hence by our boasted improvements we commit a threefold injury. We dislodge the poor from a spot to which they have become attached, and which they find convenient to their places of work; we throw them on districts already over-crowded; and we add to the burden of the respectable inhabitants of the parishes

and places adjoining. This we believe, to be a fair estimate of the value of our magnificent metropolitan improvements.

But to return to Mr. Liddle's evidence. We shall first extract from it a case or two illustrative of the condition of the streets and houses of the poor. "A man of the name of Sculley, having a wife and five children, the other day told me that the only place he could procure for himself and family was a cellar in Beck's Rents, and for which he pays 1s. 3d. a week. This was for the use of a cellar, which he inhabited with his wife and five children, the youngest about six months old." He added "I had some difficulty in procuring any sort of lodging for my large family. I would willingly pay from 6d. to 9d. per week more, if water was laid on in my room; it would be a great saving of time and expense; for if I want a cup of coffee in the morning, I am obliged to get up and fetch the water from a distance, or else to go to a coffee-shop, where I am charged more than it would cost me at home." He further described the condition of the court in which he was living by stating, "there is but one privy, which is always in a filthy state. I am frequently obliged to clean it myself, which is a most filthy job. I would willingly pay a sum weekly, for the convenience of a water-closet for myself and family, to be saved the unpleasant labour of cleaning the common privy in turn. If water were laid on in the house, all of us labouring men would keep ourselves much cleaner, and our houses would be much cleaner. The labour of fetching the water is the principal reason, why the houses are not kept clean. The water which we keep in the house in tubs soon becomes spoilt and unfit to be used as drink. I would willingly pay a halfpenny per week to have the court and outside of my house kept clean."

Here is an instance of another evil to which the poor are subject—overcrowding. "The subdivision of rooms is very common in many places in my district, and out of charity, many of the poor give shelter to a houseless friend in the corner of the room, and this is sometimes the cause of fever in a family. An instance of a corpse being admitted into a room of a friend occurred the other day in the course of my practice. A young man died in the Blind Asylum, and the mother lived up two pair of stairs in a back room in a street leading out of the Commercial Road, where it appeared almost impossible to carry up a corpse and a person of the name of Hildebrand, living in Crown-court, kindly consented to allow the body to be brought into her room, where her children were playing about (one of her children was ill at the time), she and her family, consisting of seven in all, were obliged to huddle together to sleep in a small back room."

We shall now present our readers with one or two gratifying instances of good effected by improvement in the dwellings of the poor. The first is an encouragement to landlords to improve their own tenements for the sake of their own pockets. "In a place in Cartwright street, where there are a number of small tenements surrounding a piece of waste ground, which tenements are occupied entirely by the labouring classes, a well has been sunk by the landlord, and a large tank erected over the well. This tank is filled by horse-power. From this tank, pipes are carried and the water is distributed into these several houses. The water is turned on three times a week from the tank. Some of the houses have a water-butt in the cellar, and the privy is there also." "I may mention as evidence of their appreciation of the supply, that they now pay 3s. 6d. per week as rent in lieu of 2s. per tenement, which they formerly paid. It appears that these houses were for many years in the opinion of the landlord underlet, but the tenants consider that the increase of the rent arises from the supply of water."

The other instance of improvement which we shall cite is also encouraging to the landlord, but it is something more. "Windmill Court, in Rosemary Lane, was one of the most unhealthy in my district. It was unpaved and filthy, and with stagnant water before the houses. I used to visit it sometimes two or three times a day for fever cases.

About twelve months ago it was flagged: it was well supplied with water from a large cast-iron tank, which enables the inhabitants to have a constant supply, instead of an intermittent one, on three days a week. The court is regularly washed down twice a week, and the drains are so laid that all the water passes through the privy and carries off the soil, which was formerly a most foul nuisance, and a constant expense to the landlord. In the seven months ending March, 1843, I attended 41 new cases of sickness in that court; in the last four or five months, I have had but two cases." Mr. Liddle adds, "the rent is better paid, and the landlord is considered to have made a good thing of the improvements, which are executed at his own expense. There is no doubt that sickness is the most common cause of the inability to pay the rent."

We shall conclude our notice of Mr. Liddle's evidence by a fact of a different kind. The London Hospital was badly drained, heated with hot air, and not large enough for its inmates. In 1837, and 1838, respectively, the mortality was 14 and 12½ per cent. In 1839 the sewerage was completed, and the mortality fell to 9½ per cent. In 1840 the hot air was discontinued, and a further decrease to 9 per cent took place. The mortality in 1841 was ten per cent. In 1842 the new wing was opened, when the mortality fell to 3 per cent and in 1843 to 7 per cent.

Want of space prevents us from noticing at length two or three other points in Mr. Liddle's evidence, such as the cost of fever (in the Whitechapel union £400 in a single quarter), the coincidence of excessive reproduction with excessive mortality, and the deterioration of the inhabitants exposed to unwholesome influences, &c. One opinion is too important not to be stated, namely, that if sanitary measures were properly carried out, the health of the labouring classes might be made quite as good as that of the better classes. In this opinion of Mr. Liddle we fully coincide, and we think that it is rendered extremely probable, by a fact recently stated in our pages on the authority of Dr. Guy, that the peers and the families of the peerage and baronetage have a lower expectation of life than the general population of England—a fact which strongly favours the opinion that the higher classes are not naturally of a more healthy constitution than the lower, and that sanitary measures would confer on the poorer classes one, at least, of the advantages hitherto supposed to be peculiar to their more wealthy brethren—better health and longer life.

DR. C. J. B. ALDIS, Physician to the London, Farringdon, and Surrey Dispensaries, gives some valuable evidence relating to the condition of the poor in Bethnal Green and Spitalfields, in the neighbourhood of Snow-hill, and in the borough of Southwark. He describes the condition of the habitations of the poor as very unwholesome. "Generally, one badly-conditioned room occupied by a whole family, badly ventilated and filthy." "Within the room close offensive smells, the atmosphere quite vitiated, the foul smell of the cess-pool often distinguished; the courts uncleaned and in a dirty condition." Field Lane, the courts leading out of Smithfield, Fetter Lane, and Fleet Street, the Mint, Artillery Passage, Bell Lane, and Petticoat Lane on the Surrey side of the water, are particularly specified. Dr. Aldis confirms Mr. Liddle's statement as the effect of metropolitan improvements upon the neighbouring districts. Keate Street, Keate Court, and its immediate neighbourhood, situated in Spitalfields, we are told, have been over-crowded in consequence of the improvements now going on in Essex Street, Whitechapel.

The following extracts will convey a just idea of the condition of some of the worst of the districts just mentioned. "At the back of Ray Street, Clerkenwell, which is densely populated, a most offensive and open drain, a part of Fleet ditch, passes by the back of the houses, and takes its course parallel with Great Saffron Hill, running under West Street, where it disappears. The evils from this open sewer are of course most felt in summer, when the stench is intolerable. I have witnessed similar nuisances in Lock's Fields,

Bermondsey, and Rotherhithe. In many places the refuse water, which has been employed for the purpose of cooking and cleansing the houses, flows through gully-holes into the kennel in the street, where it frequently remains stationary, producing in warm weather the most offensive exhalations. Old Niehol Street, with some streets in its vicinity, situated in the district of the London Dispensary, is very offensive in warm weather, in consequence of the exhalations from stagnant water. I am called upon to visit more cases of fever there than in any other part of the district. In regard to the water supplies, they are little calculated to add either to the comfort or health of the poor. In many courts there is only one supply of water for all its inhabitants, and it occupies a good deal of time to procure it and convey it back to the different rooms, where it soon becomes covered with a black scum. There is generally a filthy accumulation on the surface of the water on the water-butts. In some courts there is no supply of water; such is the case in Ireland Court and Lusignea Buildings, Red Lion Street, Spitalfields, which I visited to day. One woman informed me that her husband lay dead, and that she could not obtain water without the greatest difficulty to wash his "rags." I went into her room, and found her husband lying dead in a coffin; the room was small, dark, and dirty, and occupied by six children, in addition to the father and mother. Another female represented the place to be "stinking alive" for the want of water. In the neighbourhood of Field Lane some persons have not even cesspools or privies; all their excrements are thrown into a little back yard, where they are allowed to accumulate for months together; others have a cesspool, but it is not provided with a drain, so that the excrements run into courts or streets, where they remain until a shower of rain washes them into the gutter. These are the places we are called upon most frequently to visit."

Here is another description. "The courts in Field Lane are low and ill-ventilated, leading to back yards and houses. The yards are strewn with decayed vegetables, dust heaps, dung, human excrements, and other putrescent substances. In one yard I have noticed some pigs. I find the cesspools imperfectly covered, and the privies in a most filthy condition." "Red Lion Court, Saffron Hill, is quite unfit for human beings to dwell in; the houses are in a most delapidated and dirty state. The privies and back yards are exceedingly disgusting, the former being filthy and out of repair, and both emitting a most horrible stench. One yard, especially pointed out to me, was filled with a mass of putridity. There are no privies to some of the houses. Other sources of unhealthiness may arise from the knackers' yards, in one of which I was informed that sixty horses were slaughtered weekly. Different kinds of animals are skinned here, and the bones boiled, which occasion a sickening smell, and heaps of bones may be seen in the yard, the washings of which, with the offal from the animals, are thrown into the Fleet-ditch." Dr. Aldis's evidence adds nothing to our knowledge of the physical effects resulting from this unwholesome state of the streets and dwellings of the poor, although it confirms the statements of other witnesses. The moral effects of the overcrowding which accompanies it are painfully suggested by the following statement. "Sometimes I have found grown-up young men sleeping in the same bed with a middle aged or young mother, brothers and sisters above the age of puberty lying in the same bed. In one case of melancholia in a young woman, which ended in insanity, she described the cause as arising from an incestuous intercourse with her brother. But the moral effects only come to our knowledge accidentally."

The same evils seem to exist in the lodging-houses. "The sexes are not properly separated in the lodging houses, for single males and females sleep in the same room, in beds about six inches apart. The lodging-house keepers profess to make a distinction between the "married" and "single rooms," which no doubt is generally maintained, but not always. I happened to be in one of these lodging-houses in Keate Court the other day, and

was shown into the "married room," where I observed five beds; the room was small, and four of the beds were large enough to contain two persons in each. The landlord told me that the fifth bed was occupied by a single female. Each lodger pays three-pence a night for the bed, and if two individuals, male and female enter the house together, no question is asked as to their being married, and they sleep in the same bed."

We shall conclude our notice of Dr. Aldis's evidence by the following statement in answer to a question of the commissioner. "A very large diminution of sickness and mortality of the poor may without doubt be made; such a diminution as has been made in the sickness and mortality formerly prevalent amongst the higher and middle classes, apparently by the improved condition of their dwellings and streets. Many of the districts I have had to visit are apparently as filthy as the whole of London was described to have been at the time of the plague. I have stated that the small-pox has fallen like a plague on some of the worst conditioned spots. The crowding of the habitations is apparently increasing. I am informed that the alterations now making in St. Giles's have contributed to the overcrowding a part of Westminster and Drury Lane; this I am informed by a pupil who lives close to St. Giles's. The epidemics, continued fever, and even small-pox are increasing, and I imagine that no one will venture to deny that conditions of the atmosphere may occur which might produce in these districts a dreadful mortality. I may mention that I have become so much impressed with the importance of ventilation, that I have proposed to some of the committee of the Surrey Dispensary, the application of the ventilators used by Mr. Toynbee as one of the most important charities that can be promoted in the overcrowded neighbourhoods."

The evidence of Dr. RIGBY, Physician to the General Lying-In Hospital, York Road, Lambeth, is very interesting and conclusive as to the importance both of drainage and ventilation. Puerperal fever is shown in the clearest manner to have been connected with neglect of these important measures, and to have been removed by their enforcement. We regret that the length to which this paper has already extended prevents us from giving full extracts from this most interesting and lucid piece of evidence, we must, therefore, content ourselves with referring our readers to it. For the same reason we must notice very briefly his statements as to the defective drainage and ventilation of private houses, and especially of bedrooms, among which, he especially notices the sleeping-rooms of servants. Such defects exist both in old and new houses, and give rise to much sickness both of the heads of families and of servants. We will give one instance. I am at this moment, "says Dr. Rigby," attending a lady in her confinement (in the Marylebone District) whom I have with some difficulty rescued from an attack of puerperal fever, which threatened to assume the malignant form. On being summoned to her when in labour, I was struck with the offensive drain-effluvia, which not only pervaded the lower parts of the house, but rose perceptibly from the area as I stood at the hall door; and I cannot help attributing this attack coming on, under all the possible circumstances of wealth and station, to the deleterious influence to which I have just alluded."

Dr. Rigby is the last of the witnesses who reside in the metropolis, and have given evidence chiefly relating to the health of its inhabitants. This evidence fills 122 pages of the first octavo volume, and supplies, as our readers will acknowledge, many subjects for reflection, of which we propose to avail ourselves in our number of next week.

Since we commenced this series of papers, another report has issued from the commissioners containing definite proposals founded on the evidence contained in their first publication. This is a step in advance which we had not expected, and which leads us to propose a curtailment of our original plan. Instead of analysing, as we had intended, the evidence laid before the Commission in Reports from the provincial towns, we shall, for the present, bring our labours to a close by a summary view of the principal facts contained in

our former numbers, and the most obvious reflections to which they lead; but should the hopes held out in the speech from the throne suffer disappointment, and the labours of the commission prove as abortive as those of its predecessor, then we shall resume our labours with the view of keeping the great question of the public health under the public attention, and contributing in our humble sphere to strengthen the growing impression that the time for action is already come, and that any postponement would be a bitter mockery of the hopes which have been raised in the public mind.

THE GOVERNMENT MEDICAL BILL.

ON Tuesday evening the attention of the House of Commons was claimed by Colonel Wood, who presented two petitions from Kennington and Chelsea, praying for some mode of summary conviction against persons practising medicine or surgery without a license; and that no Bill should pass which did not fully represent the general practitioners in the Council of Health. The petitions protested against that part of the New Bill which enforced the payment of a registration fee, on those who have already been in practice. When Colonel Wood had concluded,—

SIR JAMES GRAHAM, amidst the profoundest attention of the House, which was very fully attended, rose and said, that he hoped, ere he sat down, to convince his gallant friend that it would have been wiser for him to have heard the details of his contemplated measure than to have presented petitions against it, without being thoroughly aware of its nature. The House could not but call to mind, that when introducing his Medical Reform Bill at the close of last Session, that he did it with a particular view,—namely: to prevent all possibility of hasty legislation on a subject of such vast importance to the interests of the public and the medical profession. He did it with a view of giving all parties a full opportunity of canvassing the merits and demerits of his bill. (Hear, hear.) The fairness of such a course of proceeding could not be denied, even by those who continued to be opposed to the measure. Its usefulness, also, they would be prepared to admit; because, certainly, if discussion could have led to the amendment of the measure, it had been most amply discussed: and he would now proceed frankly and shortly to state to the house what was the result of that discussion as to the amendments to the bill which he deemed it his duty to propose. He might here state to the house what were the leading objects of his measure, and what would be the objects which would be sought by it. The first object of the measure—and to which he still adhered—was the establishment in this country of a Council of Health, which should exercise a general superintendence and control over the medical and surgical education throughout the United Kingdom, and which should constitute a board in the metropolis, of easy and useful access to the executive government in all those great questions affecting the health of the people of this country which must necessarily from time to time arise—such as quarantine, questions of sudden epidemics, which from time to time spread themselves over the land, or for assisting the government in devising the measures which should be taken by the legislature with reference to the health of large cities and towns; for which purposes this Council of Health should be at the seat of government for consultation and advice. That was the first object of his proposed measure. The second object which he had in view was, to secure all medical practitioners throughout the United Kingdom equal facility of practice (hear, hear); and also that with this equal facility of practice, in order to secure the public, there should be security for the possession, on the part of the practitioners, of equality of attainments. It was his object, and that of his measure, that those who possessed

equality of attainments should enjoy equality of practice. The third object sought to be secured was, that those attainments being assured by examination, and the standard being kept uniform, there should be a registration of the practitioners, which should inform the public that the practitioners so registered had undergone examination and had come up to the standard; and that none but those so qualified should be eligible to any public situation in hospitals, medical institutions, or government employ, or be legally entitled to practice in medicine or surgery. These were the leading objects of the bill which I introduced last year; to those objects I still adhere in the bill which I contemplate; and if the house gives me permission to bring it in, it shall be my care that the provisions which I have pointed out shall be fully secured to the public. Having thus shortly stated the leading objects of the proposed measure, I will now proceed to lay before the house the alterations in the bill of last session which it is my intention to make. In that bill I proposed to repeal the statute of Henry VIII (14 and 15, c. 5) which gives to the members of the College of Physicians the exclusive right of practising as physicians in the metropolis, and within seven miles of it. I do not now propose to repeal that act entirely, but I do so only so far as to exempt from its penalties all physicians who shall be registered according to the provisions of the proposed measure, and I have also framed a clause whereby the Universities of Oxford and Cambridge will be exempted from its operation, and their graduates will consequently be secured in all their present privileges. (Hear.) There exists I am sorry to say both at Cambridge and Oxford a great jealousy respecting their privileges, and they have not as yet consented to forego their rights and to come within the operation of the proposed measure; I have, therefore, thought it expedient to introduce a clause into this bill exempting their graduates from its operation, and consequently conferring on them the right to practise according to their respective degrees throughout all England and Wales, save and except in the metropolis, and within seven miles of it. This provision respecting the right of the two universities will be inserted in the proposed bill unless they shall, subsequently to its introduction, agree to come under its operation. The particular arrangement that has been entered into between the College of Physicians and the universities, is, that an assessor from the College of Physicians shall go down to Cambridge or Oxford, and have the power of granting medical degrees in conjunction with them, which degrees shall confer on the graduate the same right of practising in the metropolis, and within seven miles of it, which they will possess with respect to all the other parts of England and Wales, under the operation of the clause I have already referred to. But if the universities shall, previous to the passing of this bill into a law, consent to waive their exclusive privileges, and to place their graduates under its operation, then the clause can be withdrawn in committee, and the same arrangement can be made with respect to them, which I am happy to say the universities in Ireland and Scotland have already acceded to. I now come to the question more particularly referred to in the petition just presented by my hon. friend the member for Middlesex, namely, the question of the repeal of the Apothecaries' Act. After having reflected upon this subject with great anxiety, I have come to the conclusion that it is not expedient to propose the total repeal of the Apothecaries' Act. It is my intention to propose the repeal of that act only so far as parties who shall be registered under the bill I am about to introduce, shall be concerned. A great complaint made against the measure proposed by me last session was, that I gave no additional security against empiricism and that I abolished the penalties already in force. In the present bill, whilst I propose the partial repeal of the Apothecaries' Act I shall leave the full exercise of the powers to enforce penalties untouched. (Hear, hear.) The Apothecaries' Company will still be allowed to prosecute all those practitioners who shall not be registered under this bill, and who shall practise without being licentiates of their

body. I confess, Sir, that I do not attach much value to the enforcement of these penalties, but I am content to leave the power. Now, I do not stop here; I do hope that I shall be able to give an additional security to that offered in the bill of last year, and as I think it is a security which I can offer consistently with the principle I maintain, against the simulation of the right to practise by any individual who shall not be duly enrolled. I cannot regard it as an offence for any person not professing to possess the required standard of an examination, to practise surgery or medicine, subject to the risk which he runs of a criminal prosecution, and, I believe, also of a civil action, if any injury shall result from his practice. He will still be subject to the general operation of the law, and if he does not pretend to be what he is not, I cannot see why we should make any new crime. I propose, however, to go the length of saying that there should be an additional restraint, by making it penal for any unqualified person to assume the title of physician, of surgeon, or of apothecary or doctor, or any other title recognized by this bill. My best course, however, will be, as this is a most important clause, that I should read the whole clause, which runs in these words: "And be it enacted, that every unregistered person who shall wilfully and falsely pretend to be, or take or use the name or title of physician, doctor, bachelor, or inceptor in the faculty of medicine, or surgeon, or licentiate in medicine and surgery, or apothecary," (I retain that, because I do not now propose to repeal the Apothecaries' Act), "or any name, title, or addition implying that he is registered under this act, or recognized by law as a medical or surgical practitioner, shall be deemed guilty of a misdemeanour in England and Ireland, and in Scotland of a crime and offence, and being convicted thereof shall be punished by fine or imprisonment or both, as the court before which he shall be convicted shall award." I shall meet many objections by this provision, and I feel it consistent with my duty to go the full length against empiricism, and against the pretenders to medical science who have not the qualifications they claim. I am further strengthened in my determination of not enacting any laws against empiricism, by reviewing the operation of such laws which have been enacted in neighbouring countries. Special and stringent laws against empiricism have been enacted in several of the United States, the result of which has been a complete failure, to carry out the end for which they had been passed. I propose also to repeal so much of the Apothecaries' Act as requires the examiners, who will hereafter be conjoint with physicians in the examination of licentiates of medicine, of necessity to be members of the civic guild of apothecaries of the city of London. The examiners are now part and parcel of a civic guild, the admission to which may be by purchase or by inheritance, without any medical knowledge or examination. In lieu of the present provision, I propose that the qualification for an examiner shall in future be, an apothecary of ten years' standing, who shall be in practice as an apothecary or a licentiate in medicine of ten years' standing; anticipating that after the lapse of ten years the examiners will, in fact, be licentiates in medicine under this act, and that under the general name of "licentiates" the examiners will be general practitioners. (Hear, hear.) I come now to another alteration to which I attach great importance. I confess that I earnestly desire to see one admission to practise by an examination common to all, and that after all shall have passed one common portal, each should choose what branch of medicine he may wish to practise. I would earnestly desire to see that common examination, but I have found objections raised to that plan which appear to me to be reasonable and to be insuperable. The College of Physicians has always attached, and as it appears rightly attached, great importance to an university education, and to enforce upon persons who have received that education another examination, such as would be enforced upon others at an earlier period, would greatly increase the protracted study of the physician, who could not, as I propose, enter into practice till he is twenty-six, which is certainly not too late a period of life for a physi-

cian to commence practice. This objection is made, that academical education is not so various, and not so full upon particular points of the curriculum of education. This objection, therefore, does not apply to surgeons, and I have great satisfaction in knowing, as far as my inquiries have gone, that there is not on the part of the College of Surgeons, or of the surgeons generally, any objection to a provision in this bill to which I attach great importance,—that no one shall be qualified as a surgeon till he is twenty-five years of age, or unless he shall have been previously examined as a licentiate in surgery and medicine, and shall have passed the examination as licentiate in medicine as well as surgery. There was also an objection made to the bill of last year, which was not so much a real as an apparent objection,—that there was no direct provision for an examination in midwifery. By the Bill which I am now about to place upon the table of the House, this omission, if it can be so called, is supplied by the introduction of a clause, rendering it imperative on any candidate for registration to produce a testimonial of having passed an examination in midwifery, which candidate shall have when registered on the roll, a distinguishing mark to his name. Now, my hon. friend the member for Middlesex has just presented a petition requiring that the general practitioners should be incorporated. Sir, I have given that subject my most anxious consideration, and I must confess, that if I followed out my prepossessions in favour of the general practitioners, I should be strongly inclined to recommend to the crown the granting such a charter. But in giving such a subject, momentous alike to the public, and the profession, calm and unbiased consideration, every feeling of prejudice inimical or friendly to the class concerned, must be dismissed, and the consequences of granting such a charter, alone looked to. The consequence of such charter, I hesitate not to say would be highly injurious to medical science, involving as it should, a separation of the general practitioners from the College of Surgeons. I should most deeply regret the separation of the general practitioners from the College of Surgeons. That might in some degree have been the consequence of the measure as it was proposed last year, but I think that that evil has been much met by the proposition that no one shall be able to qualify as a surgeon without having previously become a licentiate in medicine. I will not now anticipate a discussion on the new charter granted to the College of Surgeons—that there are defects in it I am fully aware—but when I introduced for the first time a particular order into that body, which existed in every other college in England, Scotland, and Ireland, namely, the order of fellows of the college, it was necessary that I should create a constituency for the election of the council. I only state the difficulty in the recent change, but I now hope that the general practitioners and the College of Surgeons will be in a more close and honourable connexion that at any antecedent period. Now, reserving to myself the right of advising the crown to grant a charter of incorporation to the general practitioners, and stating that I shall be ready to give that advice if I shall deem it desirable, I may say that I am most anxious to sustain the station, the honour, and the attainments of the general practitioners. (Cheers.) I doubt whether we should be doing good, and should advance the honour and the station of the general practitioners, by dissolving the connexion between them and the College of Surgeons, and by giving them an institution which might be as good as the College of Surgeons, but which would be wholly new,—a college of general practitioners. I am anxious that the alterations I propose should tend to promote the spirit of conciliation, and I would consult as far as I can the feelings and wishes of the whole body of general practitioners. They will have an opportunity of considering the changes I have made, and to review the requisition they have made for a new charter of incorporation. I shall be delighted if the result shall be that they will withdraw that requisition, and as a consequence form a closer alliance with the College of Surgeons, that institution, which with all its defects is an admirable and noble one, and which I hesitate not

to say, has produced the most eminent surgeons of Europe, and which numbers among its teachers, the most distinguished physiologist of modern times. It is impossible that such a connexion can carry with it any other effect than honour and distinction to the general practitioner; and I cannot anticipate any new arrangement which will be more conducive to the honour, the character, and the station of the general practitioner. (Hear.) They are as a class, among the most useful and honourable in the community, their very situation must make them, occupying as they do such a very large proportion of popular consideration. In great towns, or cities, where the superabundant number of medical men, imperatively calls for a division of labour, the pure physician or pure surgeon, may take a higher position in public estimation, than the general practitioner, but when we come to consider that it is the general practitioner, alone, who ministers to the wants and infirmities of our rural population, scattered as it is, over such a vast area of this kingdom, we must unhesitatingly confess that no body of men, can possess higher claims to public esteem, respect, and honour. (Cheers.) These are my strong opinions with regard to the general practitioners. Yet holding these opinions, I cannot at present bring myself to think favourably of their proposed Charter. (Hear, hear.) I pass on now to another alteration I proposed in the bill of last session. It was an obvious error to provide that a gentleman seeking to be qualified as a physician should for the two years' immediately preceding his examination at the College of Physicians, have resided in the university. In many cases this would be found a great hindrance to attendance on foreign universities and for foreign education. I propose to change the necessity to two years' residence at the university after matriculation, instead of two years before examination. So also with respect to attendance on foreign universities; I have proposed, that the term of attendance upon foreign universities be not less than three years; one of which must be spent in residence at such university. I now come to the general constitution of the council, and it is a point of great importance. If, Sir, I filled any other situation than that which I have the honour to hold, I should perhaps have ventured to propose some alteration in the bill in this respect. It is my opinion, that it would lead to far greater safety if there were left to the executive Government, acting on its responsibility in Parliament, the power of nominating permanently the council. I think there are evils arising from the election of members by the general medical body which would thus be avoided, but having proposed a mixed scheme of nomination and of election, on the whole I adhere to the proposition as it was introduced in the bill of last session. That point may still be open for discussion, but I beg to state distinctly that, in reserving to the Crown the nomination of six members of the Council, I do not introduce that provision, without stating that any advice I may give to the Crown will be with a knowledge that a portion at least must be general practitioners, and that a portion must be country practitioners. Upon that point I am clear, that the general practitioners and the country practitioners have a right to be represented in the Council. (Cheers.) There was also in the bill of last year an omission which I propose to supply. There was no power given to the council to remove a person from the register, in case of any flagrant misconduct. I propose now to invest the council with power to remove from the register all parties who may be convicted in a court of law of any criminal offence, or if he should have used any false or simulated testimonials to obtain admission. (Hear, hear.) One other alteration I propose in a provision of the bill, which arose from a misconception on my part last year. I proposed to give the faculty of physicians and surgeons of Glasgow equal power of licensing with the faculty of physicians and surgeons of Edinburgh. In proposing to grant this power to the faculty of physicians and surgeons at Glasgow, by the bill of last session, I was led to do so from a false conception, under which I no longer labour. On the introduction of the bill of last session, I was led to think, that the faculty of physicians and surgeons

at Glasgow possessed the power of granting licenses to practise in medicine and surgery in the four counties adjacent to that city. Subsequent information has proved this opinion of their power erroneous and exaggerated. The question has been specially raised and argued; and the High Court of Justiciary, in Scotland, has decided against them, and given it as their opinion that the faculty of Physicians and Surgeons at Glasgow, possess no such power. Possessing, as I do now, such accurate information on the subject, I have determined to grant the above faculty no additional powers; and the clause which, in the Old Bill, invested them with additional privileges, has been expunged from the measure which I am about to lay on the table of the House. I think it, therefore, preferable to limit the power of confirming licenses in medicine and surgery to the only faculty which at present possesses it, namely, the faculty of Physicians and Surgeons at Edinburgh.

I am not aware that there is any other change proposed in the bill which I have omitted to state to the house. I have recapitulated the various provisions of the original bill, and I have pointed out those alterations I intend to make, which, so far from being at variance with any of the objects of the original measure, are quite consistent with them and conducive to their accomplishment. I have endeavoured to meet fairly the objections of the great body of medical men who have canvassed my measure. I do not complain in the least of the severity of criticism to which it was subjected. I was only anxious to avail myself of the knowledge of the subject which that criticism disclosed. I do now commit the bill to the candid consideration of the profession and the public. I certainly have taken a calm and dispassionate view of the whole subject, and with only one desire—to promote the interests of the profession and of the public. No labour I have bestowed on it will be thrown away in the least degree if that object shall be gained, and I certainly commit it to the further consideration of the house and the country, in the confident hope and expectation that this session will not close without some measure receiving the sanction of Parliament which shall better regulate medical practice throughout the united kingdom. (Hear, hear.) The right hon. baronet concluded by moving for leave to introduce the bill.

The question having been put,

Mr. Wakley heard with great satisfaction the right hon. baronet, and earnestly hoped and really believed that the difficulties which beset this subject would now be amicably and finally settled. The right hon. gentleman had shown by the alterations he had proposed that he was most anxious to consider every matter mooted by the general practitioners and the profession, and he believed the Government could be scarcely aware of the difficulties by which this subject was encompassed. So many various interests, so many laws affecting the profession, so many rights conferred, that more difficulties were in fact connected with this subject than almost any other requiring the legislative interference of the house. He had felt very strongly opposed to the other bill; and considered some portions of it most objectionable; but was so satisfied that the right hon. gentleman, from the alterations he had proposed, was anxious to conciliate all parties in the profession, that he had only now to request he would not propose the second reading of the bill at an early period, but give time for the most mature consideration of its provisions by the profession.

Sir J. Graham said the speech of the hon. gentleman, who had met his proposition in a spirit of calmness and temper, was perfectly satisfactory. He would not propose the second reading of the bill until after Easter.

Leave was then given to bring in the bill.

Sir J. Graham next moved for leave to introduce a bill to enable Her Majesty to grant new charters to certain colleges of physicians and surgeons, which he said, would serve to render more efficient the operation of the measure he had just obtained leave to introduce. So far from rendering these bodies more close, the intended charters would render them more open. (Hear, hear.) He would be quite ready to lay on the table, copies of the four charters proposed to be

granted to the Colleges of Physicians in London, Dublin, and Edinburgh, and to the College of Surgeons in Edinburgh, and then, taking them in connexion with the other bill, the house would have an opportunity of judging of the entire scheme. *The College of Surgeons of England is not named among the number.*

Leave was given to bring in the bill.

GENERAL MEDICAL PROTECTION ASSEMBLY.

The usual weekly meeting of this body was held on Monday evening, 24th Feb., at Exeter Hall. In the absence of the regular secretary, the chairman proceeded to read the minutes of the last meeting, which contained a resolution, setting forth that four members of the assembly should join the provisional committee of the Hanover-square Association, in order that it might beget real confidence, and fairly represent the profession.

The chairman proceeded to inform the assembly, that agreeably to the resolution first read, their secretary had dispatched a letter to the secretaries of the Hanover-square Association, acquainting them with the circumstance, to which a reply was received announcing, that as the gentlemen named were not the president or honorary secretaries of the assembly, they could not be admitted to the provisional committee.

Dr. Lynch considered that the letter (which was read) from the Marylebone Association, was a scandalous evasion, and clear refusal of a hearty offer of co-operation with them, made in a manly manner. This act was but part and parcel of the conduct of the men who have disgusted the profession by their arrogant assumption of unrecognised authority, as well as by their secret sittings and cabals. He, for one, would reckon the members of this association, contemptible poltroons if they a second time sought a junction with that association which had already treated them so contemptuously. He would not allow their unprincipled conduct to escape so lightly, but would move that the secretary be directed to call an extraordinary meeting of the members of this assembly, to give expression to the feeling of universal disgust and contempt which the Marylebone gentry had excited by their treatment of this assembly.

Mr. Nix would move as an amendment to Dr. Lynch's resolution, "that the secretary be directed to apply by letter to know if the Marylebone Association still refused to elect as members of the provisional committee, the gentlemen who had been chosen from this assembly."

Mr. Ross objected to any such proceeding. Having once sought companionship with the Hanover-square Association, and having been refused, he would never degrade this assembly or himself by any further application.

Dr. Lynch assured Mr. Ross that he would not apply a second time for admission. He would bring the matter fairly before public scrutiny, and would prove the Hanover-square committee guilty of *lese majesté* against the cause of medical reform.

Mr. Hunter begged to second any resolution, no matter how strong, condemnatory of the unprincipled conduct of the Hanover-square Association. Would the General Protection Assembly, after daring the College of Surgeons to do its worst, after bearding the power of such a corporation, a corporation to which they were still bound by many early ties—would this assembly, having set such enemies at defiance, calmly sit down beneath an insult put upon it by west-end apothecaries, and dispensers of rhubarb? He begged to second Dr. Lynch's resolution.

Mr. Hilles dissented from the resolution, inasmuch as he thought that the refusal of the Marylebone committee to elect the members of the General Protection Society upon their committee was strictly official. He felt confident, that if the Marylebone committee were made acquainted with the peculiar constitution of this assembly, that they would cheerfully, and at once, elect the gentle-

men from Exeter Hall to serve upon their committee.

Mr. Rugg was inclined to think, that they could put forward no such excuse, as they might have easily learned from the columns of the *Lancet*, if any of them read that journal, that the General Protection Assembly had no responsible president.

Mr. Hilles thought, notwithstanding Mr. Rugg's idea of publicity, that the Hanover-square committee might naturally plead ignorance as to the nature of this assembly.

Mr. Hunter reprobated the conduct of the committee at Hanover-square, as stigmatising not alone the rejected nominees, but the entire members of this assembly. It had been stated by an absent member, whom he was sure the meeting would know without his naming him—(cries of "Yes, yes, Mr. Wakley")—that the Marylebone Association, sought nothing more anxiously than our co-operation. We did propose to them to work kindly, and in union with them. What return have they made to our offer? Have they repaid us with reciprocal friendship? He would say to Dr. Lynch, express to them in the strongest language, the opinion of this assembly on their conduct.

Dr. Lynch would never make a second application. It had been stated already by Mr. Hunter, that Mr. Wakley, the professed eulogist of the Hanover-square cabal, had asserted here, night after night, that all that was wanted was our co-operation, to compel Sir James Graham and the legislature to listen to, and grant the just demands of medical reformers. Now that we have sought to work with them, they turn upon us, and throw us overboard altogether, availing themselves of a wretched subterfuge "that the rules of their committee prevent the election on it, of any member of any medical association, but the president and hon. secretaries," well knowing that this association had not any such functionaries. Mr. Hilles had endeavoured to show, that the Marylebone Association might plead ignorance of the constitution of this assembly, as an apology for their conduct, but he would ask Mr. Hilles, has not Mr. Ancell, a member of the Hanover-square Association, attended the meetings of this assembly, night after night, and, under these circumstances, would Mr. Ancell (who, by the bye, was a member of the committee), whose name was appended to the contemptuous rejection of our offer, have the hardihood to stand up, and declare his ignorance of the constitution of this assembly.

Mr. Simpson thought that the best course of proceeding would be to elect a president and two honorary secretaries; if the Hanover-square Association refused to elect these officers, then the press should be made available to expose to the public, the hollowiness and trickery of the conduct of these self-styled medical reformers. He proposed Mr. Hunter as president, and Mr. Ross and Dr. Lynch as honorary secretaries. Mr. Curtis seconded the resolution.

Mr. Ross, as an honest medical reformer, anxious for the prosperity of his profession, could not but reprobate as strongly as possible the conduct of the Marylebone Association; they had taken advantage of what they conceived their advanced position, to lay before government the details of their charter, fancying that, in some shape or other, it should be carried into effect. Now, sooner than see the proposed incorporation of general practitioners established upon obnoxious principles, he for one would cry out, "Perish for ever the new college!" He would, at once, by a public meeting, call upon Sir James Graham to disregard the application and suggestions of the Hanover-square Association. Those suggestions were the emanations of hole and corner meetings, at which the wishes of the profession were not fully and fairly represented.

Mr. Nix seconded the resolution of Mr. Hilles, because he thought that unanimity of action, among all classes of medical reformers, was necessary at the present crisis.

Mr. Battan considered Mr. Simpson's motion, the best plan for cutting the Gordian knot which the Marylebone Association had tied upon the members of the General Protection Assembly.

Mr. Curtis would prefer voting for the original

resolution than for Mr. Hilles' amendment. He also agreed with Mr. Simpson's proposal to elect a president and secretaries, as this would give the Hanover-square Association an opportunity of proving the sincerity of their protestations for the co-operation of this association.

Mr. Rugg opposed Mr. Simpson's proposal, because he thought that such a proposal was a contradiction to the recorded vote of that assembly, which recommended the members to join individually, not collectively.

After some further observations by Dr. Lynch, declaring that any strictures he had passed that evening, upon the Marylebone Committee, referred to their public, not their private character; the former, he said, resembling more that of the despotic Venetian Council of Ten than an assembly of freemen who had met for the purpose of effecting a great social movement, and that it had been marked throughout by wile, guile, and trickery, of the meanest character: the meeting proceeded to the discussion of private matter.

CANCER OF THE PENIS.—Mr. Hancock has narrated two cases of cancer of the penis, which were treated in the Cbaring-cross hospital. In the first case the disease affected the entire organ, and extended up to the pubes. Very little relief could be afforded except in palliation, as the disease had extended too far for any surgical operation, and the man left the hospital after four months' residence, at which time the skin of the scrotum was implicated, being thickened, hard, of a purple colour, and nodulated; the ulcers on the penis were considerably enlarged, and had extended deeply into the substance of the corpora cavernosa, so that a probe introduced on one side passed freely out through the opposite side of the penis. This man never had phymosis until the disease had commenced. The second case was that of a man, subject to congenital phymosis. He had syphilis thirty years previously, and had never considered the part sound afterwards. In him the disease appeared to be purely local, and accordingly amputation was performed, at about an inch behind the corona glandis. In some clinical remarks on these cases, Mr. Hancock observes that this disease rarely falls under the observation of the surgeon until it has progressed to some extent, owing partly to its insidious nature, and the absence of pain, but more frequently to the pre-existence of phymosis; it may commence either in the prepuce, in the glans penis, or in the corona glandis, but it quickly involves the whole three, in whichever situation it reigns. Individuals most subject to cancer of the penis, are those who have congenital phymosis or an elongated prepuce, but this is by no means an invariable rule. The disease mostly occurs in individuals of an advanced age, very rarely before the middle period of life. It commences by hardness unattended by pain, and followed by a discharge, which is sometimes mistaken for that of gonorrhoea, from which it differs in being thinner and more offensive, while the parts present to the touch the stony hardness of cancer. Fungous growths, are found springing up from the glans or prepuce, when the latter is slit up, and these are succeeded by unhealthy ulceration either of a superficial character, or deep and sloughy, with jagged edges, numerous fistulous openings occasionally form in different parts of the penis for the discharge of the urine and of pus, and the pain becomes sharp, burning and lancinating, and increased in severity at night. After a time the glands in the groin become enlarged, at first from irritation only, but they afterwards assume the malignant form of disease, either scirrhus, or medullary, the lumbar glands take on the same form, ulceration ensues, and the patient dies, worn out either by irritation or by frequent hæmorrhage. Mr. Travers is of opinion that the disease may be stationary in the penis, and yet become active in the absorbent glands. The causes of cancer in the penis are the same as of cancer affecting other parts of the frame, but in many cases, especially when occurring where there has been congenital phymosis, and consequently dependant on local irritation, it appears to be purely of a local character, and

when removed by the knife, does not in general manifest a tendency to relapse. Of Mr. Hey's twelve cases nine had congenital phymosis, three had not. The disease returned in the three last, and quickly destroyed the patients, but the nine all recovered. Mr. Travers states that he has never had occasion to operate upon a Jew, but he has operated upon a man who had been cut for phymosis ten years previously. This form of cancer is increased by irritation, produced by long-continued pressure of the constricted part, as well as by the impossibility of paying sufficient attention to cleanliness in washing the parts, and removing the acrid secretions. Among old men, who are more liable to this complaint, the prepuce will appear to become elongated, from the shrinking and retraction of the penis itself; when, therefore, there has been phymosis, there is nothing to resist the tendency to contract, until at length the orifice of the prepuce becomes nearly closed, so that when the patient attempts to pass water, as the orifice of the urethra becomes more or less covered by the contracted prepuce, the glands are suffused by this fluid at every attempt, and a portion remains doing mischief. The cancerous fungi are distinguished from venereal condylomata as follows; the bases of venereal warts are smaller than their surfaces, in some cases appearing like branches of coral; they penetrate but little, if any below the surface of the mucous membrane, which remains healthy between them; but the cancerous fungi, on the contrary, have broad bases; they penetrate deeply into the substance of the penis or prepuce, and are always accompanied by extreme hardness. The history of the case, the fact that ulceration rarely, if ever, occurs primarily in a cancer, the character of the hardness, and the sharp lancinating pains, will also serve to form the diagnosis between cancer and syphilis. There is also an intractable fungus of the prepuce, as well as an ulcer of the glans, which occurs between the ages of twenty and thirty, and is neither cancerous nor venereal, but is connected with or dependent on visceral disease, indicated by advanced hectic. An operation in such a case instead of prolonging life, probably abridges it. Mr. Travers believes that this disease had its origin indirectly in gonorrhoeal warts, concealed and encouraged by unrelieved phymosis, and that its unmanageable character depends on established hectic. With respect to the treatment, when the disease is true cancer, its progress very rapid, and the corpora cavernosa and the glands in the groin are implicated, or where it is connected with visceral disease, and there is confirmed hectic, no operation should be performed, and the treatment should be essentially palliative, by the exhibition of medicines to improve the general health, and the local application of anodynes, such as morphia, opium, cicuta, &c. The use of escharotics or irritants is attended with mischief. When the disease is produced by irritation, when it is confined to the prepuce or glans, and when the corpora cavernosa and the skin of the penis remain sound, amputation may be performed with every reasonable expectation of a complete and lasting cure, even if there be slight enlargement of the glands in the groin, as that may be dependant on irritation, merely: at the same time it should be observed, that the disease has returned even when this glandular enlargement did not previously exist. Although the fungus or sore may seem to be confined to the prepuce, its removal alone should never be relied upon.

At a meeting of medical men at Mr. Dermott's on Friday last, a letter was read from Sir James Graham, declining to receive a most respectable deputation on the subject of medical reform. Dr. Collier, who was present, inveighed in forcible language against the course pursued by government; and resolutions were passed pledging the gentlemen present to further exertions.

Dr. Goodeve, of Calcutta, is expected in England daily, with four native students who come with him to walk the hospitals. This is considered an important step in reference to Hindoo Medical Education.

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REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

ellow of the Royal College of Physicians, Senior Physician to the
General Lying-in Hospital, Lecturer on Midwifery at St. Bartho-
lomew's Hospital, Examiner on Midwifery to the University of
London, &c.

Oophoritis.

The case with which I propose to occupy the
report for this week, is one of a very complicated
nature, and will, I trust, be interesting to your
readers as a good specimen of the entangled skein
of symptoms (if I may so express myself), which
these cases sometimes present, setting all our
powers of diagnosis at defiance to unravel it, until
by gradually improving the general health, and
fixing our attention on one or more of the most
prominent and serious local symptoms, we are
enabled to clear the ground a little and obtain a
better view of the more important features of the
case.

I do not pretend to offer this case as any bril-
liant specimen of quick or successful diagnosis;
several important affections co-existed in a state
of intricate complication, and it was, moreover,
attended by a condition of the uterus, which,
when I first saw her, was not familiar to me, and
which was then by no means the most important
symptom.

M. M. æt. 30, married four years and a half,
as had one child eleven months after marriage,
and one abortion at the sixth week of pregnancy,
about twelve months after her confinement.

Delicate looking, unusual length of limb, being
early six feet high.

April 8th, 1844.—Great irritability of bladder
with *ardor urinæ*; complains of throbbing, dart-
ing, aching pains in the uterine region, and about
the anus; constant leucorrhœa; catamenia recur
very fortnight or three weeks, lasting seven days
very profusely, with exsudations, which do not
appear until the sixth day; the discharge is of a
dark colour, and is expelled by pains. Has severe
pains in the loins, hips, thigh, and legs; vertex
headache, increased by the erect posture; palpi-
tation of heart; general dyspepsia; constipated
bowels; catamenia were present last week.

The menstruation was always healthy and regu-
lar (pregnancy excepted) until after her confine-
ment, when the general health became impaired.
Soon after the abortion, she began to notice the
appearance of leucorrhœa, and in about three
months afterwards, had the first attack of menor-
rhagia, which was attended with much uterine
suffering and great irritability of the bladder.
The symptoms were increased eight months ago
by an attack of dysentery.

Examination per vaginam.—Cervix taper. Os
uteri admits the tip of the finger; both of its
lips are hard, but not peculiarly sensitive; anterior
lip is fissured. Body of the uterus enlarged, and
bulging backwards. Great tenderness in the
course of the urethra, and severe pain on passing
catheter.

Examination per rectum.—Uterus is felt bulging
considerably backwards. Although the left ovary

cannot be distinguished by the finger, there is a
spot exactly in the direction of it, which is in-
tensely tender when touched.

R. Pil. hydrarg. extr. coloc. co. aa. gr. v. om.
nocte.

R. Acid. nitrici dil. m. xv., infus. gentianæ co.
3iiss. M. Ft. hanstus ter die sumend. Hirudines
viij. ori uteri applicand.

13th.—Has had much throbbing pain in the
spot referred to throughout the week; the pain in
the right loin has been very troublesome; there
has been less irritability of bladder, and less
ardor urinæ. Headache has abated; the appetite
has improved; the bowels are open, and she feels
stronger. Pergat.

Hirudines viij. ovario sinistro per rectum ap-
plicand.

20th.—Only one or two leeches took per rectum,
and about the same number per vaginam; they
bled but little. Was seized on the 17th with severe
pain in the kidneys, coming on in paroxysms every
five minutes, running down to the groin and
thighs, particularly the right; says that she passed
pus in the urine. She was visited by one of my
pupils, who stated that the renal symptoms had in-
creased, with severe pain and throbbing in the
region of the bladder, the urine depositing a
copious mortar-like sediment. To-day (20th) is
suffering from a severe attack in the loins, running
down to the groins and thighs, of a darting and
tearing character; nausea and retching; hurried
respiration, with pain across the kidneys on deep
inspiration, pressure, &c. Pulse 100, small and
feeble; tongue moist. He ordered a draught with
tinct. opii, and a hot hip bath, which quickly re-
lieved her.

21.—Has had a good night, is almost free from
pain in the loins and kidneys, has still some pain
in the bladder with irritability, urine clear and
straw-coloured when passed, sp. gr. 10·18, alka-
line with ammoniacal odour, and depositing an
amorphous white sediment on cooling. (N. B.
Not examined by microscope or tests.)

Rep. mistura acid. nitro-muriatici ex infus
gentianæ co.

27.—Less pain of back, has pain in the urethra
when she passes water, the urethra is tender to the
touch, she complains of pain in the course of the
rectum: urine neutral, bowels confined.

R. extr. Taraxaci, ʒi. m. et n.

R. acid. hydrochlor. dil. m. xv. ex. hanst gen-
tianæ c. bis die. sumend.

May 18.—Feels better, urine acid.

Pt. Taraxacum. R. acid. nitr. dil. m. xv. ex
infuso. gentianæ co. ter die.

R. aquæ menthæ viridis, aquæ distillatæ aa. fl.
3vss.

Acidi sulphurici dil., m. x. syrupi rhæados fl. ʒss.
Magnes. sulph. ʒii. M. ft. haust. om. mane
sumend.

25.—Feels better, less pain in the urethra, still
smarting on passing water. It is rather more
than three weeks ago since last appearance of the
catamenia. The pulse is weak but she feels
stronger. Urine passed in the morning of a pale
opal, alkaline, with triple phosphate crystals and

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copious carbonates, and splendid crystals of
muriate of soda and ammonia.

R. Linim. camphoræ co. ʒiiss. tinct. opii. ʒss.
M. ft. Linimentum lumbis infricand. Pergat.
Hirud. viii. lumbis,

8th.—Much pain of kidneys, especially the right,
where there is severe pain on pressure: she is pale,
feels weak, the pulse is feeble, has darting pains in
the direction of the urethra, with much smarting
and pricking about the orifice of it. Bowels regu-
lar, but the motions are dark and offensive. Ap-
petite bad. Leeches bled sparingly, and died im-
mediately.

Urine acid, with copious nucleated epithelial
matter. Sp. gr. 10·10. precipitate of phosphates
by ammonia, is of about the natural quantity, but
contains scarcely a trace of lime.

Pt. taraxacum, mistura, et haust. menth. c.
magnes. sulph. Rep. hirudines viii. lumbis.

15th.—The leeches bled freely and produced
much relief; she feels and looks better. Contin.
omnia.

22nd.—Urine passed in the morning, of a red-
dish orange opal; acid with much epithelial
matter. Sp. gr. 10·24, with a copious red deposit
of lithic acid, and an abundant precipitate of the
phosphates by ammonia. Pergat.

July 20th.—Has been suffering from a good deal
of pain in the right renal region, with pain on
passing water. Catamenia appeared yesterday.
Haust. sodæ tart. ter die.

27th.—Better in every respect, no uneasiness in
the renal region.

R. Acid. nitrici dil. m. xv. ex. decoct. sarzæ.
eo. ter die.

Sept. 14th.—Has been in the country, and has
returned in better health. The catamenia have
occurred twice with much pain, and the last time
very profusely, but with no coagula. She has still
pain in the region of the right kidney. Bowels
regular.

Urine, opal, of a greenish yellow colour; al-
kaline, with a thick sediment; sp. gr. 10·19;
numerous bibasic triple crystals may be seen by
the microscope.

R. Haustus sodæ tartratis ter die.

28th.—Urine tolerably clear, of a greenish
yellow colour; alkaline, with a slight reddish se-
diment; sp. gr. 10·24, and shewing the presence
of muriate of ammonia.

R. Ext. taraxaci ʒj. o. n. Empl. opii lumbis.
Rep. haust. sodæ tart.

October 12th.—Catamenia were present all last
week; has much smarting at the orifice of the
urethra, and slight pain of back.

Urine opal, strongly alkaline, with a thick white
sediment. Sp. gr. 10·23; copious bibasic and a
few neutral crystals of the triple phosphate of
ammonia and magnesia may be seen by the micro-
scope. The proportion of lime seems to be natural;
copious carbonates. Pergat.

Nov. 9th.—Catamenia present, had much pain
of hips for four days previously, which continued
for two days afterwards; the discharge is profuse,
watery and dark, the pain of back is better; she
is much emaciated.

The urine since last report has been acid, becoming alkaline and turbid on boiling, from excess of carbonic acid, and full of triple phosphate crystals.

Rep. extract taraxaci 3j. o. n.

R. Acidi nitrici dil. m. xv. ex decocto sarzæ co. ter die.

16th.—Much pain of right kidney, darting down the urethra and right thigh, bowels natural.

Urine bright, of a greenish yellow colour, strongly alkaline, with a dirty white sediment and sp. gr. 10·17; copious triple crystals, lime, sparing muriate of ammonia, muco-pus globules.

R. Acid. nitrici dil. m. xv. ex. haust. gentianæ c. senna, bis die.

Rep. taraxacum et lin. camphoræ, co. c. tinct. opii.

23rd.—Feels much better.

R. Acid. nitrici dil. m. xv., infus. Pareiræ, decoct. sarzæ co. aa. 3vj. M. Ft. haust ter die sumendus. Rep. Tarax.

December 14th.—Catamenia appeared last week; they lasted but four days; were less profuse, and attended with less pain; no exsudations or coagula; the discharge was of a good colour; no pain in the right kidney, and scarcely any along the urethra. Pergat.

January 4th, 1845. Catamenia appeared five days ago (only a fortnight after the last), with much more pain than usual, with coagula, but no exsudations. She had severe pain of the left ovary at the time. Mr. P. Smith examined her a fortnight ago with the uterine sound, and distinctly made out the existence of a retroflexed fundus uteri, but she has not been able to undergo an examination since.

R. Pil. hydrarg. gr. v. alternis noctibus. Rep. Mist.

11th.—Urine straw-coloured, bright, neutral, copious nucleated epithelial matter, sp. gr. 10·16; phosphates (by ammonia) sparing; lime natural; free carbonic acid. Pergat.

18th.—Feels better in every respect, except that she has still pain in the region of the uterus.

Rep. Acid. nitrici dil. m. xv. cum infuso Pareiræ et decoct. sarzæ co. ter die.

R. Ferri sulph. gr. ij., extr. gentianæ, extr. hyoscyami aa. gr. iv. M. Ft. pil. ij. om. nocte sumend.

25th.—Urine yellowish green, bright, slightly acid, sp. gr. 10·13; phosphates in natural quantity. Pergat.

Feb. 7th.—I replaced the uterus a week ago, and attempted to retain it *in situ* by means of Dr. J. Y. Simpson's instrument for the purpose, but failed on account of the distance of the uterus from the os externum, the pelvis, as in most tall women, being very deep. The retroflexed, or retroverted fundus may be felt with great distinctness, and is the convex mass of uterus "bulging backwards" as noticed in the first report; it is rather to the left side. When the uterine sound is introduced with its curve backwards, the point passes backward, and downwards, and slightly to the left side into this tumour, which can then be raised upon the sound in a direction upwards and forwards with perfect facility, without much pain. Having altered the angle of the instrument so as to enable it to pass higher up into the vagina, I introduced it into the uterus, and fixed it in the usual way.

Her general health has much improved, she is gaining flesh; she has lost the pain of back, and on replacing the uterus, the uneasiness in the direction of the rectum ceases. Urine seems nearly, if not quite, in a natural condition. Pergat.

22nd.—Feels better than she has done ever since her confinement; the uterine supporter has kept its place without inconvenience; at one time it hurt her, but she was enabled to rectify it herself; evacuations not quite healthy. Omitt. med.

R. Pil. hydrarg. gr. v., ferri sulph. gr. j., extr. gentianæ gr. iv. M. Ft. pil. ij. h. s. s.

Perhaps I ought scarcely to have brought this case under the head of oophoritis, because the affection of the kidney occupies a much more prominent place in the detail of the symptoms. But serious as this attack was, it can scarcely be looked upon as the original cause, which in the

first report was evidently situated in the uterus; and it may, with equal justice, be questioned, whether or not the painful state of the left ovary, as shown by the examination *per rectum*, was not owing to the displaced condition of the uterus. I have now met with so many cases of inflamed ovary, attended with this peculiar displacement of the fundus uteri, and generally inclined somewhat to the same side as that of the ovary which was affected, that I cannot help thinking its effects upon the broad ligament in which the ovary is situated, may probably be such as to obstruct the returning circulation from the ovary, and produce congestion.

I forbear, however, to enter fully upon this interesting subject of retroversion or retroflexion of the uterus in the impregnated state, being in hopes that my friend, Dr. J. Y. Simpson, of Edinburgh, to whom I am indebted for having first pointed out to me the frequency of its occurrence, will favour the profession with a memoir upon it.

The reason which might induce me to suppose that the ovarian affection was the original one in this case, is the circumstance of the catamenia being attended with exsudations; but, as I have stated, when speaking of dysmenorrhœa connected with mal-assimilation (p. 39), the formation of exsudations by the uterus, although, as I believe, always associated with inflammatory action in some neighbouring organ, is not necessarily dependant on oophoritis, but may also be connected with irritation, or inflammatory action, of the kidneys, and to this source must the *ardor urinæ*, and smarting of the urethra be referred.

The circumstance of the exsudations not appearing until the sixth day after the commencement of the discharge, is not of easy explanation; it is occasionally met with, and possibly depends on a diminution of the discharge taking place before the system has been sufficiently relieved, as is sometimes also seen to be the case with the attacks of pain in dysmenorrhœa. The catamenia being expelled with pains, probably resulted from the flexed state of the uterus, rendering the upper part of the canal of the cervix nearly impervious. The pain in the region of the kidney, and the highly deranged state of the urine showed, that mischief was threatened in this organ. The tenderness and smarting of the urethra, especially at its orifice, is a suspicious symptom of renal disease, even if no distinct pain in the organ itself be detected. The appearance of muriate of ammonia in the urine on several occasions, was an additional evidence that inflammatory action existed in the kidney, as this salt can scarcely be present in the urine without hydrochloric acid having been secreted by kidney.

The *primæ viæ* were in a very unhealthy state, and required careful watching throughout the whole case. The bowels were kept steadily open; the liver and skin gently acted upon by taraxacum and sarsaparilla, and the urine gradually rendered more healthy by the constant application of compound camphor liniment with tinct. opii to the region of the kidneys, and by the long continued use of nitric, or nitro-muriatic acids. On the appearance of muco-pus globules in the urine, I combined the medicines with infusion of Pareira, under which her final improvement was made.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c. &c.

(Continued from page 419.)

Whether inflammation be ever a proximate cause of tubercular formation, has yet to be decided. If we are to regard the inflammatory process, as it occurs in a healthy subject, and disconnected with any phenomena which are not peculiar to it, to be an exaggerated or heightened state of natural function, I should conclude that under such circumstances it could never *directly* give rise to tubercular deposit. But, believing that tubercular *genesis* is a form, and a specific one, of erroneous nutritive function, and knowing how strong is its tendency during those periods when the growth or reparation of parts is most active, I should say that inflammation occurring in a cachectic or scrofulous subject, would have

an especial tendency to originate, or to accelerate tubercular formations.

We know, however, that inflammation is often consequent upon the presence of tubercles (1), and that it may, or may not, hasten their development and decay. The fact of tubercle being susceptible of the influence of an action occurring in the contiguous tissue, is sufficiently a proof (were it solitary), that this body is not altogether foreign either in its nature or properties, from the living structure in which it is deposited. Dead animal matter is not capable of being so influenced (2), and were it, then such capability must be, in general acceptation, must in fact be a law; and that it would not be applicable to tubercle, shown in the circumstance that inflammation often occurs in organs diseased with this matter, without it being in any appreciable degree changed in consequence.

(1) I allude to tubercles of the lungs: tubercular deposits in other organs, rarely give rise, until the period of softening, to active inflammatory symptoms. And in the lungs, even, primitive tubercles seldom excite more than simple irritation until their complete stage of maturation or softening.

But in subjects of highly irritable or inflammatory temperament, it occasionally happens that evidence of primitive tubercular deposit in the superior portion of the lungs, will exist for an indefinite time, and suddenly a local cephalic *râle*, with other signs of partial pneumonia, not referrible to any extraneous cause, will supervene and maturation, softening, tubercular sputa, and pulmonary excavation, result in a few days.

It is sometimes happily the case, that primitive tubercles, by long detention, acquire a considerable amount of earthy and saline matters, often equal to one-fourth or one-half their original size; tubercles so modified, are never affected by inflammation; they may frequently be found entire amid the pulmonary and tubercular debris of phthisis and pneumonia.

(2) That this is the fact, and also that tubercle after its removal from the body, or after the death of the parts in which it is imbedded, is not capable of being affected by contact with an inflamed tissue, is manifest from the following experiment.

A quantity of tubercles in their primitive state of various degrees of transparency and softness, but without any appearance of maturation (cheesiness), were removed from the mesentery of a rabbit, and inserted into a wound made in the fleshy part of the thigh of a large dog. The opening was accurately closed by sutures and plaster. Considerable inflammation and swelling followed, and at the end of forty-three hours suppuration was established. The tubercular matter was now removed, washed, and carefully examined; but it was found to have undergone no appreciable change.

A similar experiment was tried with primitive tubercular matter taken from the peritoneum of a scrofulous child. The results were precisely the same.

Primitive tubercles that had commenced to mature ("soften"), some peripherally, and others centrally, were removed from the mesentery and peritoneum of a man, ætat. 26, who had died of phthisis, and were inserted beneath the abdominal integuments of a strong healthy dog. Inflammation soon commenced, and was followed by suppuration in 36 hours, at the expiration of which time, the tubercular matter was removed. I could not discover that the process of maturation had been in the slightest degree advanced in any one of the specimens.

Three slices of lung, respectively, one-fourth, one-eighth, and one-sixteenth, of an inch in thickness, displaying an abundance of primitive tubercle, with, here and there, a trace of maturation, were inserted underneath the abdominal integuments of a healthy dog. They were suffered to remain until the termination of the fifth day, at which time suppurative inflammation was extensive and vigorous. The portions of lung, after having been washed, were carefully examined, but they afforded no evidence whatever of change.

difference of opinion has prevailed, and will prevail, concerning the maturation of

This process is by pathologists generally termed "softening." I object to the term want of precision, and from its not distinguishing between the organic and the inorganic tubercle. I have chosen to denominate *maturation*, and for three reasons.

1. Because I believe, and hope I have succeeded in proving, that the action by which primitive tubercle is converted into the "crude" or "young" variety, is within certain limits, an action; and involves an expenditure of vital power was possessed by the tubercle in its developmental state.

2. Because the action of maturation is always one of softening, but occasionally is the reverse, as when it occurs in tuberculous degrees of fluidity. Examples are met with in the mesenteric, and other lymphatic glands, in the sub-serous cellular membrane, and in the false membranes covering the lung, &c.

3. Thirdly. Because the process of softening, due to no vital or organic forces, but is the consequence of an unrestrained play of affinities amongst the constituents of the tubercle. As I have elsewhere said, tubercle never softens; the condition of softening can only occur to tubercle after its maturation.

In the question I have alluded to, about which the great authorities are at issue, is, whether tubercle commences centrally, or at its circumference.

Bayle, Laennec, and many after him, maintained that it occurs at the centre; Lomax, Andral, and others, maintain that it is in itself inert, and that when it matures, it is by exciting irritation and inflammation of the adjoining parts, which ends in the formation of pus, or other fluid, that breaks down the tubercular substance, loosens it, and effects its discharge.

In its theory it may be objected that primitive tubercular matter very rarely excites inflammation in the contiguous pulmonary tissue; that we never see tubercles in every stage of their development in the lungs, without a single trace of remote inflammation near them; that tubercle is not capable of being dissolved, nor the least degree affected by any of the effects of inflammation; that we constantly see tubercles advancing and advanced to maturation without the contact of a single globule of pus (4), and that globules of mercury may remain indefinitely in the lungs of inferior animals, surrounded by a fluid or a solid form, without the occurrence of any sign of pulmonary disorder.

Carswell, who has paid much and very close attention to the subject of tubercle, has endeavoured to "offer a satisfactory explanation of the appearances which led Laennec and others to infer, respecting the commencement of maturation of this substance." He observes, "we have already stated that when tuberculous matter is in the lungs, it is generally contained in the cells and bronchi. If, therefore, this product is confined to the surface of either, it is accumulated to such a degree as to leave a limited central portion of their cavities unoccupied. It is obvious that when they are divided into cells, the following appearances will be observed: 1st, a bronchial tube will resemble a tube having a central depression or soft central portion; the consequence of the centre of the bronchus being occupied, or never having been, occupied by the tubercular matter, and of its containing at the end, a small quantity of mucus or other fluid; 2nd, the air-cells will exhibit a similar appearance, or rings of tubercular matter grouped together, and containing in

their centres a quantity of the same kind of fluids" (5).

It is somewhat remarkable that Dr. Carswell should have drawn so largely upon his ingenuity to correct the error of Laennec, since a little reflection would have enabled him to perceive that his explanation has reference only to tubercular matter situated in the alternate ramifications of the bronchi and in the air-cells of the lungs. Whilst in other parts of the body, to which this explanation would not apply—as the mesenteric glands and peritoneum—tubercles almost constantly commence to mature in their centre.

It is a singular fact in the history of pathology, that its most distinguished and enlightened professors should be nearly equally divided upon this curious question concerning tubercle. A pretty certain proof, that, however each party may be attached to its own opinions, and whatever confidence it may have in them, both may in some sort be right. And we consequently find, that the best pathologists of the present day admit, that the process of maturation may commence, according to circumstances, either at the circumference or at the centre of tubercle.

It is of much pathological interest and importance to discover the causes which determine the maturation of tubercle, now in this place, and then in that. We have the established fact before us, that the locality varies, and we are certain that the same cause cannot operate singly in each instance of variation.

I have already stated my belief that the process of maturation is dependent partly upon an action *per se* in the tubercle, and partly upon the condition and function of the surrounding integuments. I have endeavoured to prove that primitive tubercle is not wanting of vitality, or of organic power, and I have also attempted to show, that in the process of maturation, certain changes occur in the constituents of tubercle, which are not exclusively due to chemical and physical laws. If these proofs be at all admissible, they will, *a priori*, entitle us to infer that tubercle may commence of its own independent action to mature. But we have also the fact of the case demonstrated to us in tubercles of the mesentery and of the peritoneum. When we see in these situations masses of transparent tubercle (often of considerable size), with a speck of opacity and cheesiness in their centre, and other masses, indicating various degrees of further maturation spreading from the centre to the circumference, we must surely conclude that this change is due to a spontaneous action in the constituents of the tubercle, little aided (perhaps, not at all) by the feeble vital condition of the contiguous parts. On the contrary, when we perceive that, in the lungs, the process of maturation almost invariably commences at the circumference of tubercle, and when we consider how minute, usually, is this matter in such situations, and how vascular and vitally active is the nidus of the deposit, we can but infer that the maturative process is as much, or perhaps more, dependent upon the action of the pulmonary organism, than upon that of the tubercle itself. Nevertheless, the influence thus exerted by the contiguous tissue, is confined to inducing an action in the tubercular body. Were the process inorganic, it would be an example of imperfect catalysis. The feeble, latent, organic power, possessed by the primitive tubercle, is called into activity by an increase, or an alteration in the vital condition of the adjacent structure, and in the exercise of that power the tubercle is exhausted of its low vitality, and becomes an inert dead mass.

The conclusion to which a series of careful and extensive observations have led me, is that, the liability of tubercle to mature at the points where it is touched by the neighbouring integument, is directly as the vital activity of that integument, and the smallness of the tubercular body (6).

(5), Cyclopædia of Practical Medicine, vol. 4, p. 256. Art. Tubercle.

(6) So also, tubercular matter in its primitive state is never met with in the blood. The vital activity and influence of this fluid would appear

It is probable that something in this process is due to the condition, or *healthiness*, if I may use the term, of the constituent of the primitive tubercle. No doubt this body, simply albuminous though it is, varies in purity, and in tendency to change, with the state of health and strength of the system in which it is engendered, and with the integrity of the parts wherein it is deposited. Hence one reason of the remarkable contrasts in extent and rapidity of progress, which we daily meet with in tubercular lesions.

The process of softening, properly so called, is simply one of decomposition. It admits of no further definition or description. It has nothing in common with the development and maturation of tubercle, but is consequent merely upon a chemical interchange of the elements of matured tubercle; it is not affected by the state of the surrounding tissues, further than that it may be incorporated with, and diluted by, any fluid effused from them; and itself produces upon such tissues no effect beyond that which would arise from the contact of any other dead and decomposing body.

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. J. CORRIGAN, M.D., Physician to the Whitworth, Hardwicke, and Richmond Hospital, Lecturer in the Dublin School of Medicine, &c.

We broke off in our last lecture while discussing the pathology of cirrhosis; we now resume the subject. In cases where the disease has proved fatal, we have an opportunity afforded of admiring the wonderful efforts made by nature to remedy in her own way the evils caused by the disease. We have seen the constricted veins of the liver unable to relieve the congested vessels of the intestines of the blood accumulated within them. Here nature causes the epigastric and external mammary veins to anastomose, to relieve, if possible the obstruction in the vena portæ, and its ramifications. We now come to examine the symptoms of this disease, which I shall divide into those of the first and second stages. We cannot possibly be too anxious to acquire a perfect knowledge of these, because on their proper and timely recognition the life of your patient depends: and more urgent still, because there is a stage of the disease, the primary one, which, if it be recognised, is wholly and completely under the controul of art; but allow this to go over, and no skill can save your patient. I shall commence by detailing the symptoms which characterise the second, or incurable, stage; for this reason, that being incurable, as I think, I need not trespass unnecessarily on your time, by attempting to lay down for your guidance rules of practice: it would be absurd to do so, matters cannot be mended. Here I shall not detain you, either by repeating for you the symptoms of it, which are laid down in systematic works, as I think in place of enlightening, they only tend to bewilder you; but I shall just lay before you what, in my opinion, are the true criteria of the second stage of the disease. A patient comes to consult you on his case. He tells you that he has no pain about the liver, which might lead you to infer that to be the organ at fault; this organ itself feels as though it did not occupy its usual space in the abdomen; but in the ascitic belly, in the slightly jaundiced eye, and in the sallow dirty-coloured cheek, you have evidences, unmistakeable by the practised physician, that with the liver all is not right. The ascites may be the only hydropic affection present, but most often it is accompanied by anasarca. And generally speaking, this latter is the disease for the relief of which you have been consulted. To these signs of the disease already enumerated, I have to add another.

to promote, almost immediately, the maturation of primitive tubercle. And the tubercular deposits which occur during, or directly subsequent to inflammations (especially pneumonic), in scrofulous subjects, are either of the matured kind at the commencement of deposition, or very quickly advance to maturation.

uvages, however, was the first who said "nequaquam in centro suppuratas."—Method. vol. 2, p. 443. Ed. Amst. 1768.

Indeed, I never in my life saw tubercular matter in its softened form, with a trace of it.

This, as far as I am aware, has been unnoticed by any writer upon the subject. It is the regular deposition of purpura of ammonia in the urine. When I say regular, I mean that it must be present day after day—that it is not present for one day and absent for four or five. It must be steadily visible all through the disease. I suppose you are aware of the fact, that there are some other diseases where purpura of ammonia is deposited in the urine. Gout, for instance, is one of them, in which it is deposited during the paroxysm: but it is not this evanescent appearance that we want here: it must be visible day after day, while we are making our examination. You must be on your guard not to confound this purpura of ammonia, the brick-red, light, flocculent precipitate of lithic acid, which is seen so frequently in the urine of most persons, that has cooled down and stood for any considerable time. From the latter, purpura of ammonia, or whatever its new name in chemistry may be (erythrogenic), is distinguished by being scanty in quantity, the other generally being copious; of a bright vermilion colour (lithate of ammonia being brick red), and by its adhering firmly to the sides of the vessel, in which it has been deposited, so as often to render it not easy of detachment. If two cases of dropsy came before you, in one of which the liver is felt, small, not occupying its usual space in the abdomen, and along with which, should be present the symptoms I have just been detailing; while in the other the liver could be felt large, hard, and extending below the umbilicus, as low as the crista of the ilium, in which of these cases is there the greater danger? In this: because its symptoms denote that the disease of the liver has gone beyond its curable stage, and must inevitably prove fatal; while that denotes an affection under which, by proper treatment, life may be prolonged to a good old age. We now come to consider the disease of cirrhosis in its most interesting stage, its primary one, where, as I think, our efforts, if properly directed, can be successful, and will remove it altogether. To the observations connected with this subject which I am about to make, I beg to direct your earnest attention, because it is one of considerable interest to you, if you value your fame hereafter as medical men; and for another, and a more particular reason, namely, of all the diseases of the liver which come under your notice, cirrhosis forms a very large percentage. Further, this is a disease which is met with much greater frequency in private than in hospital practice, the wards of most hospitals furnishing you with not many specimens of it. This affection of the liver has been very commonly ascribed to the effects of intemperance, and of late we have heard, at Coroners Inquests, a good deal on the subject of "Whiskey Liver;" but it does not follow, because drunkards may have laboured under this form of hepatic disease, that intemperance should be wholly charged with the crime of inducing it. In bringing it on, intemperance only plays the same part as many other causes, and how it is brought on we shall see by and by. I have frequently witnessed this disease in men whose whole lives had been most temperate. I have seen it occurring in females who never drank; and I have met it in children of 10 or 12 years old, who never had had any the least opportunity of drinking. Middle life is the period, however, at which it most generally makes its attack.

Symptoms of first stage of Cirrhosis.

A man comes to consult you, who has been ailing with, what himself and his friends term, cholic pains—these are generally felt at, or about, four or six hours after dinner—so it is nothing unusual, if he has dined about 5 P.M., for him to be awake from sleep by an attack of these pains. They are accompanied in general by quick pulse, from 86 to 90, vomiting, constipation, and some slight degree of fever; under the use of some stimulant, taken internally, joined to the administration of a laxative glyster, this attack is removed; sometimes the patient attributes this train of symptoms to errors in diet, but after some short time they come on, when nothing of an injurious nature has been taken. According as the disease advances, you have these "cholic" fits more frequent,

the vomiting is more intense, the pulse is quicker—this may or may not be so, it is immaterial; the skin is dry, the tongue is red, and smooth in the centre, presenting an appearance as if the papillæ had been removed from thence; in most cases there is pain felt at the top of the right shoulder, and in all a degree of jaundice, very slight indeed, is visible, which, however, is much better marked if you examine the conjunctiva, having previously turned out the lower lid. The jaundice in this disease comes on gradually. With regard to the pain at the top of the right shoulder, which, as you know, has been set down by the older writers, as a sign of hepatic disease, I must confess myself completely ignorant as to its cause. As to the value which is to be attached to it, numerous examples of this disease in which it has been present, lead me to look upon it as a very important item to be taken into account in coming to a diagnosis. In this stage of the disorder, along with the symptoms just enumerated, there is some slight pain present in the region of the liver and duodenum. But the most attentive and careful examination cannot detect the slightest alteration in the liver itself. The stools at this period, along with the usual feculent matter, are loaded with a quantity of mucus; and are sometimes streaked with blood. Here we must stop for a few moments to ask ourselves, what do the above-mentioned symptoms denote? We have pain simulating that of cholic, accompanied with tenderness of the right side; vomiting; tongue smooth and red, seeming as if its central papillæ had been removed; quickened pulse at 96; dry skin; pain at top of the right shoulder; and lastly, passage of fæces, loaded with mucus and tinged with blood. Do they denote any intestinal affection? Not dysentery. For though we have mucous stools, streaked with blood, yet we have no tenesmus. The colon is not engaged; were it so, we should have diarrhoea. We must, therefore, proceed higher up the intestinal tube to search for the locale of the disease. This, I am inclined to believe, is the duodenum. This opinion I have been led to form from a careful consideration and comparison of the above symptoms, which, as I think, are nothing more than the signs of gastro-duodenitis, or duodenitis itself. And physiology explains to us how duodenitis may cause disease of the liver; it teaches us that diseases of membranous structures, adjoining which, are glands that open on the above tissues by means of ducts, of similar texture as the membranes in question, are liable to extend their action to the glands which open on such diseased membranes, or the glands may become sympathetically affected. We see this exemplified in affections of the mucous membrane of the intestines, which frequently involve the glands of the mesentery in the existing mischief. This disease of cirrhosis I would look upon merely as the consequence of duodenitis, and we shall presently find another argument in favour of the opinion as to the gastric origin of the disease in question, in the fact, that the medicines we find most serviceable in removing certain functional diseases of the digestive organs, are these, which in the first stage of cirrhosis, have also been found most productive of benefit to our patients.

Treatment.

The most essential preliminary to the successful medical management of your patient is an injunction on him to refrain sacredly from every description of stimulant, such as ale, porter, wine, &c. Such a prohibition will be the more necessary, because from a habit of taking stimulants of the above class during the pain, which most probably has been indulged in, and which might have been erroneously deemed capable of relieving the pain, your patient might fancy himself benefited by them, or at least, that they were not productive of injury to him.

Such an idea would be a most fatal one to act upon: because any trifling remission of pain produced (if at all) by their use, would be sure to be followed by an increased intensity of all the previous evils. All errors and excesses in diet must be religiously spoken against also; and the same veto must be placed upon any articles of food which the patient might previously have found prejudicial, though tempting. While you restrain

him thus, you will take care that his diet is of a sufficiently nutritious character, comprising, it may, a light farinaceous milk diet, with a portion of animal food, suitable, both in quantity and quality, to the enfeebled energies of stomach and digestive apparatus. At the time that you lay down these rules for his guidance, acquaint him fully with the peculiar and precarious situation in which he is placed,—a situation from the inevitable fatality of which, he not have the slightest chance of escaping, he implicitly adhere to your dicta. Another most particular object for you to enforce, through, is, the necessity which exists of patient breathing as pure an air as possible. With men of business, who consult you at the commencement, such a thing could not be practicable, implying, as it does, an entire abandonment of business. Where circumstances forbid you must see that your patients' nights, are spent in the country; without this precaution all your remedial efforts will be unavailing. Indeed, it is astonishing to witness the wonderful restorative effects which a residence in the country produces in persons labouring under this disease. Before a month has rolled over in the country, the rheumatism, as the pain at the shoulder called, will have completely disappeared in persons who had been doctoring themselves availingly, in town, with plasters, liniments for three, four, or six months previously. The pulse becomes slower, the tongue moist, the countenance becomes much improved: in fine they become all but restored to their former health under the conjoint good effects of pure air and appropriate medicines. As regards treatment "paroxysmo instante," I shall detain you by entering minutely into its details. It will suffice me to mention that counter-irritation by spirit of turpentine (in the manner previously directed under the head of bronchitis) over the seat of pain, the exhibition of one or two grains of powdered opium, with calomel in a draught, will invariably, in every case, be quite effectual in removing it. In such cases be not misled by the patient's statement having derived relief from stimulants on previous occasions. Do not have recourse to them, they may have been sanctioned by prior advice.

Now, with regard to the radical treatment. Your first step should be the application of 12 leeches on, or the abstraction, by cupping, of 3viij. or 3x. of blood from, the usual seat of pain. The cupping over the liver and duodenum may be repeated once a week for 3, 4, 6, or 8 times, as the severity of the case may seem to demand. Here, it would not be advisable to take away blood in any large quantity, as persons in whom the disease generally appears are not those who would bear with impunity large evacuations, being, for the most part, of constitution, naturally weakly and debilitated. After the topical bleeding, counter-irritation should be directed to be sedulously employed on the surfaces covering the inflamed organs, for this purpose I do not know of anything better than the unguent. antim. tart.; the use of which alternate with the bleeding. Along with topical means, you will have to employ constitutional ones, those which are generally serviceable to subdue inflammation. Direct, for this purpose, the administration of mercury, combined with opium. Of this mineral, I invariably select the simplest preparations, such as iodium of mercury, or the hydrarg. e. creta. The administration of this mineral will require to be continued until the desired effects are produced, namely, gentle salivation. This must be kept up for a period of a week or three weeks. Severe salivation, I recall uncalled for here, and likely to be productive of injury rather than benefit, for the same reason which I have urged against large doses of mercury, namely, its tendency to increase existing diseases. After the mercury has done its work, you may very advantageously now prescribe the sesquioxide of bismuth, a medicine (although I do not think it possessed of any specific effect on the liver), in the present case is eminently serviceable. The con-

I am in the habit of prescribing for this case, consists as follows:—

R Ferri cum saccharo

Sodæ bicarbonat aa gr. x.

Subnitrat bismuthi gr. v.

pulvis: to be taken three times a day.

is I direct to be persevered in for some length of time, till all the symptoms, of pain are removed. It may take up a period of two or three months, in general, you will find it much harder to disengage your patient from taking, (such an effect has relieving him) than you would have in perceiving him to continue it. If the symptoms of the disease should again recur at any period subsequent to the discontinuance of the above combination, it will be very easy for you to have recourse to it again.

Now, I trust, given you now an ample history of the curable stage of this disease; this I have endeavored to do, from my firm belief of its curability. The means just laid before you, while in its first stage, extending as it does over a period of time from three to six, twelve, eighteen months, or, in some cases, even longer. I have been drawn on to dwell upon it at a length, which, probably, may be thought prolix, and a melancholy reflection, that when a case is set in, all our efforts at relief must prove fruitless, and that the disease must inevitably end in death.

THE PHYSIOLOGY OF THE BRAIN, AND THE CHANGES IT UNDERGOES IN INSANITY.

By. W. B. COSTELLO, M.D.

(For the Medical Times.)

(Continued from p. 466.)

Our mode of considering the subject, rejects any isolation of these affections, which place the manifestations of unsoundness of intellectual operations, as flowing from any source, than the modification and alteration of the cerebral convolutions. As pathologists, we recognise no distinction, except in a purely sensitive sense, between disturbed intellectual function and perverted sensation or motion. Their range on this point is clear, definite, and unalterable. "To perpetuate such a distinction," Pinel, "can have no other effect than to perpetuate an error which in our own times has only served to build up a symptomatology, without physiological meaning, or any rational therapeutical indication."

The elevated nature of the intellectual function challenges our utmost admiration as a portion of the works of the beneficent Creator of all things; but this does not constitute a reason why we should shrink from applying the same principles to the study of the disorders of these functions as those that apply to pathological investigation generally. Knowledge is a godly attribute, its acquisition is at once a privilege and a duty, vouchsafed by God, to our industry and perseverance. "To refrain, therefore, from such investigations," says the eminent authority just quoted, "would be to shut our eyes to the facts, and chemical and experimental observation is bringing to light."

Let us clearly state the case as between ourselves, and those who hold the vital theory of cerebral functions without structural lesions. "Symptoms of derangement," say they, "have been observed in life without their being able to account for them by any discoverable lesion in the body; nay, the brain is affirmed to be healthy, where symptoms, (speaking on pathological grounds), required that some morbid appearance should be found. But two things are wanting to impart force to this line of argument; first, that the healthy condition of the brain is undisputable, and the second, that in other cases where disease had existed before death, the signs of life left the evidence of its existence clear, as not to be altered or dimmed by any morbid phenomena. No one, however, denies the traces of exanthemata, the blush of erysipelas are often dispersed after death, and shall it

be otherwise as regards the brain, and its membranes?" And what again of the assertion, "that the brain is perfectly healthy?" Does it rest on satisfactory evidence of so important a fact? Are the conditions of the health of brain so clear and definite as to be beyond dispute? Anatomists, up to a recent period, had not determined, in regard to the structure of the brain, whether it is simply fibrous, or arranged in laminae. Some, too, have described it as formed of globules of various sizes; and others as consisting of rings or tubes arranged spirally. The arrangement of the plans of all the cerebral organs in their distributions and multiplied intercommunications, are still undetermined, at least in reference to what might be considered what was normal, and suited to healthy functions. To have any validity in so important a matter, their opinion here must be supported on such evidence as to render it authoritative and decisive; yet have they such evidence to offer? Have they possessed themselves of that standard of comparison which entitles them to say, at off-hand examinations, what is healthy and normal in the structure of the brain, and what is not? And if they have not, is it safe to take their assertions, that there are diseases of mind distinct from diseases of the brain, or, in other words, that there has been disease without lesion, in opposition to facts of the most obvious character that are presented to our daily notice?

We may meet these ideas to the extent of saying, that the lesions of the cerebral pulp are not appreciable at first view; that it requires in some cases familiarity with morbid changes, and great care to insure the detection of them. Modifications of form and structure, of colour and consistence, of chemical composition, and capillary permeability, cannot be detected at a glance. But these are not reasons for asserting that mental disorder may exist without lesion of any portion of the brain, either on its convoluted surface, or in its centres, more especially when it can be shown that such lesions are always to be discovered in connection with insanity, in some part or other of the brain, and under some form of the morbid modifications of structure which indicate such lesion.

Modern researches have reaped a rich harvest as regards our knowledge of the morbid conditions of the brain, and its membranes. Investigators have not confined themselves to the examination of appearances only; they have scrutinised all deviations in regard to size, colour, consistence, chemical composition, permeability, weight, the condition of injection, and a variety of other physical conditions, of great significance in these questions, such as hæmorrhage, ecchymosis, serous infiltration, and shrinking, or hypertrophy, of the cerebral organs; and as regards the membranes, infiltration of the pia mater, and opacity of the arachnoid.

MM. Leuret and Pelivie, have proved that the brain of the insane is heavier than that of persons not so afflicted. M. Couerbe in his comparative analyses of diseased and healthy brains has shown that one of its healthy constituents (cephalote) abounds greatly more in phosphorus in persons labouring under insanity, than in the sane of mind. Gall imagined that mental alienation depended on disease of the surface of the brain, and that idiocy was the result of defective organization, and that inflammation, at first acute, and subsequently chronic, accompanied the various forms of insanity. He admits a functional lesion as preceding the organic, but that when it has lasted but a short time, it may leave no trace after death, which it always does when the insanity becomes permanent. He remarks on the morbid thickening of the skull coincident with atrophy of the brain in chronic insanity, and Spurzheim goes still farther in his remark, "that many alterations of colour and texture are to be found in the brains of the insane, if the persons who make such dissections would only be more attentive." Foville states, that in acute cases of insanity, the cortical substance is of a deep red colour; its blood vessels, which in the healthy state are scarcely visible, are so distended, that when cut, their mouths remain open, and slight effusions of blood of the size of a pin's head are poured out. In the chronic state,

when the outside grey layer is peeled off, the parts exposed appear red, like fleshy granulations in a wound; the grey substance also, is often so much softened as to stick to the fingers.

The white substance when altered, is also the seat of sanguineous injection, and varies in colour, density and texture. It is sometimes on the other hand, of a refulgent whiteness; its consistence being then stiff, almost approaching to the firmness of cartilage. M. Foville also mentions the small cavities that are found in this substance, now known to be the focuses of small blood dots, or ecchymoses, that have been absorbed. Pinel has found isolated portions of this substance perfectly circumscribed, and completely impervious to his fine vermilion injections. The cessation of the capillary circulation in these portions, altering of course their structure, and impairing or abolishing their functions. M. Guislain considers that the cerebro-meningeal inflammation of the insane, depends on engorgement, a condition which passes readily into organic derangement in a tissue so soft as the brain. He supposes the progression of the phenomena in insanity to be as follows:—nervous excitement, congestion, irritation of the tissues, chronic, secondary inflammation, disorganization, albuminous exudation, opacity of the membrane, and finally, adhesion of the convolutions. M. Ferrus proclaims that the alterations of the brain and nervous system present as great a degree of certainty as the lesions of any other organ. In fact, these positions are supported by such an abundance of pathological proofs, that to remain any longer in ignorance, as regards the inseparable connexion between lesion and function in reference to mental alienation, must be a voluntary error, and therefore beyond the reach of correction by fact or argument.

Let us now present to our minds a case as sketched by Dupuytren of maniacal symptoms in connexion with traumatic lesion of other organs—the nervous or sympathetic delirium as it is usually called,—and let us ask ourselves the question in what point, it differs in reality or whether it differs at all either in its symptoms, or its lesions, from an attack of mania considered merely as exhibiting derangement of the intellect.

"If" says he, "in the evening or next day, or on the second day after a fracture, or luxation, or an attempt at suicide, or even a slight operation, the patient appears unnaturally gay, if he be loquacious, give short answers, if the eye be brilliant, the movements quick and involuntary, if he boasts of a courage and resolution which he no longer stands in need of, be on your guard; let him be kept in the most perfect quietude, protect him from light, noise, and improper visits; it may still be possible to stop the progress of the nervous excitement. In spite of all precautions, however, the mischief may burst forth. But, sometimes, the attack marked by irregular movements, gestures, or incoherent observations, comes on suddenly and unexpectedly in persons who seemed to be going on favourably, exhibiting in this case the most singular confusion as to ideas, places, persons and things. A prey to sleeplessness, they are under the impression of some fixed idea, which usually bears some relation to their profession, passions, tastes, or age. They are in a state of continual restlessness. The upper part of the body is covered with profuse perspiration, the eyes become brilliant and injected, the face flushed, and the patients utter with extraordinary volubility, menaces and vociferations. Their insensibility is sometimes so great, that instances have occurred when patients with comminuted fractures of the lower extremities, have torn off their bandages and splints and attempted to walk with their broken limbs without betraying the slightest feeling of pain, and of others who with broken ribs, sing and dance without exhibiting the slightest sign of suffering; and some too who had been operated on for hernia, have introduced their fingers into the wound, and in the coolest manner have seemed to amuse themselves in pulling out their intestines with as little appearance of pain, as if they were manipulating on a dead body."

These two are the characteristics, feature for feature, of a sudden and violent attack of mania depending on inflammation of the convolutions

the brain. Neither in character nor in substance, shall we by any mode of examination, be able to discover any difference in the lesion of the organs affected, whether the attack has resulted from a wound, or from mental labour or anxiety. In both cases, the symptoms spring up from an essential source, inflammation of the brain in its state of violent acuteness.

We are now prepared to go a step farther, and examine the validity of the opinions here propounded, as sustained by clinical observation. Let us take the description of the alterations of the white and grey substance, as sketched by a distinguished labourer in this branch of pathology.

ACUTE ALTERATIONS OF THE GREY SUBSTANCE.

"In this substance, the afflux of blood necessary to produce an irritation sufficient to produce a permanent delirium, determinates in the long run, a particular decomposition; the cortical substance when [this has taken place, appears to consist of three distinct layers. 1st, The first and most internal of these layers, that which is contiguous to the whole substance, preserves its natural grey colour with but slight alteration; 2nd, The second thicker and of a vivid red or violet hue, seems as if entirely formed of sanguineous vessels highly engorged. This layer when it presents a vivid red appearance, and its consistence is augmented, is in my opinion the seat of all maniacal symptoms and of all morbid exaltations of the intellect. In such cases, the consistence varies a little according to the more or less advanced state and acuteness of the disease, being more firm in the beginning, and less so towards the decline; 3rd, The third layer much thinner, is of a pale whitish hue, arising from the albuminous exudation which we have found so strongly marked in some cases, and which in all others is distinguished from the middle layer by its greyish appearance.

"The most remarkable alteration is the deep red colour and inflammatory thickening of the second layer. It is the consequence of an active concentration of blood in this vascular tissue, where its presence by exalting the energy of these parts, produces acute delirium with all the explosions of mania. When the acute delirium is mitigated, and has a tendency to become indolent and chronic, this red colour also undergoes a change; the blood retires, from red the hue is changed to brownish, and the cerebral pulp become less firm. These changes mark the moment of transition to a favourable resolution, to a tendency to recovery which should be skilfully seconded by the treatment. If this favourable moment be neglected, and time is allowed to pass away, the irritation instead of being resolved, passes insensibly into the chronic, incurable type; the grey pulp, altered, decomposed by long congestion, shrinks, loses its colour, turns white or pale, and loses all its excitability; the intellect following in the track of these organic alterations passes successively from excitement, to enfeeblement and extinction.

ACUTE ALTERATIONS OF THE WHITE SUBSTANCE.

"The white substance being more compact than the grey, and formed, notwithstanding what may be said to the contrary, of fasciculi of fibres that are perfectly evident, is less penetrable to sanguineous injection, and consequently the phenomena resulting from morbid irritation of its tissues are less easily recognised than in the other substance; they may, however, be recognised by the following signs:—its normal colour of dead white is slightly altered, and in its stead we find a livid hue resulting from a deep injection of the capillaries; blackish spots and ecchymoses more or less extensive may be observed. One of the most constant effects of irritation of the white substance is the destruction of its fibrillary arrangement, which is sufficiently obvious in its healthy state.

"If the disease be not arrested in its first stage, true inflammation supervenes, softening the white substance, rendering it diffuent, and giving it the appearance of crushed cheese. This fresh alteration is soon fatal; if it last any time, it terminates in suppuration in the centre of the softened mass, or a hæmorrhagic ecchymosis. When the irritation subsides, and is dispersed, the delirium becomes calm. But when on the other hand, the irritation passes into the chronic type, the white

substance undergoes the slow induration which found to accompany demency."

But the description of these morbid appearances however accurate they may be, requires in order to place their importance in its fullest light, to be able to bear the test of application and close analysis to cases as they occur in practice. This opportunity is within the reach of a great number of persons, and it need scarce be added how desirable it is that such advantages should be turned to account in clinical observation. I refrain, then, from further tasking your patience, although I am prepared with several cases to shew that they may be interpreted in the sense here contended for without any arduous difficulty.

When we contemplate the functions of the brain in regard to the discovery of traces of excitement, we must bear in mind that to put forth its highest powers, a state of high activity, nay of super-excitation, is necessary; and that this state needs only to be slightly exaggerated to become morbid. *Ira, furor brevis.* Yet these states, characterised by increased circulation and injection of the blood-vessels and capillaries, are evanescent. Suppose but their persistence, and we have at once presented to us the condition which leads to morbid alteration, and perverted function.

My task now draws to a close. I have trespass long upon your attention. I could have wished to spare you a recurrence to this subject, and would gladly have done so had I been allowed briefly to express my opinions, and the grounds on which they rested, at your last meeting; opinions founded on the researches of modern pathology, and opposed to allegations of ancient metaphysics. I came to listen to a paper of Dr. Winslow's for the instruction it imparted, and allowed myself, with blameable warmth, to be carried into the debate. For this fault I wish to atone, as well as for the imperfections of a paper, which I am fain to think would not have been so numerous, had my time during the past week been more at my own disposal.

REMARKS ON TRANSFUSION,

By ROBERT LEWINS, M.D., Fellow of the Edinburgh Royal College of Physicians, &c. &c.

SEVERAL melancholy instances of death from uterine hæmorrhage after delivery have recently come to my knowledge, where no attempt was made to save the unfortunate sufferers, by transfusion.

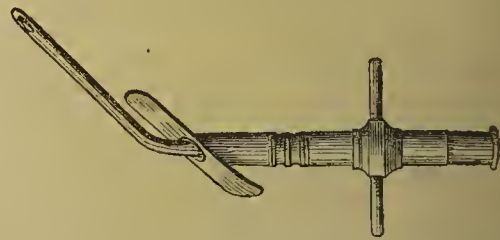
Circumstances lead me to suspect that that grave omission, in my opinion, has arisen, partly, at least, from the supposed difficulty and danger of the operation. The difficulty and danger of the operation referred to are generally over-rated. I cannot better correct this misconception, and at the same time induce practitioners of midwifery to have recourse to transfusion, in urgent cases, than by quoting from a communication I made to the Central Cholera Board, in 1832.

"The great desideratum of restoring the natural current in the veins and arteries—of improving the colour of the blood, and recovering the functions of the lungs in cholera asphyxia, may be accomplished by injecting a weak saline solution into the veins of the patient. To Dr. Latta, of this place, (Leith) is due the merit of first having recourse to this remedy. The most wonderful and satisfactory effect is the immediate consequence. A large quantity must be injected—from five to ten pounds in an adult, and repeated at longer or shorter intervals, as the state of the pulse and other symptoms may indicate; whenever the pulse fails, more fluid ought to be thrown in, without regard to quantity. In one case, 120 ounces were injected at once, and repeated to the amount of 330 ounces in 12 hours. In another case, 376 ounces were thrown into the vein between Sunday at 11 o'clock, a.m., and Tuesday at 4, p.m.; that is, upwards of 31 pounds in the course of 53 hours!

"The solution consisted of two drachms of muriate, and two scruples of carbonate of soda in sixty ounces of water. It was injected at the temperature of 106°.

"The apparatus employed for injecting was

merely one of Reed's common enema syringe (the fluid being put into a vessel rather deep & narrow,) with a small pipe so fitted that it might easily be introduced into an incision in the vein, the usual size and at the place made in bleeding.



In several cases the fluid was injected by means of a common silver blow-pipe attached to the tube of Reed's syringe. In the hands of a man of ordinary dexterity, this apparatus will be found to answer the purpose perfectly well. The pipe introduced into the vein, if the blood does not rise so as to fill it, must, as well as the tubes, be filled with the fluid, before commencing the operation, and more fluid than it is intended to be put into the vessel from which it is pumped."

The following reports of cases, copied from the Records of the Leith Cholera Hospital, will illustrate the immediate effects of the injection of a saline solution into the veins:—

Case 1.—May 20th, 1832.—M. T., under Lewins' care, a woman about forty years of age, was admitted this morning at seven o'clock; was pulseless, even at the axilla—blue, and cold over the whole body. Respiration very slow and irregular. It was feared that she would die before the operation of injection could be commenced. Between seven at night and two o'clock in the morning, 284 ounces of fluid, upwards of 23 pounds, were injected.

Two o'clock in the morning.—A change for the better that appears almost miraculous has taken place. The action of the heart is greatly improved; respiration not in the least laborious, quicker than natural; pulse 120, small, but distinct. She can articulate distinctly; countenance natural; lips red; tongue moist and warm; spirals freely, heat over the whole body natural.

May 23.—Case 2.—Mrs. —, under Dr. Latta's care, a woman aged 50, was at four p.m. seized with cholera in its most violent form, and by 11 p.m. past nine was reduced to a most hopeless state. The pulse was quite gone even at the axilla, strength so much exhausted that I had resolved not to try the effects of injection, conceiving the poor woman's case to be hopeless, and that failure of the experiment might afford a prejudiced and illiberal opportunity to stigmatise the practice; however, I at length solved to give her a chance, and in the presence of my colleagues, Drs. Lewins and Craigie, Messrs. Sebson and Paterson, I injected 330 ounces, when, like the effects of magic, instead of the pallid aspect of one whom death had sealed his own, the vital tide was restored, and life and vivacity returned; but diarrhoea recurred, and at three hours, she again sunk into her former exhausted condition. One hundred and twenty ounces more were injected with the same effect. In this case, 330 ounces were used in twelve hours, when re-action was completely established, and in forty hours she was able to sit up and smoke her pipe.

Case 3.—May 26th.—M. S. aged 38, under Craigie's care, a noted drunkard, thin and debilitated, in the sixth month of pregnancy, admitted into the hospital at eight p.m., half-past eleven, every symptom of sinking. Let the following solution be injected into one of the veins of the arm.

R. muriat sodæ 3j.

Carb. sodæ gr. x.

Aquæ, ad gradum 105tum Fah. calefactæ

Solventur Salina:

When about 1lbj. had been thrown in, the

* In none of the cases at Leith and Edinburgh amounting to upwards of 100, where the practice was adopted, did any accident arise from entrance of air.

perceived to flutter at the wrist, but gradually strengthened as the injection was proceeded with. The time lbs. ii ss. had been injected, the countenance which was before quite death-like, now red with the appearance of health, and she began to converse freely. P. 96, moderately strong. Half-past one o'clock, pulse has again become perceptible, respiration quick and laborious. At the venous injection be repeated to lb. vii. The effect of the injection, as formerly, was striking. To see an individual who seemed *viculo mortis*, brought back as it were, in so short a space of time, to an apparently tolerable state of health could not but astonish the beholder. The injection was finished, the pulse had returned to a healthy fulness and firmness. Expresses herself much relieved.

At 1 o'clock.—Has slept softly for an hour, the sleep she has had for many days.

At 2 o'clock.—Has vomited much, and complains of a sense of weakness: countenance rather cold, breathing difficult, pulse very small and feeble.

At 3 o'clock. Of the saline solution, be gradually injected again into the veins.

After the first few ounces were thrown in she complained of an acute pain at the epigastrium, and weakness, probably arising from the fluid being poured upon the heart, too fast, or from the escape of a bubble or two of air. Be that as it may, the circulating system was so much affected that the pulse became quite imperceptible, but on continuing the injection for a few minutes, the pulse gradually returned, and the pain abated,—and she expressed herself as getting relief from the operation.

From this time, although she continued to vomit, she continued gradually improving; on the following day she voided about lbj. of urine, the first since she came into the hospital.

A few days afterwards, labour pains came on, and she was safely delivered of a still-born female. Symptoms of phlebitis appeared in the arm, but these yielded to the ordinary treatment.

It has been said to remove the erroneous notion that exists, as to the difficulty, and danger attending the employment of the potent remedial agent to which I direct the attention of the profession—one which has not received the attention to which it is entitled, as I shall endeavour to show more fully, at another time. Without entertaining extravagant expectations of the kind proclaimed in France and other countries of Europe, soon after Harvey promulgated his grand discovery, and, most cordially, with Dr. Blundell that this infusion is a most important remedy in the treatment of uterine hæmorrhage, when so profuse, as to threaten life. And I am convinced that as a powerful stimulus to the heart's action, a saline infusion, of the kind we used in the treatment of this case, will be found sufficient, which whilst easily absorbed, is injected with much more facility than any other, and is free from the serious objections mentioned by Magendie.—“If, says he,” the blood be drawn in a vessel, or in a syringe, and then injected, it is more or less coagulated, and becomes, henceforth, a cause of death to the animal, in which the transfusion is made, because it fills the pulmonary arteries.”—And Magendie maintains that viscid fluids, as oil, cannot pass the capillaries, that they stop the circulation, and produce immediate death.” The accuracy of this assertion however, I, with great deference to the high authority, question on grounds which I will not, by and bye, explicitly state, in another paper. The quantity of saline solution necessary to be injected in hæmorrhages, is much less than is required in cholera, where all the living solids, as the blood, are robbed of the fluid, and to the due discharge of their functions. It is necessary to keep in mind that great care must be taken to filter the solution, and that the event of the operation being repeated, it is not to inject by the same vein.

Devonshire, Feb., 1845.

V. Camps, and Dr. W. H. Brown, F.L.S., appointed Physicians to the Farringdon Dispensary.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, Feb. 27th, 1845.

On the Treatment of Arthrodynia by the Sulphate of Quinine. By M. Legroux, Physician to the *Hôtel-Dieu, annexe, &c.*—Of all the inflammations to which the human frame is subject, arthrodynia is perhaps that which gives greatest opportunity of trying the effects of various remedies, but though it be little to be feared in its immediate effects, still its symptoms are so intense, and its consecutive lesions are so very serious, that any remedy capable of relieving the former or preventing the latter, is much to be desired. It is in order to attain this end that the author made trial of the following remedies: 1° Large doses of *antimonium tartarizatum*; the disease after yielding, became more intense and lasted longer; 2° *Potassæ nitras*. This did not produce such advantageous results as it has since in the hands of Dr. Martin Solon; 3° *Opium, tinctura colchici*; can only be considered as adjuvants; 4° *Venesection* repeated at short intervals: this though really efficacious, still presents many inconveniences and perhaps more than generally admitted. Thus, it cannot be employed in cases of rheumatism complicated with anæmia—the anæmic state it constantly produces renders convalescence long and tedious—it favours metastasis to other organs, especially the heart; a circumstance which explains the difference of opinion between Professor Bouillaud and Chomel, the former affirming that diseases of the heart are almost always complicated with rheumatism, the latter on the contrary, that such a complication is but an accident; 5° *Antiphlogistics combined with alteratives or the latter alone*, (*venesection and pulvis ipecacuanb. comp.* &c.)—3j. in divided doses during the twenty-four hours). Under this mode of treatment the fever yielded, and the pulse sometimes fell as low as 40 or 50 per minute; 6° *Sulphas quiniæ*. At first it was given as recommended by Dr. Briquet in the dose of 3ss. 3ij; but on account of the accidents it produced, (slight it is true with the patients under the author's care, but serious in those of other practitioners,) the dose was therefore reduced and the salt given as follows:—1st day, R. Sulph. quiniæ. grs. xvij.—grs. xxvij. divid in dosis vj.—vij., quarum j. quæque secunda hora sumend. superbib. cyath. minum. pot. sequent, R. syrup simpl. 3ij. aq. puræ. Oij.; acid sulph. alcohol. ʒiiss. Second and subsequent days. According to the effects produced, the dose was increased or not, but without ever going beyond 3ss. in twenty-four hours. The sulphuric acid by converting the sulphate into bi-sulphate, though it renders it soluble, does not cause its absorption to take place more rapidly, since when this salt is administered in the neutral form, its presence in the urine may be detected quite as soon; consequently it may be stated that the importance of sulphuric acid, however useful it may be, has been greatly exaggerated. When the pain and fever have ceased, the dose must gradually be decreased, to grs. x. at which dose it must be continued for several days. The phenomena produced by this remedy are *tinnitus aurium*, slight vertigo, and deafness; dilatation of the pupils,—accidents which enable the practitioner to regulate the doses of the quinine, increasing or diminishing these according to the intensity of the above symptoms. In the commencement, the patient must not be allowed to take any food, but as soon as the appetite declares itself, he may be permitted to have broth, soup, and soon after, some solid food, though the febrile symptoms still exist: the tisanes to be used are, a solution of gum arabic, currant syrup, with water, &c. If necessary, enemata, or even purgatives, must be given. Twenty-four cases are recorded in which the sulphate was administered, in one only the patient was not cured, because he left the hospital too soon; in five the blood was analysed. First Case.—A man, ætat. 30, strong and hale, affected with rheumatism of the lower articulations, took in the space of four days, about ʒxj. of sulphate of quinine; the first day 3j.; the second ʒiv.; the third ʒij.; and the fourth ʒij.; the pulse on commencing the treatment was 100; two hours after the first dose 108; the next day 96, the third

72, and the fourth 68; the physiological effects of the remedy were, giddiness, somnolence, abundant diaphoresis. No accidental symptoms occurred in the cardiac region. Second Case.—A woman, ætat. 32, of strong constitution, and general health good; ill of rheumatism, first of the right knee, then of the right elbow, and finally of the left knee; against which, antiphlogistics were employed with considerable benefit; the disease, as indicated by the pulse, which beat 116 times per minute, however, still persisted; the sulphate of quinine was then had recourse to, and in five days ʒixss. were taken, as follows:—1st day 3j. of the sulphate 2d day ʒiv.; 3d day ʒiv.; 4th day ʒij.; as it caused great nausea and vomiting, it was administered thus: R. Sulph. quiniæ. ʒij., opii. gr. j.; fnt. pulv. No. viij. quarum j. quæque secunda hora sumend. 5th day, R. Sulph. quiniæ. grs. iss., extr. opii. grs. ʒi., quater in die capienda. The articulations previously affected were now perfectly free from pain, there remained, however, a pericarditis, for which a blister was put on the sternum: the pulse which was 116 when the sulphate was commenced, fell to 92, 88, and 68. The phenomena produced by the remedy were vertigo, somnolence, diminution of the frequency of the pulse, dreams, momentary delirium, a weakening of the muscular system, which lasted nearly a month; this last symptom evidently indicating that the sulphate had been given in too powerful doses. In fifteen other cases the cure was obtained in from four to twenty-four days; the quantity administered was from ʒiv. to ʒxxij.; the effects of the remedy were diminution in the number of pulsations, which fell in one case to 41; susurrus, giddiness, vertigo, abundant sweats, epistaxis, weakness. The other remedies employed were venesections, purgatives, blisters on the cardiac region when the pericardium became affected. In two cases relapse took place, which yielded, the one to purgatives, and a blister, the other to the sulphas quiniæ. In five other cases the blood was analysed by M. Larippe, *interne en pharmacie*; in one patient, bled three times, it was found as follows:—

1st. Venesection performed before commencing the quinine. The blood presented a tenacious, buffy coat, four lines thick.

Quantity of blood drawn, ʒiv.

Cruor, ʒij. and xv.

Serum, ʒj. and 3ij.

Globules, 3ij. and gr. vij. or about 0.112½.

Fibrine 3ss., or about 0.011½.

Albumen and Salts, 3ij. gr. xxv.

Water, 3ij ss.

Loss, gr. xxvij.

2nd. Venesection, performed two days after the former. Buffy coat still is tenacious and thick; cruor firmer and smaller.

Quantity of blood drawn ..	ʒ	3	ʒ	gr.
Cruor ..	3	4	0	0
Serum ..	2	1	1	10
Globules ..	1	2	1	10
	0	2	2	5

or about 0.117

Fibrine .. 0 | 0 | 1 | 10 |

or about 0.0012

Albumen and Salts .. 0 | 3 | 0 | 0 |

Water .. 2 | 5 | 2 | 5 |

3rd. Venesection, performed two days after the second. Buffy coat still thick, but somewhat less tenacious and opaque.

Quantity of blood drawn ..	ʒ	3	ʒ	gr.
Cruor ..	4	2	1	10
Serum ..	2	2	2	0
Globules ..	1	7	2	10
	0	4	1	10

or about 0.135½

Fibrine .. 0 | 0 | 1 | 5 |

or about 0.008½

Albumen and Salts .. 0 | 3 | 0 | 5 |

Water .. 3 | 2 | 1 | 1 |

Loss .. 0 | 0 | 0 | 1 |

These analyses show that fibrine was in excess before the quinine was administered, and continued so for 48 hours, and then decreased; the globules, on the contrary, increased in quantity, explaining—why the skin of patients anæmic at the commencement of the treatment became coloured at the close—why, in some individuals, from the loss

of fibrine, an affection presenting a typhoid character declared itself—why there is utility in combining quinine with ferruginous compounds in the treatment of chlorosis and other anæmic diseases. In this case, the quantity of sulphate, given in six days was about $\text{℥} \text{ixss.}$ as follows:—1st day, $\text{℥} \text{ss.}$ in six doses: 2nd day, $\text{℥} \text{ij.}$ in eight doses: 3rd day, $\text{℥} \text{ij.}$: 4th day, $\text{℥} \text{ij.}$: 5th day, $\text{℥} \text{ij.}$: 6th day, $\text{℥} \text{ij.}$. The urine tested with the ioduretted hydriodate of potass gave eleven hours after the last dose, on the first day, an abundant white precipitate, indicative of the presence of quinine in that excretion; the phenomena produced by the quinine, were similar to those already described. In the four remaining cases, the cure was obtained in eight, six, eight, and nine days—the quantity of sulphate administered, and the proportion of fibrine in these cases were:—

Case	Quantity of Sulphate.	Highest Dose.	Lowest Dose.	Quantity of Fibrine.		
				1st Ven.	2nd Ven.	3rd Ven.
1 $\text{℥} \text{viii ss.}$	$\text{℥} \text{ss.}$	$\text{℥} \text{ss.}$	—	0.006½	0.006	0.005½
2 $\text{℥} \text{xj.}$	$\text{℥} \text{ij.}$	—	—	0.010	0.090	0.009
3 $\text{℥} \text{ix.}$	$\text{℥} \text{ss.}$	$\text{℥} \text{ss.}$	—	0.007½	0.007½	0.005½
4 —	—	—	—	0.009½	0.007½	0.006½

A fourth venesection in this last gave fibrine 0.010. —(*Journ. de Med.*)

Curious Case of Malformation of the Heart.—M. Auguste Valette, *chirurgien sous-aide* at the Military Hospital, Strasburgh, relates, in the *Gazette Medicale*, the following case, of the same nature as those observed by Wilson (*Phil. Trans.*, 1798.), M. Standen (*Phil. Trans.*, 1805), Mr. Farre (*Essay on the Malformations of the Human Heart*, 1814), Mayer, Mr. Mauron (*Philad. Jour.* 1827), Mr. Ramsbotham (*Lond. Med. and Phys. Jour.*, 1829), Professor Breschet, and other authors. Julie Rieder, born at Strasburgh, of healthy parents. Her mother had previously given birth to a male child, when she became pregnant for the second time. The accouchement took place at the usual period, and the child (Julie), in appearance healthy, for six weeks presented nothing abnormal, when all at once the skin presented a blue tint, and the respiration became difficult. When six months old, convulsions took place, and were succeeded by hemiplegia of the right side, which gradually decreased and finally disappeared, leaving, however, that side somewhat weaker than the opposite. The cyanosis persisted, increasing when the patient ran or walked quickly, and being deeper on the right than on the left side: the dyspnoea was continual. Last November, bronchitis, caused by cold, appeared, and pulmonary congestion became sufficiently intense to cause death, Julie Rieder being six years and twelve days old. Autopsy. The chest only was examined. Heart in its normal place between the two lungs; pericardium presented nothing remarkable, and contained about a spoonful of limpid serosity. Heart—vertical diameter 4 inches, horizontal diameter 2½ inches. The extero-anterior surface, presented inferiorly the anterior surface of the ventricles—somewhat higher up the anterior face of the auricles—superiorly the origin of the aorta and pulmonary arteries was hid at their commencement by the auricles and the veins which end in them, showing that the auricles were united not to the base but the anterior surface of the ventricles. Posterior surface, when examined, after removing the heart, presented a large triangular surface, belonging entirely to the ventricles, the summit of which was turned downwards and directed obliquely from right to left. On the base of this triangle, at the union of the right two-thirds with the left third were the origins of the arteries, in their normal rapport; finally, the posterior surface of the auricles. INTERIOR. Cavities of the ventricles, exposed by two vertical incisions made on the right and left edges of the heart. The ventricular parietes were on both sides about one or two lines thick; the columnæ carneæ normal; a large communication existed between the two ventricles, through which the thumb could easily be passed. The circumference of the opening was round and smooth and without any valves; the septum was only four lines high, the aortic orifice was normal, situated at the internal and upper part of the left

ventricle: the sigmoid valve presented no anomaly. The orifice of the pulmonary artery was separated from that of the aorta by a small eminence which formed the upper part of the circumference of the interventricular opening. The pulmonary artery is about half the size of the aorta, neither it nor its orifice presented anything irregular. The auriculo-ventricular orifice is single, common to the auricles and ventricles, situated at the base of the cavity of the ventricles, behind the aorta and pulmonary artery, and so disposed that if the septum had extended sufficiently upwards, it would have been divided into two equal parts; the cavity of the auricles, partly divided by a thin septum, could easily be perceived through this opening, which was about the size of that in the ventricular septum. Thus there was communication between the two ventricles, between the ventricles and auricles, and between the two auricles. The auriculo-ventricular orifice was furnished with a large triangular valve, whose base was inserted into the centre or three-fourths of the circumference of the opening, and whose summit was fixed by means of small fleshy columns to the posterior wall of the ventricles; a few fleshy columns proceeding from the right and left ventricle were attached to the side of the valve, which was large enough to close the orifice completely. Cavity of the auricles. The right auricle was laid open by an incision of its right edge, in such a way that the vena cava inferior, the auricular parietes and the vena cava superior were successively divided; the foramen ovale still existed, so that the blood passed freely by two openings, from one auricle to the other, the foramen ovale, and that which existed just upon the auriculo-ventricular opening. The fact here recorded by Mr. Valette, of the deeper coloration of the paralyzed side, comes to the support of the opinion of Bertin and others, that it is owing to the difficulty with which the venous blood circulates: and though it be complicated almost always with the mixture of the two kinds of blood, still it is not produced by this mixture. Professor P. L. Berard, (*verbo Cœur, Anat. abnormalc, (Dict. de Med.)*), adopts this opinion, and adds that cyanosis has a certain value as a sign of abnormal communication between the cavities of the heart, because it causes, especially when complicated with diminution of the sac of the pulmonary artery, the venous circulation to be performed with difficulty. This diminution has evidently an effect on the direction the blood takes, which then flows from the right into the left cavities, mixing with the arterial blood; on the contrary, when the pulmonary artery is of the normal size, the blood flows easily into it, and that which enters the aorta is unmixed arterial blood, similar to that of a person whose heart is naturally formed. It, however, in the latter case a disease of the lungs appears so as to embarrass the circulation, cyanosis instantly takes place and disappears with the cause.

On a new instrument for pulverising a calculus in the bladder.—Alex. Arthaud, M.D., after four years laborious researches, performed in the presence of a numerous audience, an experiment with an instrument of his invention, by which the calculus, instead of being broken to pieces, was literally pulverised. A mulberry calculus, thirteen lines and a half in diameter was placed in the bladder through an incision made in that organ, which having been properly closed, an injection was made *per urethram* and the instrument introduced. After two ineffectual attempts, owing to the presence of a certain quantity of serosity in the abdominal cavity, the calculus was seized, and in the space of a quarter of an hour was pulverised. Should the experiments succeed, which the author purposes performing, his invention will be of great utility, inasmuch as it will enable the operator to reduce the calculus to a fine powder, instead of breaking it into fragments, and of accomplishing at one sitting what has hitherto needed several.

On Real and Simulated Paralysis.—Dr. Mac-loughlin has just published the second edition of his work entitled "*Consultation Medico-legale sur quelques signes de Paralyties variées et de leur valeur relative*." As the case which gave rise to this publication is one worthy of the attention of the Medical Profession, a few details may not be uninteresting.

A charitable committee has been formed here to relieve all British subjects in distress. English medical men give their services to this Society gratuitously. In November 1838, Dr. Mac-loughlin requested to see and prescribe for a Mrs. Hardern who had been on the society for some years; consequence, it was said, of being afflicted with incurable diseases, the existence of which was certified by seven or eight of the first medical men here. Dr. Mac-loughlin met in consultation a medical gentleman who had been in attendance on this woman for the last eleven months, and stated that his patient had five incurable diseases. After an attentive examination, Dr. M. was convinced she was in perfect health, and simulated those maladies to secure the pension of the charitable fund. He not only satisfied the medical gentleman that he had been imposed upon, but likewise convinced Mrs. Hardern herself that it was impossible for her to continue scheming longer. She was however determined to be considered as afflicted with an incurable complaint, so as to continue to receive the pension allowed the charitable fund. A few days after, she sent Dr. Cruveilhier, professor of pathological anatomy, and one of the most distinguished medical men here, and to him she represented herself as labouring under complete paraplegia, but said nothing of these diseases she had simulated for three previous years. Professor C. stated that he examined her twice with all possible care, and was convinced that she was suffering from the disease for which she had consulted him, he gave a certificate to that effect. As soon as she had a certificate, her husband wrote to the charitable fund committee, to say that his wife was afflicted with complete paraplegia, which Dr. Mac-loughlin had overlooked. In reply, the committee requested Sanson and Professor Andral to see her and report her state. These gentlemen after visiting gave a certificate saying she was paraplegic.

Hardern and his wife having two certificates emanating from such authorities attacked Mac-loughlin, who had in consequence to meet law suits; on the latter, before the *Cour de Paris* Professor Cruveilhier presented himself in behalf of Mr. and Mrs. Hardern, and maintained that 7-10ths of Mrs. H's body were completely paralysed. Dr. Mac-loughlin declared that not a symptom of paralysis existed, but that the patient was in perfect health, and offered to demonstrate the fact to the Professor whenever he pleased. After the trial Professor C. received Mrs. H. into his ward at the Charité, and a consultation there took place between Professors Andral, Bouillaud, Fouquier, Gerdy, Velpeau himself: the general and unanimous opinion was that 7-10ths of her body were paralysed. She had been sixteen days in the hospital, when Professors Cruveilhier and Dr. Mac-loughlin met accidentally in one of the wards, a discussion took place, the latter repeated his offer, to prove that the patient was not ill: it was therefore agreed that they should meet on the 26th February, 1840, in Professor Cruveilhier's ward, at the bedside of Mrs. Hardern, about 150 or 200 medical men, amongst whom were Professors Bouillaud, Gerdy, Velpeau, Ollivier d'Angers, were present. Professor Cruveilhier stated, 1° that Mrs. Hardern had completely lost the sense of feeling of the right side of the face and head, of the right conjunctiva, of the mucous membrane of the corresponding nostril; 2° that the elevator muscles of the lower lip on both sides were paralysed, so that the lip could not be kept shut, and mastication could be performed only by the help of the hand pressing the lower jaw against the upper; 3° that she had lost the power of speech; 4° that the tongue was completely paralysed, and that manual interference was necessary to draw it out of, or push it into the mouth; 5° that the pharynx was paralysed and deglutition impossible; 6° that the arm, bladder, and rectum were completely paralysed; 7° that paraplegia existed; and 8° that the cause of these maladies was a tumour in the brain.

After thus demonstrating the existence of these diseases, Professor C. further stated, that Mrs. Hardern had, during the 18 days she had been in the hospital, taken nothing but tea in

quantities at a time, which she swallowed with considerable difficulty. Dr. M. requested that she might be given her, "She applied (p. 418) her lips to the cup firmly, and drew in a sufficient quantity of the liquid to fill her mouth without swallowing a drop; she then put away the cup, and kept her mouth closed for some seconds without making any effort to swallow, she then allowed the lower jaw to fall, and the liquid ran out on both sides." Dr. M. said, "that in the manner she had applied her lips to the cup and performed suction, it was evident that the muscles of the lower jaw and the tongue were not paralysed; that from the manner she had retained the liquid in her mouth without coughing, and expelled it out of that cavity, that the muscles of pharynx were not paralysed. These points were so clearly proved, that Professor C. admitted that she somewhat exaggerated her sufferings" (p. 418). Furthermore pressed by the evidence drawn from anatomy, physiology, and pathology, he admitted "that there was no paralysis of the tongue, larynx, and elevator muscles of the lower jaw." "cease to maintain," added the professor. "that of the organs situated above the superior extremity of the sternum are paralysed, but I assert, that the right arm and lower limbs are completely paralysed for no pain is manifested when she is pricked with a pin, nor can any voluntary muscular contraction be perceived when the limbs are thrown in every direction." (p. 50.)

Dr. MacLoughlin gives in the work before us, the reasons why he continued the consultation, and the avowal by Prof. C.; they do not, however, appear to us satisfactory. In our opinion it ought to have ceased the moment the foregoing admission was made; still, in a scientific point of view, we must thank Dr. M. for following the Professor through the whole case, for he drew the attention, Professor Gerdy said, to points of pathology yet unknown, or not sufficiently studied in France.

Passing therefore to the hand, evidently from the colour and softness of the skin; the natural perspiration in the palm of the hand, the non-atrophy of the tip of the fingers, and the force of the pulse at the wrist, it was perfectly healthy, and apt to perform all its functions. The other extremities were next examined, and here the discussion became highly interesting, inasmuch as it touched on the highest branches of medical science. Professor C. contended, that the functions of the rectum and those of the bladder remain under the controul of the will in complete paraplegia. Dr. M. denied this, and appealed to anatomy, physiology, and pathology to prove that these two organs must also be paralysed, and execute their functions involuntarily: and that not only this occurred constantly in complete paraplegia, but that the urine becomes alkaline; a pathological condition which Professor Gerdy acknowledged was new to them. Both parties joined issue on these points, and the Professor was ably assisted by one of the firmness of purpose was worthy of a better name.

Mrs. Hardern had, for fifteen months, stated that she was affected with paraplegia, had been in that state for eighteen days; and had been visited by a number of medical men. She was aware of Dr. M.'s opinion, concerning paralysis of the bladder and rectum in complete paraplegia, and therefore she was all in her power to have it believed that this was the case. Thus, on her entering the hospital she asked for, and obtained a female catheter, with which she drew off her water daily; aware that she must eat, the bowels must act, she took while in hospital only very small quantities of tea, and before no motion had taken place during these fifteen days. The catheter having been taken away from her, at Dr. M.'s request, the day before the consultation, "the bladder was found (p. 44, 2d ed.) empty, but not a drop of urine had escaped from the urethra," and (p. 45,) "on introducing the catheter, the contents of the bladder were produced to the distance of about four inches from the end of the instrument. The urine was acid, and contained no mucosities. The sphincter was firmly contracted; no traces of the escape of feculent matter; nor had the bed clothes or body linen ever been soiled by urine or feces. The skin on the

sacrum was not red; no signs of scars were visible proofs that she had not been lying on her back fifteen months, nor the eighteen days she had been in the hospital." Dr. M. therefore concluded, that neither the bladder or rectum were paralysed, and that the state of the skin on the sacrum, indicated that she had not remained fifteen months on her back or even eighteen days, which would have been the case had she been completely paraplegic. Dr. M. further contended, that since the bladder and rectum were healthy, and under the controul of the will, the lower extremities could not be completely paralysed. "For," argued he, "if the portion of the medulla spinalis, from which the nerves distributed to the sphincters of the rectum and bladder arise, is healthy, the portion from which the nerves of the lower extremities originate, must be so likewise, and consequently the lower limb, cannot be completely paralysed," (p. 56.) Unable to convince the patient is affected with this disease, how long can she live?" "Three days," replied Prof. C.—"I accept your prognosis," said Dr. M. "and to shew you that my diagnosis was not formed without mature consideration, keep Mrs. H. in the hospital, one, two, or three months, surround her with every care, I will be the first to thank you. During this period, you will discover that my statement is correct, and that you will be the first to acknowledge your error," (p. 69.)

Eight days after the consultation just mentioned, Mrs. H. left the hospital, taking with her another certificate from Professor Cruveilhier that seven-tenths of her body were completely paralysed. With this new certificate, Mr. and Mrs. H. began to annoy Dr. MacLoughlin, and Professor Cruveilhier, having in the 35th number of his work on pathological anatomy, reported the case in the light in which he viewed it, Dr. M. published eleven months after the consultation, the 1st edition of his pamphlet. This publication convinced many of the professors, and they expressed themselves to that effect; not so Professor C., for he convened Professors Andral, Breschet, Chomel and Moreau who, after examining the patient, declined giving a certificate. Two years after the consultation Mrs. H. and her husband left Paris for Naples, where they now reside.

It was mentioned above, that Dr. MacLoughlin had met two law suits. At the first, the Procureur du Roi, requested Dr. Ollivier d'Angers, one of the highest medico-legal authorities here, and author of a valuable work on diseases of the spine, to visit Mrs. H. and to report on her case. Dr. Ollivier did so, and stated in his report to the court that paralysis existed; present at the consultation of the 26th February, 1840, he confirmed his report, but from what then took place, he conceived some doubts as to the accuracy of his opinion, and, therefore, resolved to watch the case. Since then he has published a memoir on simulated diseases, where he admits that he had been deceived by Mrs. Hardern. (*Vide Annales d'Hyg. pub. et de Med. legale*, Vol. XXX. p. 19.)

In conclusion we strongly recommend this work to the perusal, not only of those gentlemen who devote themselves to the study of medico-legal questions, but likewise to the general practitioner. The author has rendered the medical profession an essential service in vindicating its claims to true scientific deductions, and we must do justice to the courage and knowledge he evinced in combatting the opinions of seven of the most eminent professors of the University.

Academy of Sciences.—Sitting of the 24th Feb., Mr. Elie de Beaumont in the chair.

On the Action of Sulphurous Acid on the Alkaline Mono Sulphurets.—By M. Langlois, Professor at the Military Hospital, Strasburgh, presented by M. Pelouse, M.A.S. When in a concentrated solution of sulphuret of barium, sulphurous acid gas, procured by the action of sulphuric acid on mercury, is made to pass, the following results are obtained; at the commencement of the operation, the sulphurous acid saturates the free oxyde, no precipitate takes place; shortly after, the liquid becomes heated, turbid, and assumes a citron-yellow colour produced by a deposit of sulphur, but this last being soon changed into hyposulphate, the

liquid becomes milky white. In the vase which contained the solution of the sulphuret, an abundant precipitate of hyposulphate of baryta and sulphur is found, and a small quantity of the salt remains in the solution with a little sulphurous acid. In treating the precipitate repeatedly with boiling distilled water, the sulphur is separated and the hyposulphate dissolved, and the liquid on cooling, deposits, small, white, needle-like crystals, which present all the characters of those obtained by the usual method: analysed, its formula was found to be $BaO, S_2O_2 \times H_2O$. Thus, during the action of sulphurous acid on sulphuret of barium, 3 eq. of the former change 2 eq. of the latter into an equal quantity of hyposulphate and of sulphur. Or $3S.O_2 + 2BaS = 2(BaO, S_2O_2) + S$. The monosulphuret of strontium with sulphurous acid not only deposits sulphur but likewise disengages sulphidic acid this last being easily collected by means of a solution of sulphate of copper. The formula of the hyposulphate of strontium is that already indicated by M. Guy Lussac, $S_2O_2 + 5, H_2O$, and it almost always contains some sulphuret of barium: this must be removed by repeatedly dissolving it in boiling distilled water. The monosulphuret of calcium is converted by sulphurous acid into a hyposulphate; formula $CaO, S_2O_2 + 6H_2O$. From the monosulphuret of magnesium, a crystallized hyposulphate is obtained: formula $MgO, S_2O_2 + 6H_2O$. The action of sulphurous acid on the monosulphuret of potassium is rapid and energetic, the temperature increases to about 122° or 140°, sulphuretted hydrogen gas is disengaged, and sulphur deposited. The liquid on cooling, deposits a white crystalline mass, the hyposulphate of potash: the changes which take place may be represented by the following formula: $2KS + 6SO_2 = 2(KO, S_3O_5) + 2S$. From the solution of monosulphuret of sodium, sulphur is precipitated, sulphuretted hydrogen is disengaged, and the hyposulphate is formed. $NaO, S_2O_2 + 5H_2O$. But soon after the sulphurous acid acts on the hyposulphate-changing it into hyposulphate of soda, which cannot be obtained in a solid state; finally, it is converted by heat into sulphate of soda, sulphurous acid, and sulphur. These changes may be explained by the following formulæ: 1° Formation of the hyposulphate of soda, $2NaS + 3SO_2 = 2(NaO, S_2O_2) + S$; 2° Change of the hyposulphate into hyposulphate, $2(NaO, S_2O_2) + 3SO_2 = 2(NaO, S_3O_5) + S$; 3° Decomposition by heat, or concentration of the hyposulphate and formation of sulphate, sulphurous acid and sulphur $2(NaO, S_3O_5) = 2(NaO, SO_3) + 2SO_2 + 2S$, which shews that two equivalents of mono-sulphuret of sodium or potassium, and six equivalents of sulphurous acid produce finally two equivalents of sulphate; or four equivalents sulphur and two equivalents of sulphurous acid gas. The author terminates his memoir by some remarks on the action of strong acids on the hyposulphites, sulphyposulphites, and hyposulphates.

On the Various Proportions in which Chemical Combinations take place. By M. Baudrimont.—The study of the proportions of chemical combinations persevered in for the last seventy years, has given rise to two opinions which appear to be as well founded the one as the other, though they seem to be in direct opposition. On the one hand it has been proved that chemical elements unite in fixed proportions, and on the other it is equally proved by the analysis of compound bodies, and especially mineral substances, that the elements in certain chemical series may unite with each other in indeterminate proportions. From his researches the author concludes: 1° That there are two modes of chemical combination, the one by the union of antagonist substances: the other by that of similar bodies; 2° That it is to the former that definite proportions may be assigned, and to the latter that indefinite proportions belong; 3° That chemical substitutions cannot take place in indefinite proportions.

On the Colic produced by Copper Emanations.—Dr. Tenqueril des Planches addressed a letter in which after quoting several passages of his work published in 1839, he concludes by stating, that the diseases Dr. Blondet describes as new, were

known many years ago, and the errors he seeks to destroy have not existed for some time.

On Vaccine.—Dr. Serres in the name of a committee composed of MM. Dumeril, Magendie, Breschet, Roux, and himself, read the first part of a report on the memoirs presented for the vaccine prizes, in reply to the following questions proposed by the Academy in 1840: 1° Are the preservative properties of vaccine absolute, or are they but temporary? In the latter case, determine by precise experiments and authentic facts the period during which, vaccine may be considered as a preservative from variola. 2° Has the cow-pox more certain and more durable preservative qualities than vaccine matter which has already been more or less employed. 3° In admitting that the preservative qualities of the vaccine matter become weaker, ought it to be renewed, and by what means? 4° Have the local phenomena produced by vaccine matter, any connection with its preservative properties? 5° Is it necessary to vaccinate the same person several times, and if so, how many years may be allowed to elapse ere re-vaccination must be had recourse to? After some remarks on the facts which have given of late greater interest to the solutions of these questions, Dr. Serres observed that, contrary to the other remedies which are employed against a disease in activity, the vaccine is a physiological preservative measure. Before its discovery, variola reigned almost always epidemically, and its ravages were considerable, as may be seen in the statistical table published by Surin, Heberden, and Blane, where it is stated that it carried off one in fourteen, and produced on an average, yearly, 400,000 deaths in Europe, of which 60,000 took place in France. Modern medicine in producing discrete variola by inoculation, hoped to put a stop to the frequency of the confluent species which was almost always fatal, and the results obtained were sufficiently advantageous to obtain the support of the most eminent physicians of the 18th century. Jenner was a partisan of this method, but, like a man of genius, profiting by the fact, probably observed before him, that individuals who milked cows affected with the *picote** were never affected with variola, and thinking that it would act as a preservative, he transferred it from the cow to man. Vaccine matter may be considered as a disease carried from one species to another, capable of being transmitted afterwards from man to man, retaining the properties which primitively distinguished it, and whose effect is to destroy in the economy, the faculty of absorbing the variolous virus. But though upwards of half a century attests on millions of individuals the benefits derived from Jenner's discovery, still it is needful from time to time to verify the results, so as to prevent vaccine losing its primitive qualities. This was the intention of the Academy in proposing the foregoing questions. Thirty-five candidates presented themselves, and, as the preservative qualities of vaccine are never more apparent than during the epidemics of variola, the authors have chiefly considered (in order to solve the first question studied) the effect these epidemics had on vaccinated individuals. The author of the Memoir No. 24, mentions the results furnished by thirty epidemics observed in France from 1816 to 1841. The number of variolous cases was 15,921, of which 10,434 were individuals not vaccinated, 5963 vaccinated individuals, and 30 persons who had already been affected with variola; of the non-vaccinated persons there were 1632 deaths, and 62 only of the vaccinated. In general, it attacked individuals who had been vaccinated long before, respecting the recently vaccinated; but even when the vaccine had lost its preservative qualities, still it had an influence on the mode of development of the affection: thus the eruption of the pustules which took place on a vaccinated individual, did not end by suppuration. The conclusions of the committee on the 1st question, that the preservative properties of vaccine matter are absolute for five or six years, and may extend to the 10th or 11th; that beyond this period a certain number of vaccinated individuals are, during epi-

demies of variola, subject to be attacked by that disease; that, notwithstanding, the greater part of vaccinated persons are preserved all their life. And as to the second question it results from the experiments contained in Memoirs No. 20 and 24,—that the preservative qualities of vaccine are not in direct ratio with the intensity of the local symptoms, and that vaccination with cow-pox was preferable to that with old vaccine matter.

M. Dufrenoy, M. A. S., presented, in the name of Dr. Michea, his work on hypochondriasis, just published, and of which part has appeared in the *Medical Times*. The author founds his opinion on upwards of eighty cases; he considers that the fundamental pathognomonic characters consist exclusively in a partial disturbance of the intelligence; consequently all the other symptoms, whether dynamic or organic, are merely accessory. He admits, however, a primitive hypochondriasis originating in a limited disturbance of the mind, and a secondary, or consecutive, to some organic lesions, especially those of the abdomen. Finally, the author of the work gives a proof of sound judgment, and, by careful inductions and numerous facts, renders the treatise worthy of the attention of medical practitioners.

Academy of Medicine.—Sitting of the 25th of Feb. M. Caventou in the Chair.—The President informed the Academy of the loss they had experienced in the death of Dr. Ribes, titular member, and MM. Fabre and Bouchard, corresponding members. Dr. Begin read the speech he made in the name of the Academy at the interment of Ribes. The speech, read with evident emotion, was listened to with marked attention, and received with merited applause. Its insertion in the *bulletin* was decided upon. The President informed the candidates to the vacant place in the section of anatomy and physiology, that those who wished to read a memoir would, on demanding it, obtain the favour of being heard immediately.

Discussion on Professor A. Berard's Case of Vesico-Vaginal Fistula.—After hearing Professors Moreau, Roux, and Velpeau, Professor A. Berard's reply was postponed to the next sitting (A long account of this important discussion shall be given in our next).

Lithotomy.—Dr. Leroy d'Etiolles presented the fragments of a calculus in sufficient quantity to fill a small bottle, about six inches in circumference, withdrawn artificially after lithotomy, the bladder being incapable of expelling them spontaneously. This fact proves that not only large, but likewise very small fragments, may be easily extracted from the bladder, and that the success of the operation depends not on the condition of the calculus, but on that of the urinary organs and general health, the appreciation of which depends entirely on the sagacity of the operator. Dr. Leroy presented a new modification of his percussor, and stated that he would shortly explain his mode of pulverising the calculus by means of instruments, which he presented to the Academy of Sciences a year ago.

Professor Gerdy presented a patient whom he had cured of several ulcers of the articulations of the foot.

GARLAND DE BEAUMONT, D.M.P.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M. D.

On Peritonitis.—The great danger of the above disease depends on the following circumstances. 1. On the degree of extension of the inflammation, and on the peculiar parts of the peritoneum affected. 2. On the causes and subsequent character of the disease. 3. On the individuality of the patient. The more extended the inflammation is at first, the more the peritoneal membrane is affected, and the more rapidly death is induced. The signs of a fatal termination in this disease are, constant vomiting with excruciating pain and tympanitic distention of the abdomen. As regards the causes of peritonitis, Broussais, Chomel, and others maintain that it is generally caused by perforation and traumatic lesion of the alimentary canal, as in ruptures and

abortions. But daily experience contradicts this assertion. For peritonitis is as frequently observed after colds as after the above mentioned lesions. It frequently occurs in wet and variable weather, and in countries distinguished for rapid changes of temperature. Women are more easily affected than men. As regards the treatment, the author recommends the following the most successful: constant fomentations over the whole abdomen, abundant friction with mercurial ointment, careful observation of an equal temperature, clysters of water and oil: internally, simple emulsions, common drink, small quantities of fresh water.

Ischuria intermittens.—A soldier of the 1st regiment came into hospital on the 29th of September, with a clap. When the inflammatory stage passed, and when the discharge was but trifling, ischuria suddenly set in, on the evening of the 30th of October, with a painful desire to evacuate the bladder, and, accompanied with high fever: leeches, warm baths, frictions, and fomentations with water were all of no use. The catheter was introduced, but could with difficulty be introduced. In the evening all signs of ischuria had completely vanished. But in the evening, the above mentioned symptoms appeared with renewed violence. The same remedies were employed as before, though without immediate relief, and the catheter could not be introduced late at night, when the patient had placed in a second bath. This attack subsided likewise, in the course of the next day, and the patient could discharge his urine freely in the afternoon. But at 7 p.m. the paroxysm re-appeared with all its usual symptoms, when its intermission character was perfectly confirmed. After removing the most urgent symptoms quina, with camphor extract: aconit. and small doses of ipecacuanha administered forthwith, and from that time the symptoms of this intermittent ischuria reappeared. On the 15th of November the patient was dismissed cured, after having received doses of quinine for the purpose of restoring lost strength. (Dr. Pauli in *Pr. Vereins-Zeitung*.)

Spermatozoa in the urine.—A pale young man suffered from pains of the stomach, aversion to food, pyrosis, periodical palpitation of the heart, and eczema on the pit of the stomach and hands. Prussic acid, hyoscyamus, luke-warm baths were of no avail: digitalis had only a momentary effect. In the turbid urine, bits of epithelium, little moving corpuscles were found with thread like streaks; these were spermatozoa, smaller than usual, and not so distinctly separated in their elliptical tail-like parts. The patient was accordingly treated for weakness of the seminal vesicles, arising from pollutio nocturna. Lotions of cold water were applied topically to the urethra, and a tartrate of iron given internally. The patient confessed that he had practised onanism, but discontinued it three years before. (Dr. Junger, *Rhein. u. Westphal. Correspondenz*.)

Pruritus hiemalis.—With the sinking of temperature below 50° R. many are affected with a very troublesome itching of the skin, particularly on the lower extremities and abdomen, of this they become peculiarly sensible at night when in bed. No exanthema appears but a contraction of the skin. The general health and digestion are normal, but the urine secretion is copious and pale. Both sexes are equally affected by it, particularly adults and aged persons. A warm temperature removes the complaint, while cold increases it. Thus cold is decidedly the ultimate cause of the proximate cause might be supposed to be repressed perspiration, if experience did not show that baths, sudorifics, lotions, &c., only make the complaint worse. Change of climate may perhaps be the most useful means of removing it altogether. (Dr. Handschuh of Munich in *Allgem. Zeit. für Chirurgie*.)

On the co-existence of true small-pox with cow-pox.—In the year 1834, 353 individuals were attacked with epidemic, small pox; amongst these were 10 children, who had been vaccinated in the course of the epidemic, who notwithstanding the appearance of genuine vaccine vesicles, were attacked by small pox. The disease ran through a regular course. In the year 1841, 16 individuals fell sick of small pox. Amongst these was a child of 1 year and a quarter, who was vaccinated imme-

* *Picote* is the name by which variola is designated in the south of France.

the appearance of the epidemic, and notwithstanding, the real small-pox appeared at the same time with the cow-pox. In 1842, 357 individuals were seized with the small-pox, amongst these, even children, who were vaccinated during the epidemic, presented cow-pox and real small-pox simultaneously. In some of these cases the eruption of variola vera, took the precedence of vaccina by a few days. The cow-pox vesicles attained an unusual size, exceeding by far the size of the real small-pox pustules. The peripheric inflammation of the cow-pox vesicles also increased in size—(Dr. Schleifer in *Osterr. Medic. Wochenschrift*.)

Anomalous menstruation per anum.—In the person a question, menstruation commenced at the 16th year, without any complaint, when she was married against her will and gave birth to a boy. In her 10th year, occasional obstruction to menstruation ensued; menstruation appeared sometimes sooner, sometimes later, and finally became more sparing in quantity, thinner and paler. Her general health was but little disturbed. At last, menstruation ceased for two months, then came on sparingly, at a later period it returned abundantly and regularly, alternating thus for some years till 1840, when it ceased entirely. In the meantime, every 4 weeks, at the same time with menstruation, hæmorrhage appeared from the anus. The quantity of blood amounted at first but to or three tablespoonfuls; later, it increased in proportion as menstruation diminished, and after the latter had ceased, it became exceedingly profuse. At first, the hæmorrhage lasted one day, then from two to three days with interruptions, at last four to five days regularly. Itching, burning, a feeling of fullness and heaviness in the head and difficulty of motion in the lower extremities were the usual precursors of this profluvium. The two former disappeared on its appearance; the latter only when it had continued for some time. This complaint was diagnosed and treated as hemorrhoids. The author concluded from its duration for several days, from its regular appearance and disappearance with the usual menstruation, that it was connected with the latter, which was supplanted by hæmorrhage. He therefor endeavoured to reproduce normal menstruation and remove the obstinate obstruction. Pills of pilul. ruf. pil. rhæi co. and extr. tarax. with ior. martial. did not produce the desired effect. But the use of the *Kreuzbrunn of Marienbad*, perfectly restored menstruation, stopped the hæmorrhage, and removed the obstinate constipation. When the patient had drunk sixty bottles, she found herself in the possession of perfect health.—(Dr. Grosskopf of Woidenhofen in *Osterr. Medic. Wochenschrift*.)

Delivery in an unconscious state during a sleep of three days.—The author was called on the 25th of May, 1843, to the wife of a joiner, who had been pregnant for the fourth time, and who was now in the ninth month of her pregnancy. She had fallen into such a deep sleep, that she could not be awakened by shaking, dragging, nor by stimulants, such as spirit of hartshorn, ether, &c. On the third day of this unnatural sleep, she was unconsciously delivered of a living healthy boy. When the author visited her on the fourth day, she had awoke just a short time before, unaware of having been confined, and perfectly astonished at the occurrence.—(Dr. Shultze in *Pr. Ver. Zeitung*.)

Urethrus not closed after Birth.—A child, of one year, had an opening in the navel, out of which urine streamed whenever the child cried. The opening had the form of the orificium urethræ, the navel was thickened, and protruding, and resembled the glans penis. As long as the child remained quiet, the urine ran from the urethra, but when ever the abdomen was pressed or distended, the urine streamed from the opening at the navel. The child, otherwise, is perfectly well.—(Dr. Meyer of Kempen in *Casper's Wochenschrift*.)

Noma without Fatal Issue.—In a child, of two years old, but a fortnight recovered from violent nervous fever with affection of the brain, for the cure of which about twenty grains of calomel had been administered, a livid swelling of the upper lip appeared. This ulcerated and displayed black slummy borders; the incisor teeth fell out. Wood-vinegar was employed externally, quinquina and mineral acids internally. But the phagædenic

ulceration made such a rapid progress, that three-fourths of the upper lip and a piece of the right cheek, as large as a dollar, were changed into a black, leather-like foetid mass. The author drew a line with concentrated sulphuric acid, by means of a wooden staff, round the circumference of the destroyed part, cauterised it effectually, and covered the part with a paste made of saffron and sulphuric acid. He thus succeeded in stopping the work of destruction; a distinct line of demarcation was soon formed, and the parts transformed into a tough glutinous mass soon separated. Only a small part of the left side of the upper lip remained; a piece of the right side of the nose was lost with the septum, and a part of the right cheek. Both apophyses alveolares separated from the upper jaw and were removed as a crumbling mass. The child recovered very soon, but presents a horrible appearance.

Melancholia Periodica.—A girl, of 18 years, of lax constitution and scrophulous habits, who had always suffered from alvine obstruction, suddenly became very melancholy, restless, lost her appetite and flesh, and fell at last into a state of apathy, in which she lay on the sofa with open eyes. Her pulse was weak and infrequent, respiration weak, appetite poor, and her tongue was clean. The secretion of the bowels and skin seem entirely suspended, that of the kidneys remains normal. She only eats and drinks, when food is offered her. She has every appearance of an idiot. This state lasts from four to six weeks, then unhealthy fecal matter is evacuated, which gradually becomes more and more natural; the other functions begin to improve, the patient becomes lively and talkative, even to excess, and feels great inclination to physical love. After six or eight weeks this state passes away, and that of apparent paralysis ensues, till it is again relieved by the reappearance of the healthy state, which has been just described.—(Dr. Wachsmuth in *Preuss. Ver. Zeitung*.)

GERMAN CHEMICAL SCIENCE.

Prepared for the 'Medical Times' by Dr. JAMES SHERIDAN MUSPRATT, Fellow of the Chemical Society, and Translator of "Plattner on the Blowpipe."

Dr. Augustus William Hoffmann, in investigating the products resulting from the destructive distillation of coal gas naphtha, pursued, in particular, one of the bodies (cyanol), which, after numerous analyses and a most careful study of its marked reactions, he proved to be identical with Zinin's benzidam* and Fritzsche's anilene† (crystalline.) Such a conclusion is of the greatest value to science, for I am perfectly convinced that before long, the present host of organic substances will be greatly decreased if chemists only undertake such laborious and interesting researches as those which have marked Dr. Hoffmann's career. Pure cyanol, which is best obtained from the oxalate, is a clear and limpid fluid, possessing an oily consistence, an agreeable highly-vinous odour, and an aromatic and somewhat caustic taste. It is not solidified at a temperature of 4° Fahr., nor does it lose anything of its mobility. It is highly volatile, as the stain which it imparts to paper vanishes almost immediately. Its boiling point is 359°·6 F., and its sp. gr. 1·020 at 68° F. A most singular fact relating to cyanol purified by distillation only, is, that it is rather lighter than water. It is copiously dissolved by ether, alcohol, pyroxylic spirit,

* Zinin obtained benzidam by treating an alcoholic solution of nitro-benzide with sulphuret of ammonia. A large quantity of sulphur is precipitated in this process:—

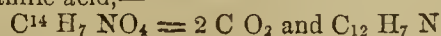


Nitro-benzide.



Benzidam.

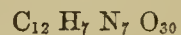
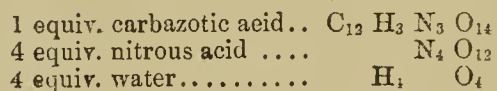
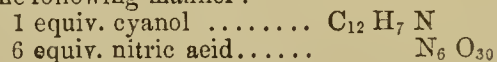
† Anilene is procured by the dry distillation of anthranilic acid,—



Anthranilic acid.

Anilene.

acetone, aldehyde, sulphuret of carbon, and the fatty and essential oils. Water takes it up in very small quantities, and on the other hand cyanol imbibes water. It has not, as yet, been ascertained whether cyanol forms a hydrate corresponding to the annexed formula: $\text{C}_{12}\text{H}_7\text{N} + \text{aq. (?)}$ Ether withdraws the oil from an aqueous solution, whereas, caustic or carbonated alkalies, chloride of sodium, and sulphate of magnesia separate it. Cyanol, in the cold, and heated, dissolves sulphur; when warm, in very large quantities; upon cooling, the sulphur reappears in the form of shining prisms. This base powerfully disperses and refracts light; from the measurement of the smallest divergence, its index of refraction was ascertained to be 1·577°. Cyanol does not conduct electricity.—Its physiological properties may interest the medical portion of your readers. Runge found that leeches were killed when immersed in an aqueous solution of cyanol, and Dr. Hoffmann, who injected into the throat of a rabbit about 0·5 grm. of the oil, found that in a few minutes violent spasms ensued, accompanied by slow and difficult breathing. The pupils were dilated, and on the floor being shaken, the animal was seized with violent spasmodic contractions, similar to those produced in narcotized frogs. Twenty-four hours afterwards it had not regained its normal condition, the breathing being still slow, and the mucous membrane of the mouth highly inflamed. The blood of the killed animal which the doctor examined presented nothing remarkable. The principal reactions of cyanol are very characteristic. Its presence may be infallibly detected by fluid hypochlorite of lime (bleaching powder). If a drop of this liquid be added to a solution containing a mere trace of cyanol, a beautiful violet colour immediately appears; this is also generally the case when the anhydrous base is mixed with a few drops of fuming nitric acid; but if the mixture be slightly heated, this blue colour is converted into yellow, accompanied by an extraordinary evolution of heat, amounting sometimes to an explosion. The liquid passes through every shade of colour to the most intense scarlet, and on cooling, presents reddish tabular crystals of nitrophenic acid (carbazotic acid). This anticipated decomposition, Dr. Hoffmann explains in the following manner:—



The annexed are the different formulæ for the salts of cyanol; but before giving them I must remark that none of the hitherto examined organic bases afford crystallizable compounds with such facility as cyanol, and it was from this property that it first obtained the name "crystalline."

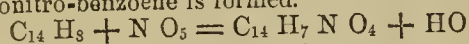
Constitution of the Salts of this Base.

- 1.—Sulphate of cyanol, $\text{SO}_3 + \text{C}_{12}\text{H}_7\text{N} + \text{HO}$
- 2.—Oxalate of cyanol, $\text{C}_2\text{O}_3 + \text{C}_{12}\text{H}_7\text{N} + \text{HO}$
- 3.—Nitrate of cyanol, not analysed.
- 4.—Hydrochlorate of cyanol, $\text{cl H} + \text{C}_{12}\text{H}_7\text{N}$
- 5.—Chloride of platinum and cyanol, $\text{cl H}, \text{C}_{12}\text{H}_7\text{N} + \text{cl}_2\text{Pt}$
- 6.—Chloride of mercury and cyanol, $\text{C}_{12}\text{H}_7\text{N} + 3(\text{Hg. cl}), \&c. \&c. \&c.$

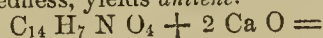
On glancing at the last salt it will be seen that it differs from the preceding, as the cyanol is in direct combination with the corrosive sublimate.

Carbolic acid, a body which was also found in the distillate from coal gas naphtha, has been regarded by Laurent as the hydrate of an oxygen compound of an organic radicle, which is expressed by C_{12}H_5 (Phen.) By assuming this view, according to Hoffmann, cyanol may be considered as an amide of the same radicle—cyanol = $\text{C}_{12}\text{H}_7\text{N}$, or C_{12}H_5 (phenamide). Now, when we review the preceding remarks, it will be seen that one of the most interesting substances in the whole range of organic chemistry, has been described by different chemists under the five following names.

aniline, benzidam, crystalline, cyanol, and phenamide, —a fact which future investigators ought always to keep in mind. Hoffmann, in concluding his remarks upon this base, stated, that in course of time, it would be found in the products of distillation of a still greater number of bodies. This really has been proved to be the case; for Dr. Blyth obtained it several times in his researches upon styriol, an interesting body obtained from *styrax*, a balsam which exudes from the *liquid-ambra styraciflua*, a tree growing in Mexico. The writer has also procured it, in conjunction with Dr. Hoffmann, in their investigations upon benzoëne and the oil of *Gaultheria procumbens*; e. g., when benzoëne is treated with fuming nitric acid, protonitro-benzoëne is formed.

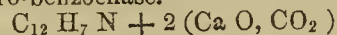


Benzoëne. Protonitro-benzoëne.
which, when passed over caustic lime, heated to incipient redness, yields aniline.



Protonitro-benzoëne.

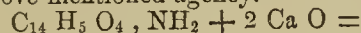
Nitro-benzoënase.



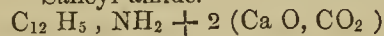
Cyanol.

Anilene.

Again, when the oil of *Gaultheria* is saturated with ammoniacal gas, salicyl-amide is produced, a substance also affording aniline on being submitted to the above-mentioned agency.

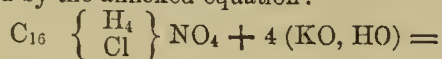


Salicyl-amide.

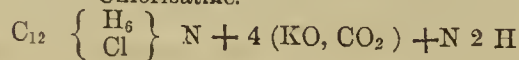


Phenamide.

Anilene has also been obtained from many other sources, as will be seen in "Liebig's Annalen" for next month. I shall now continue Dr. Hoffmann's researches upon anilene, which shew that its hydrogen may in part be replaced by chlorine and bromine. His treatise upon this subject, which has been spoken of in the highest terms by the illustrious head of the Giessen School of Chemistry, was only lately read before the *Société de Pharmacie de Paris*, and I am glad to state that its members were so much pleased with it that they gave their gold medal to the author. The *mono-chlorinated* anilene was obtained by distilling chlorisatine with potash-ley and solid hydrate of potash. An oily fluid passes over with the water, which solidifies in the recipient to a white crystalline mass. These crystals are very readily purified by ejecting them on a filter, affusing distilled water upon them, until all the ammonia (a product nearly always formed in such processes) is removed, and then re-crystallizing them from boiling alcohol. These crystals are anilene, in which one equivalent of hydrogen is replaced by chlorine. It possesses all the properties of anilene, its chemical characters, and is a base. Anilene, according to Laurent's nomenclature, is *amaphenese*, and therefore this body may be designated *amachlophenese*. Its formation is explained by the annexed equation:—

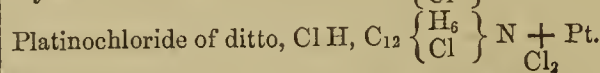
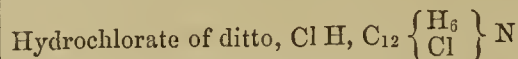
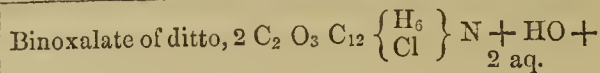


Chlorisatine.

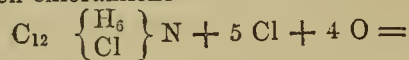


Chloranilene.

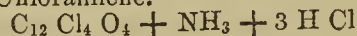
This base is exceedingly volatile, possesses an agreeable odour and a styptic taste, and is heavier than water. Its aqueous solution gives, with hypochlorite of lime, only a very slight bluish colouring, and it is distinguished from anilene by yielding, with oxalic acid, an oxalate containing two equivalents of acid. Dr. Hoffmann endeavoured, in various ways, to form a binoxalate of anilene, but was not successful. All its salts are easily obtained in a crystalline form; the following are the formulæ for the principal ones:—



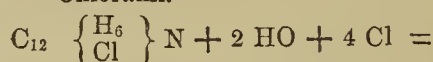
The subjoined equations shew the action at different stages of the oxygen compounds of chlorine upon chloranilene:—



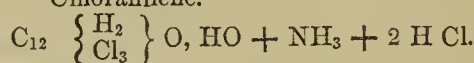
Chloranilene.



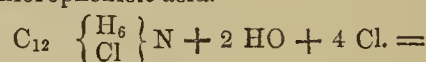
Chloranil.



Chloranilene.



Chlorophenic acid.



Chloranilene.



Chlorophenic acid.

I must remark, that the chlorophenissic and chlorophenussic acids are obtained by submitting to distillation the resinous matter mixed with the chloranil, which is procured in the first process. This matter is easily soluble in ether, and is, therefore, readily obtained by evaporation.

(To be continued.)

ON THE EUPHORBIA MACULATA.

By WILLIAM ZOLLIKOFFER, M.D.,

Corresponding Member of the Royal Medico-Botanical Society of London, &c. &c. &c.

(Read before the Royal Medico-Botanical Society of London, December 12th. 1844.)

It is with peculiar pleasure that I present the members of Royal Medico-Botanical Society of London with a knowledge of the remedial virtues, and therapeutic powers, in connection with a vegeto-chemical analysis of the *euphorbia maculata*.

Some years ago, I transmitted to the Society a paper on the medicinal virtues of the *euphorbia hypericifolia*, which was published in the first number of its Transactions; the fact of its powers being those of an astringent, in connection with a slight narcotic development, was at variance with the previously conceived opinion of botanists and writers on medical botany, that all the species belonging to the genus *euphorbia* possess acrid and irritating properties.

Willdenow, in speaking of the number of species included in this genus of plants, remarks, that—"they all abound with an acrid milk." The virtues of the *hypericifolia* have already proved the incorrectness of this pre-conceived notion; while those of the *maculata* afford an additional attestation, confirmatory of its being based upon a view that must have originated from a very limited knowledge of the curative powers of the individuals included in this family of plants. That many of the species of *euphorbia*, when taken internally, give rise to their powerful action as emetics and cathartics, and when exhibited in over doses are productive of "dangerous if not fatal prostration, with symptoms of inflamed gastro-intestinal mucous membrane," is a fact strictly in unison with the concentrated, or powerfully irritant properties they possess as acrid agents; yet, independent of this circumstance, the *hypericifolia* and *maculata* display remedial virtues, which differ very widely from this class of therapeutic remedies in the two latter possessing the combined power of an astringent and narcotic, while the former exhibit those characters which entitle them to a place within the range of a different class in the *materia medica*.

GENERIC CHARACTER. *Euphorbia*; Involucrum caliciform, eight to ten toothed, exterior alternate dentures glanduloid, or petaloid. Stamens indefinite, twelve or more, rarely less. Filaments articulated. Receptacle squamose. Female flower, solitary, stipitate, naked. Capsule three grained.—(Nuttall.) The capsules differ somewhat, being somewhat smooth, pubescent, or warty.

Specific character.—*Euphorbia maculata*, stem procumbent, spreading flat on the ground, much branched, and hairy; leaves opposite, ovate or oblong, serrulate, oblique at the base, on short petioles, smooth above, hairy and pale beneath; flowers solitary, axillary, much shorter than the leaves.—(Torrey.)

I have selected the description of the specific character of this plant, as given by Torrey, in consequence of its being more accurate than that given by other botanists.

The *euphorbia maculata* belongs to the class monœcia, and the order monadelphica, of Michx. —to the class dodecandria, and order trigynia of Linnæus; and to the natural order tricocceæ of Linnæus—*euphorbiæ* of Jussieu; and *euphorbiaceæ* of Professor Lindley of the University of London.

This plant is known by the common appellation of "creeping milk meek." This name it has doubtlessly received from the circumstance of its lying flat upon the ground. It delights in sandy fields, and by the road-side. The stem is from four to twelve inches in length, and the flowers appear fasciculate—these are somewhat different on the same stalk, being sometimes white, while others are of a lilac colour. The leaves are not unfrequently spotted, or stained somewhat of a brown tinge. Every part of the plant on being broken emits a milky exudation, which very readily becomes concrete upon exposure to the atmosphere—it is in this lactiferous substance that the slightly narcotic properties of the plant reside while in the same substance in the acrid, and irritating species of *euphorbia*, their dangerous, emetic, and cathartic powers are to be found.

In its sensible properties the *maculata* is strikingly analogous to the *hypericifolia*, being only partially sweetish, and considerably astringent to the taste.

Solubility.—Diluted alcohol and water both extract the active properties of the plant; but the latter is the best menstruum for the solution of its elements of activity, and for its exhibition.

Chemical Composition.—I digested portions of the dried plant in sulphuric ether and alcohol for seven days. Upon the addition of alcohol to the ethereal solution, a whitish precipitate was the result; and, by adding distilled water to the alcoholic preparations pearly turbidness in the mixture took place. The decoction with distilled water threw down a copious precipitate on the addition of a solution of gelatine; and a dark blue colour was imparted to a portion of the same decoction by throwing into it a few drops of solution of the sulphate of iron. From these results, it may be readily inferred, that it contains caoutchouc resin, tannin, and gallic acid.

Incompatible Substances.—When the infusion and decoctions of this plant are exhibited with a view to the production of their remedial effects, the metallic salts into which iron enters as the basis, and the solutions of animal gelatine should be avoided, from their direct tendency to change the peculiar principle upon which its astringent properties depend, by producing chemical combinations with the tannin and gallic acid, and thereby rendering it inert: and are consequently not only chemically but medicinally incompatible from the alterations these substances effect upon the principle upon which the curative powers of the plant depend.

Medical Use.—The slightly narcotic property connected with the astringent power every part of the *euphorbia maculata* possesses, renders it an invaluable remedy in tranquillizing and controlling the morbid concitions of the intestinal canal, which give rise to *chelera infantum*, diarrhæa, and dysentery. The native combination of these properties renders it a far more available remedial agent in the successful treatment of certain mala-

ies, than one can possibly procure by combining remedies of the same kind. I have used it very extensively and successfully in the secondary stages of all these affections, and invite the attention of the members of the profession to its use, from a confident assurance based upon my own experience of its virtues, that it will be found very apply adapted to the treatment of these diseases; and more so than kino and catechu and other remedies of an analogous character. In diarrhæa and dysentery I use the following prescription, viz.

R. Euphorbiæ maculatæ foliorum exsiccata. ʒj. Infunde in octario aquæ bullientis; capiat cochleare magna duo unaquaque hora donec morbis symptomata cessaverunt. The dose of the above preparation is intended for an adult. In cholera infantum I generally give a teaspoonful every two or three hours, until the violence of the symptoms seem to abate; then I gradually decrease the quantity, or exhibit it less frequently. I wish it to be distinctly observed, that it is only in the secondary stages of cholera infantum, diarrhæa and dysentery that I have used this plant; from a firm conviction that no good effects could be anticipated from its administration in the primary stages of diseased action, but perhaps, injurious consequences, by aggravating the morbid condition of the parts, and thereby greatly increasing the violence of the disease. To render the infusion more palatable to children, although fortunately for so valuable a remedy it is not at all unpleasant to the taste, I generally direct the quantity given to be combined with the same proportion of water sweetened with loaf sugar.

In morbid discharges arising from constitutional debility, or relaxation of the affected parts, the infusion and decoction of the euphorbia maculata, will be found peculiarly beneficial. To derive benefit from their exhibition, they should be given only three times in twenty-four hours, and continued for eight or ten days or longer if necessary.

EXTRAORDINARY SIZE OF A HEALTHY FÆTUS AND PLACENTA.

(To the Editor of the "Medical Times.")

SIR,—Thursday, February 20th, 1845, at three o'clock A. M., I was called to Mrs. Abby, at Cabington near Leamington; in labour of her fifth child. She was of plethoric habit, and large make. On examination I found the os uteri partially dilated, the pains becoming severe: in the course of two hours the head became firmly fixed in the cavity of the pelvis, and continued in this state till nine o'clock, when symptoms of a serious character showing themselves, I was about using the forceps, when to my agreeable surprise I perceived the head lightly advance, and the pains becoming more expulsive: the head was with difficulty extricated. Owing to the breadth of the shoulders it required four or five strong pains before the child was born. On placing my hand over the uterine region I found the uterus dilated, and on applying pressure, a rush of blood issued from the vagina, which led me to give a dose of ergot. This, with pressure over the uterus had the desired effect, the uterus soon began to contract and expel the placenta into the vagina where I extracted it. The enormous size of the child excited my curiosity sufficiently to induce me to make the following observations. On placing it in the scales, I found it to have attained the unusual weight of 13 pounds 6 ounces; and it measured 23 inches and a half in length.

The placenta I likewise took the trouble to weigh: this I found to be of the enormous weight of 3 pounds and a quarter. An extraordinary weight, as it presented every appearance of being in a healthy state, not showing any signs either of congestion or inflammation.

The interesting part of this case is the immense size of both fœtus and placenta; and though several cases are on record of children far exceeding at birth the weight of the present, yet this latter gives an instance of the variableness in weight which the mature fœtus occasionally presents, and like-

wise shows the fallacy of trusting merely to weight, in determining the age of the fœtus.

I have the honor to be,

Your obedient servant,

R. E. B. HORNEBLOW, M.D.,
M.R.C.S.L.

Leamington, Feb. 25th, 1845.

THE MEDICAL TIMES.

SATURDAY, MARCH 8, 1845.

Certus enim promisit Apollo
Ambiguum tellure nova Salamina futuram.
Horat. Lib. 1 Od. 7

Sir James Graham's altered Bill threatens to be the obituary announcement of his public life. He is a fallen man, or we read the stars amiss. It is impossible to rise from the perusal of the scheme we give in another page, without the conviction that he is not the statesman that can gallantly weather the perils of a stormy session, or out-live in anything like decent trim, the buffetings of a tempestuous unpopularity. With all the qualities that provoke, he has none of the faculties that defy hostility. The liberality with which he makes enemies, he evinces in arming them, or rather, in disarming himself; and with all his amazing tolerance of defeats (and who knows less when he is beaten?) a point must come when even Graham will give up. Each of his Parliamentary measures, however promising its origin, is in its progress but a fresh hostage for the final event. When was there a more inviting, or nobler subject for a strong Government's intervention than Medical Reform? Everything demanded it: everything encouraged it: success vast and shining was its certain reward if statesmanlike: science and humanity knew of no higher or dearer interest: nearly thirty thousand gentlemen anxiously, day after day, craved the important adjustment; and if we would understand with what tolerance and support, with what fair-play and kindness they were prepared to meet any one yielding to the call, we have only to point to the reception they almost universally extended to the measure (all undigested and incomplete as it was) submitted to them in 1844. Spurning, with few and inconsiderable exceptions, each incitement to courses marked by faction or personal hostility, they met the Government in the frankest, the most conciliatory, the most encouraging of manners. They avowed—with us and as generously—their Gratitude that something was at length proposed, they stretched justice to kindness in their expressions of approval for what they could find of good; and in a spirit of moderation that cannot be too highly praised, suggested the improvements common consent had pronounced necessary to complete a good system of Medical Government. Here, therefore, was a rare opportunity for a Crown Minister. The Profession stood before him first, capable of bearing the best of laws; secondly, worthy, from any grateful law-giver, of receiving them; and while he on the one hand wielded a power all potent, if just, science and humanity, on the other, invoked him with a thousand voices to its fullest and speediest exercise.

We expected much; who would not? We were sure that, in the interval between the suggestion of his first scheme and the deliberate proposal of his second, the crude, flimsy, and contradictory scheme of the small-minded Brodie, would receive from the genius of one wielding the destinies of a great empire, an amplitude and excellence worthy of his position. A gentlemanly, tolerant, and kindly bearing, on the part of the Profession was all that was needed for Graham's doing what to him

would be an immortal honour, to us a priceless service. Our brethren, by degrees, learned, as we have said, to share our opinions—the splendid opportunity was conceded him in profuse abundance, and now turning for the rich result, we find for our reward and solace, this meagre—this patchwork—this poverty-stricken measure of 1845! Never surely did Minister so disappoint expectation, or so mis-use fate. Fools that we were, we expected statesmanship, and he has hardly shewn us common sense. As Napoleon is personated by Tom Thumb, the great minister turns out at last to be but the little Brodie!

Of course we are not blind to the few good points of the Bill. The Registration clause is useful. The liberty to practice throughout the empire is a matter of common sense. The Council of Health, properly constituted, may do much good. The two first improvements should on no account be lost; the third, if guaranteed an improvement in its practical details, and protected from the Council influence which all are now deploring, should be carefully struggled for. But how small a part do these form of the great national question they propose to settle!

The Council of Health (considered as a tribunal for the profession) concerns but the next generation. The corporate rulers who now in units regulate the student's education will, for the future, do so aggregately. What is that to the twenty-five thousand gentlemen already educated? The existing race wish their successors well educated, and will be heartily glad to find that a rival practitioner for the future can approach the one who has not reached his twenty-first year; but does Sir James Graham, or his prompter, fancy that the non-agreement of the College Councils, one curriculum, the non-concentration in one register of names diffused or lost in several, a doubtful liberty of practice to migratory practitioners—does he fancy, that these—evils as they undoubtedly are—have been the sole main causes of the turmoil and excitement which have agitated so ceaselessly the profession for the last few years? A few days will teach him his mistake. The great source of the discontent has lain in an evil which the present bill does not touch: or if it do, touches for serious deterioration. We have many thousands of apothecaries—licentiates of the Hall; and what in that still legal corporation, is their standing? *is to be their standing?* They have undergone "according to law," a silly, mischievous, unscientific apprenticeship of many years, and have received nothing for it but a legal privilege they should have been given without it. *That apprenticeship is continued to future medical practitioners (the Licentiates of Surgery and Medicine) by the altered Bill!* They have undergone, too, studies equal, in many cases, to those that have made physicians in more distinguished corporations—and they are but "apothecaries," and under the Bill will be but "licentiates," and licentiates of no College! They have paid money for their despised diplomas, and can know nothing of its expenditure. In one word, they belong to a body of which they are ashamed,—but which treats them as if they were too unimportant to be consulted in any one concern of the institution they have supported. This source of discontent has existed, does exist, and the New Bill leaves it as it found it!

So of the College of Surgeons. The members have complained of an oligarchy mutually electing each other to high office, holding *despotic* and *secret* rule, excluding from the race of distinction the mass of surgeons, whom they had recently

cast down from their purchased, their hard-earned, their rightful place, to a lower one, to give a factitious, Act of Parliament, consequence to themselves. Ten or twelve thousand surgeons were in arms, furious at the wrong and insult: Medical Reform had concentrated most of its importance in the question of a remedy. Well? The New Bill (the amended one) legalizes the general degradation,—nay, dares the additional innovation of robbing them of their very title of “surgeons.” “Surgeons” by the enactment of the altered Bill is confined to “Fellows;” the very designation is made to imply that the Fellows are and the Members are not Surgeons. By it the Member (Licentiate of Surgery) will stand to the Fellow (the Surgeon), as an Apothecary (Licentiate of Medicine) to the Physician! Such is the contumelious fall deliberately proposed by Sir J. Graham and Sir Benj. Brodie for ten thousand gentlemen, who by studies and money payments had acquired a legal right to be the equals of those they now have placed so far above them. The Bill, as it now stands, turns out to be but a Parliamentary confirmation of the Charter, devised in even a worse spirit!

This at the first *coup d'œil*, reveals an enormous mischief to the General Practitioner. But the worst results will only be developed by time. The general lowering of the body to a level, a little, it at all, above the druggists, is fore-doomed, if this monstrous arrangement be legalised. The pure Surgeons now omitted as well as the most respectable Surgical Practitioners, will be bound, in self-defence, to enrol themselves in the order of Fellows; and the mass remaining at the bottom will take their general character not, as now, from their ornaments, but their deformities, from the dregs rather than the liquor on the surface. The *mauvais sujet*, with open shop, here to-day, and there to-morrow, the man of neither gentlemanly breeding nor social respectability, will be the type of the now degraded caste.

The new members given to the body by the new Bill will not certainly mend the matter. They will have no double examinations, no double diplomas. A single certificate, from a nameless tribunal, sitting may be in a tavern, and composed of deputies, it detached for the purpose by the Hall and Colleges, will proclaim him it is true a Licentiate of Medicine and Surgery, but a Licentiate too low down in the scale of science to have any actual connection with the time honoured Medical and Surgical Colleges of the country. It is clear that such a position will be voluntarily assumed by no man of gentlemanly feeling or high mental endowment, and it may be safely foretold that the educational attainments of those less nice, will confer no very great distinction on the class they are allowed to join. If more than a remove above the quacks, we shall take the liberty of being surprised.

Two facts connected with this subject, are very significant of what is coming. They tell the status intended for the Profession. The first is, that every body in practice before 1815, and every Licentiate of the Hall will be *ipso facto* by the bill, a Licentiate of Medicine and Surgery. The body of General Practitioners it may be fairly presumed will thus for the future be regarded less as surgeons than Apothecaries. The second fact is not less important. At the time when the Council of the London College of Surgeons, expected, that practically, there would soon again be but one grade in the College, the Examining Board were so stringent in their requirements for the candidates, that a large proportion, about fifty per cent were night after night rejected. The moment they resolved to confide themselves to Sir James

Graham, and continue as bad as before, they were taught how the Bill would lie, and what followed? Candidates could hardly manage by any ingenuity in error to get themselves rejected. The door of the future Licentiateship is open to all who think proper to knock at it.

We entreat that these facts will not be forgotten; that they will be pondered over at leisure—their connection with the Bill's perpetuation of direct and immediate Surgical injustice, not being forgotten. Properly used they will urge the whole body of the Profession to save one of its most important divisions from the blow that is so inaptly, we may add, so ignorantly, aimed at it. The Home Secretary, we are fully disposed to think, may not want the best intentions; but he is cruelly mislead, r has been guilty of an act of incapacity, that makes his ministerial holding a very perilous matter for insurance. How often have we warned him against Brodie? The man will be his ruin!

“Pugnandum tanquam contra morbum, sic contra senectutem. Habenda ratio valetudinis; utendum exercitationibus modicis; tantum cibi et potionis adhibendum, ut reficiantur vires, non opprimantur. Nec vero corpori solo subveniendum est, sed menti atque animo multo magis. Nam hec quoque, nisi tanquam lumini oleum instilles, extinguuntur senectute, et corpora quidem defatigatione et exercitatione ingravescent: animi autem exercitando levantur.”—Cicero de Senectute.

In this paper we shall treat of the errors which medical students commit in their modes of living and study, and illustrate them by facts and anecdotes:—in a subsequent communication, we shall endeavour to show how, and with what happy effects, those errors may be avoided.

The first and most fatal mistake which a student makes on his arrival at Edinburgh is in the choice of lodgings. His great object is to get as near the University as he can, and he is as solicitous about the locality of his domicile, as though his mind were to be fed only in the direct ratio of his proximity to the seat of learning. Attracted by the hundreds of boards announcing “lodgings,” in the dirty, narrow, ill-ventilated streets which environ the College, he sets about an exploration of the vacant rooms, rising flat above flat to the summit of those huge houses which are peculiar to the “old town.” The cheapness of these lodgings varies with their altitude from the ground floor, and very properly so, for to grope your way from the bottom to the top of the filthy stone staircases leading to habitations on either side, is no trifling task. It involves no little sacrifice of time, strength and shoe-leather, to perform the tread-mill-labour of mounting a hundred and fifty stone steps a dozen times a day. And when it is remembered that the effluvium for which these open stairs are famous—for they are seldom washed or swept, and furnish plenty of proofs of their devotion to Cloacina—necessarily rises, and concentrates itself at the summit, it will be almost a matter of surprise that humanity can exist in such places. Still it does live, or rather *die* there, for its outward evidences better betoken a state of vegetation than of animal activity and vigour. The only part of the body that appears at all to thrive is the legs, and so certainly does the increased exercise of them entail a corresponding increase of dimensions, that you may almost pronounce by the thickness and firmness of these organs, what distance intervenes between their owner's residence and the street floor. If this amount of exercise were taken in *fresh* instead of in *foul* air, there would be little necessity of our discoursing upon other means of preserving health.

Well then, with the object of losing as little time as possible in journeying to his class-rooms, the student, whom we are taking as a sample of

scores we have known, fixes himself within the most limited distance of the University. No matter how dark or dismal, or dirty his habitation, he can see his *alma mater* through his bed curtains, and almost fancies he can scent the dissecting room, and hear the eloquence of the professors, whilst sitting at his own table! But however these things may be, he has calculated how many minutes, occupied in going to, and returning from lecture, will be daily snatched from his hours of study, he has reduced them to the smallest number, and he is satisfied Fatal delusion!—in this very provision for an uninterrupted and seemingly secure pursuit after distinction, lurks the grand mischief that will prevent it.

Fairly ensconced in his dwelling, the student has only one object and impulse: they dictate to his actions, and determine his fate. Should he survive unhurt, the struggle, it will be his own fault if his after-life be not one that will command and compass eminence and envy. But the odds are so many against him, that the risk is unworthy the chances of recompense. He commences the duties of the session at the very top of his speed and strength. Early and late he is at his work. No rest, no relaxation, all, all is labour. He reads or dissects until the sound of the College bell warns him, that his class is assembling, and he hurries to it at a life-and-death pace. There is an anecdote related of a celebrated Irish horseman, who, whether in the course or in the field, was famous for never having thrown his animal, and when asked the reason of his good luck, was always heard to reply, that he never gave his horse time to fall. The same may be said of the student in the recognition of his acquaintance. He is always too busy, and abstracted to see them. In the street, his downward look and hasty walk denote the fever his mind is in, and excuse him for passing you without a glance or a nod; and in the class-rooms, his ponderous well-filled note-book will apologize for the absence of the common courtesies of friendship. He has no time for anything but his studies. His food is swallowed with as little mastication as a boa constrictor's, and this indispensable process of feeding is not allowed to interfere with the usual routine of study. The book is as constant an occupant of the meal-table as the saltcellar. We remember a man in whom the passion for reading amounted almost to mania; he could not bear a moment's interruption to his favourite pursuit. To give himself greater facilities, he cut up the “Dublin Dissector,” and stuck its leaves all over the walls of his room, and then nothing interfered with him—dressing and undressing, washing, shaving, eating and drinking, all came alike, for he could still continue his reading. He learnt the book as intimately as his alphabet, he could repeat its contents from beginning to end, and almost back again—but a *practical question* rejected him at the College!

The student generally allows himself as much sleep as the bare necessities of nature compel him to. He never thinks of apportioning a certain number of hours, and at a certain season, to rest in, but he yields to the sensations of fatigue when he can resist them no longer. The hours proper to slumber he generally contrives to cheat himself of; and it is cheating himself, for his constitution pays the penalty of the crime. The deed is not a harmless one, like that of the idiot, in whom the propensity to theft was so strong, that he would gratify it by robbing one of his pockets to supply the other; it is a *bona fide*

injustice which nature never allows to pass unpunished. It is a grand delusion to suppose that the sleep which forces itself in the day-time upon a tired mind and body will compensate for watchfulness at midnight. It is a dangerous experiment to reverse the seasons which are proper to rest and toil. True, poets and scholars, and even philosophers, have chosen night-time as the occasion of labour, but the choice has been an absurd one at the best, and has generally had its origin in morbid imagining or affectation. And it is because great men have committed this folly, that amongst little men it has had so many imitators; just as we find modern infidelity based upon an ambitious pretension to the scepticism of antiquity. Ask the student what are his periods of study and he will be sure to tell you that he reads at night! To rise in a morning to his work, would be to place himself on a level with a milkmaid or a schoolboy—but there is something very imposing in the talk of “midnight oil,” drained to the last drop, “weary watching,” “hectic flush,” and “fevered brow!” If you reason with him on the impropriety of such continued labour, he speaks plaintively of Kirk White and a tombstone. Tell him his pulse is too quick, and he says he fears so, but he really cannot at present find time to recruit. He is as proud of a pale face as if it were handsome, and if you discourse against it, he will remind you that Byron’s face was bloodless; and that the Athenian youths ate cumin seeds to blanch their cheeks, so classical a proof was this pallor, of intelligence and intense study. Tell him he is killing himself, and he answers you with—

Sic transit gloria mundi.

But he does not mean it. As we said, there is a good deal of affectation at the bottom of all this; he may pretend to be a martyr, but he does not wish to be one. Whilst mischief is only in prospect, he disdains to fear it; when it becomes irremediable, he ceases to boast, and repents him of his folly. We would have these silly vanities laughed out of fashion.

Various schemes are resorted to by students to keep themselves awake all night. Some will drink largely of strong coffee or tea. When taken mildly, and in moderate quantities, these beverages are not hurtful, but they are sometimes used to a most pernicious extent. They chiefly affect the nervous centres, and produce paralysis, dyspepsia, or amaurosis. We knew a very intelligent and promising man who was weaned from a systematic and sensible mode of living and study, by hearing a most interesting account of the quantity of coffee De Quincey, the opium eater, could drink, and the impulse which was thereby communicated to his intellectual powers. The temptation to do likewise was so rapturous, that it could not be resisted. He drank coffee by the quart, slept half his usual hours, and fancied himself inspired. For a month he advanced prodigiously in his studies, and promised to surpass every expectation that had been formed of him. But he awoke one morning with inflammation in his eyes; this laid him up for a fortnight, and was then succeeded by double vision, which lasted nearly two months longer. He recovered by desisting from reading for a time, and abandoning the use of coffee altogether, but he not only lost the honours he was aiming at, but totally incapacitated himself for any future contest. Another man of delicate constitution, who had been accustomed for some years, and with great advantages, to take a pint of porter with his dinner, was persuaded to drink strong coffee in its place. Previously to changing his

beverage he was in good health, and divided well his time between study, sleep and exercise. The coffee however, indisposed him for his afternoon’s walk, for his mind became so at liberty and clear that he could not deny it the privilege of additional exercise at night too, he was not drowsy as aforetime, sleep seldom tempted him, and morning was often far advanced before he retired to bed. He made correspondent progress in his studies, and informed his gladdened friends that he had hit upon a new mode of living which would render his academical career a triumph. A few weeks before his examination he was seized with spasms of the stomach, and a distressing nausea, which forbade him swallowing a particle of food. The gastric debility and disturbance were shortly followed by sympathetic nervous fever under which the poor fellow laboured for months. He was thrown back a year in his studies, and most probably rendered an invalid for life. We have known similar mischief and misfortune to follow the indiscreet use of strong green tea. It is a temporary reviver of the physical and intellectual powers, but it ultimately depresses both. It is lauded as a “cup that cheers but not inebriates:” true, it cannot intoxicate, but it can slowly poison and without the warning of inebriety. It has been conjectured that the spinal debility, terminating in disease, of the celebrated Robert Hall was chiefly occasioned by the excessive quantity of tea which he drank. Of the gastric debility induced by it, much must doubtless be attributed to the amount of warm liquid, simply, which is swallowed; but its influence upon the nervous system speaks of a more hidden and dangerous source of action. People will confess that it makes them nervous, but they cannot be persuaded to believe that such a state indicates an expenditure of constitutional power. They refer to its influence in keeping off sleep as a proof that it invigorates them and supplies the place of sleep, it does so with just as much service as chewing of tobacco satisfies the cravings of an empty stomach and a starving frame.

The *Medical Times*, has from time to time, carefully placed before the public the more prominent evils, interfering with the sanatory condition of this metropolis, and we have felt the pleasure of a discharged duty after each exposition of the pestilential nuisances each hour arresting the metropolitan’s attention, and creating his disgust. Some time ago, we sought to make the inhabitants of London sensible of one of the greatest abominations ever perpetrated in defiance of the laws that regulate human society. Our statements, then denied by interested parties, have been placed beyond doubt by the proceedings at the Court of Clerkenwell, on Monday, February 24th. The inhabitants of the Parish of Clerkenwell, appeared before the sitting magistrate in the above court, to complain of *certain practices*, which they alleged were of hourly occurrence in the Spa-fields burying-ground. The managers with a disgusting atrocity, difficult to conceive, are said to exhume the newly dead from the holes, some eight feet, wherein they fester—one to the foot—to consign them to the fiery furnace of a bone-house, whence their corruption (not purged by fire) takes wing, to scatter itself in the lungs of the highly favoured neighbours.

Reuben Room, who had been grave digger in the yard six years, said he had repeatedly dug up dead bodies interred but a short time, to make

room for others. Had frequently dug up 20 corpses to make a grave of seven feet deep. The bodies that had been interred eight feet under ground were a few days after rooted up and just covered by the surface. The stench was intolerable.

John Walters, engine-keeper of the Clerkenwell parish, stated that he went to extinguish a fire in the bone house on two occasions, and did not obtain admission without the greatest difficulty. The last time was on the 2d. of last month.

Catherine Murphy had seen the grave diggers throw up parts of a human body, and then chop it up with their shovels: saw one of them seize the upper part of a corpse by the hair of the head. On this occasion she could not refrain from crying out, “Oh, you villain, to treat the corpse so!” upon which he threw it into the grave again, and threw the clay on it. The smell was horrible.

The toleration of this monster nuisance, this “propaganda” for the diffusion of pestilence, a single hour after it has been made known to those in office, and who possess the power of removing it, will now be really a sanction of a general process of poisoning slower, it may be, but scarcely less sure than that employed by the Marchioness of Brinvilliers.

Every feeling of respect for the memory of the dead, that have been subjected to such sacrilegious outrage, every thought of considerate attention to the feelings and well-being of the living, alike imperatively call for the immediate erasure from British social life of what, in the eyes of all men, must be owned to be a foul blot upon its pages.

On the introduction of this subject to the House of Commons, by Sir P. Egerton, the other evening, Sir James Graham stated, that he had never heard of the existence of the Spa-fields nuisance. For, then, that worthy baronet observed, it would appear that Mr. Walker had written, and the Health of Town’s Parliamentary Committee reported in vain. Of course Sir James claimed that considerable difficulties must be encountered before these abominations could be prevented. The excuse is statesmanlike in modern days, but to us not very satisfactory. Mercenary people, investing their money in grave yards, can be taught we should think, without difficulty, that they have no vested, no inviolate interest in offences against decency, public health, and morality. A calculation of the capabilities of a grave yard in the way of decent interment is no “difficult” matter, and while we have so vast, if not so skilled, an organization of police, it surely can be no Herculean feat to enforce that beyond the limit of capability no grave yard trafficker should pass. Adopt this rule, and you spare us the nuisance of dead men undermining the metropolitan soil with their putrescent elements up to within an inch of the surface, injuring the water that percolates through their tenements to our wells and pumps, and diffusing for ever and ceaselessly a foul miasma in an atmosphere already too polluted. Make it not worth the while of these carrion speculators to give their city land for interments, and a world of horrible and sickening abominations will be spared us.

ABDOMINAL TUMOUR.—Dr. Snow has described a case where an abdominal tumour was formed an inspection of faces and the colon, together with a number of pieces of tough white substance, supposed to be pieces of the ligament nuche of a sheep.

THE GOVERNMENT PLAN OF MEDICAL REFORM.

[Printed Verbatim.]

A Bill for regulating the Profession of Physic and Surgery.

[Note.—The words printed in *italics* are proposed to be inserted in the committee.]

Preamble.—Whereas the laws now in force concerning the profession of physic and surgery require to be amended; be it enacted, by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present parliament assembled, and by the authority of the same, that an Act passed in the third year of the reign of King Henry the Eighth, intituled, "An Act for the appointment of physicians and surgeons;"* and also another Act passed in the fifth year of the same reign, intituled, "An Act concerning surgeons to be discharged of quests and other things;"† and also two Acts passed in the thirty-second year of the same reign, respectively intituled, "For physicians and their privilege,"‡ and "For barbers and surgeons;"§ and also another Act passed in the session of parliament holden in the thirty-third and thirty-fourth years of the same reign, intituled, "A Bill that persons being no common surgeons may minister medicines, notwithstanding the Statute;"|| and another Act passed in the first year of the reign of Queen Mary, intituled, "An Act touching the corporation of physicians in London;"¶ and also an Act passed in the session of parliament holden in the sixth and seventh years of the reign of King William the Third, intituled, "An Act for exempting apothecaries from serving the offices of constable, scavenger and other parish and ward offices, and from serving on juries;" and so much of every other Act as continues the last-recited Act, and so much of an Act passed in the eighteenth year of the reign of King George the Second, intituled, "An Act for making the surgeons of London and the barbers of London two separate and distinct corporations, as does not relate to the separation of the said corporations, or to the master, governors and commonalty of the mystery of barbers of London;"** and also so much of an Act passed in the sixth year of the reign of King George the Fourth, intituled, "An Act for consolidating and amending the laws relative to juries, and juries;"† as enacts, that all members and licentiates of the Royal College of Physicians in London, actually practising; all surgeons being members of the Royal Colleges of Surgeons in London, Edinburgh or Dublin, and actually practising; all apothecaries certified by the Court of Examiners of the Apothecaries' Company, and actually practising, shall be freed and exempt from being returned, and from serving upon any juries or inquests whatsoever, and shall not be inserted in the lists to be prepared by virtue of that Act, shall be repealed.

2. **Council of Health.**—And be it enacted that a council shall be established, which shall be styled, "The Council of Health;" and that one of her Majesty's principal secretaries of state shall be a member of the said council, in right of his office as secretary of state; and that the Regius Professor of Medicine in the University of Oxford, the Regius Professor of Physic in the University of Cambridge, the Regius Professor of Physic in the University of Dublin, the Regius Professor of Clinical Surgery in the University of Edinburgh, and the Regius Professor of Surgery in the University of Glasgow, shall be members of the said council in right of their several professorships;

and that the other members of the said council shall be *one* physician, and *one* surgeon, to be chosen by the Colleges of Physicians and Surgeons of England respectively; *one* physician and *one* surgeon to be chosen by the Colleges of Physicians and Surgeons of Scotland respectively; *one* physician and *one* surgeon to be chosen by the Colleges of Physicians and Surgeons of Ireland respectively; and *six* other persons whom her Majesty with the advice of her privy council, shall deem fit to be members of the said council.

3. **Appointment of first Council.**—Provided always, and be it enacted, that it shall be lawful for her Majesty, with the advice of her privy council, to appoint all the members of the first Council of Health, other than those who will be members thereof in right of their several offices, and that at the end of the *third* and each of the *two* next following years after the first constitution of the said council, *one* physician and *one* surgeon of those first appointed on behalf of the said several Colleges of Physicians and Surgeons, shall go out of office, in such order as her Majesty, with the advice of her Privy Council, shall direct.

4. **Tenure of Office by Official Members and Nominees of the Crown.**—And be it enacted, that those members of the said council who are members in right of their several offices shall continue to be members thereof so long as they hold the same offices respectively, and no longer, and the *six* members of the said council, appointed as aforesaid by her Majesty with the advice of her privy council, shall continue to be members of the said council during her Majesty's pleasure, and upon every vacancy among the last-mentioned members of the said council, and their successors, it shall be lawful for her Majesty, with the advice of her privy council, to appoint another fit person to be a member of the said council during her Majesty's pleasure.

5. **Tenure of Office by Members chosen by the Colleges.**—And be it enacted, that upon every vacancy among the members of the said council appointed on behalf of the said several Colleges of Physicians or Surgeons, and their successors, the Royal College of Physicians or Surgeons of England, Scotland or Ireland, as the case may be, shall choose another physician or surgeon, as the case may be, to supply such vacancy, subject to the approval of her Majesty; and every member of the council so chosen shall be entitled to be a member of the said council for *three* years, and shall then go out of office, but may forthwith be re-chosen, subject to her Majesty's approval: provided always, that no president, vice-president or examiner of any of the said colleges be qualified to act as a member of the said council while holding such office in any of the said colleges.

6. **Details of Election to be settled by the several Colleges.**—And be it enacted, that the manner of choosing the last-mentioned members of the said council shall be determined in each case by orders or bye-laws to be made from time to time by the said several colleges, subject to the approval of the council of health.

7. **Substitutes in cases of extraordinary Vacancies.**—And be it enacted, that it shall be lawful for any member of the said council appointed by her Majesty, or chosen by any of the said colleges, at any time to resign his office, or for her Majesty at any time, with the advice of her privy council, to dismiss any such member of the said council for notorious misbehaviour or unfitness, and upon any vacancy in the said council by death, resignation, or dismissal, another member of the council shall be appointed in the same manner and for the same term as the member by whom the vacancy shall have been made.

8. **Secretaries, Clerks, and Messengers.**—And be it enacted, that it shall be lawful for the said council, with the approval of one of her Majesty's principal secretaries of state, to appoint a principal

secretary for the said council, and also local secretaries for Scotland and Ireland, and so many clerks and messengers, as the said secretary of state shall deem necessary, and also with the like approval to remove at their pleasure any of the said secretaries, clerks and messengers, and appoint others in their room.

9. **Salaries and Expenses.**—And be it enacted, that there shall be paid to the members of the said council, and to the said secretaries, clerks and messengers, such salaries as shall be from time to time allowed by the lord high treasurer or the commissioners of her Majesty's treasury, who may also allow such reasonable travelling expenses which may have been incurred by any member of the said council, or any secretary, clerk, or messenger in the performance of his duties under this Act, and such other reasonable expenses of putting this Act into execution, as the said lord high treasurer or the commissioners of her Majesty's treasury shall think fit:

10. **President.**—And be it enacted, that the said secretary of state shall be president of the said council, and shall be empowered from time to time to nominate one of the members of the council to be vice-president of the council, and to act as president in his absence, and at every meeting of the council in the absence of the president and vice-president, some other member to be chosen by the council from the members then present shall be empowered to act as president.

11. **Time and place of Meeting.**—And be it enacted, that the said council shall be holden in such places and at such times as the secretary of state from time to time shall appoint; and that all acts of the council shall be decided by the votes of the majority of the members present at any meeting, the whole number not being less than *seven*; and at all such meetings the president for the time being shall have a second or casting vote in all cases of equality of votes.

12. **Minutes of Proceedings.**—And be it enacted, that minutes of the proceedings at all meetings of the council shall be drawn up and fairly entered in books, to be kept for that purpose; and such minutes shall be at all reasonable times open to the inspection of any person or committee appointed for the purpose of inspecting them by any of the said universities or colleges.

13. **Register to be kept and published.**—And be it enacted, that a register shall be kept and published from time to time, under the direction of the said council, of all persons who shall have been examined, and shall have received, and shall exhibit before the said council letters testimonial as hereinafter mentioned of their qualification to practise as a physician, or as a surgeon, or as a licentiate in medicine and surgery; for which registry the council shall be entitled to have from the person requiring to be registered, a fee of *five pounds* in the case of a physician or surgeon, and a fee of *two pounds* in the case of a licentiate; which fees shall be applied toward defraying the expenses of this Act; and every person whose name shall be so registered, who shall be desirous that his name shall be continued in the published register, shall in the month of *January* in every year send to the said council his name and place of abode, with the date of his testimonials, and the council shall verify the returns so made to them by comparison with the register kept by them, and shall forthwith, without any further fee, cause the names of all persons duly registered and so returned to them to be published in alphabetical order in their several classes, with their several places of abode, and dates of their testimonials.

14. **Licentiates in Medicine and Surgery.**—And be it enacted, that no person, except those whose registration special provision is hereinafter made, shall be entitled to be registered by the council as a licentiate in medicine and surgery, unless he shall have attained the age of *twenty*—

* Repeal of Statutes, 3 Hen. 8, c. 11. + 5 Hen. 8, c. 6.
† 32 Hen. 8, c. 42. ‡ 32 Hen. 8, c. 42. § 34 & 35 Hen. 8
c. 8. || 1 Mary, Sess. 2, c. 9. ¶ 6 & 7 W. 3, c. 4.

* 18 Geo. 2, c. 15. † 6 Geo. 4, c. 50, s. 2.

years, and shall have been examined by the colleges hereinafter named; (that is to say) if in England, examined by the Royal College of Physicians of England, assisted by the Court of Examiners of the Society of Apothecaries of the city of London, and also examined by the Royal College of Surgeons of England; and if in Scotland, examined by the Royal Colleges of Physicians and Surgeons of Scotland; and if in Ireland, examined by the Royal Colleges of Physicians and Surgeons in Ireland; and in every case shall have received letters testimonial from each of the bodies by which he shall have been examined, of his being duly qualified to practise as such licentiate.

15. *Surgeons.*—And be it enacted, that no person, except those for whose registration special provision is hereinafter made, shall be entitled to be registered by the council as a surgeon unless he shall have passed the examination required of licentiates in medicine and surgery, and shall have attained the age of *twenty-five* years, and shall have been again examined by one of the Royal Colleges of Surgeons of England, Scotland, or Ireland, after such proof as shall be satisfactory to the examining college, that he has applied himself to surgical studies during at least *five* years; and shall have received letters testimonial from the examining college of his being duly qualified to practise as a surgeon.

16. *Physicians.*—And be it enacted, that no person, except those for whose registration special provision is hereinafter made, shall be entitled to be registered by the council as a physician unless he shall have attained the age of *twenty-six* years, and shall have graduated as a bachelor or doctor of medicine in some university of the United Kingdom of Great Britain and Ireland, or subject to the restriction hereinafter contained, in some foreign university, or shall have graduated as a master of arts in the university of Oxford or Cambridge, and shall have afterwards received a license to practise medicine, after due examination, from the same university, and shall also, in each of the foregoing cases, have been examined by one of the Royal Colleges of Physicians of England, Scotland, or Ireland, after such proof as shall be satisfactory to the examining college that he has applied himself to medical studies during at least *five* years, or unless he shall have attained the age of *forty* years, and shall have been examined by the Royal College of Physicians of England; and in each case shall have received letters testimonial from the examining college of his being duly qualified to practise as a physician; and no person shall be entitled to be received for examination for the purpose of being so registered as a physician upon a foreign degree in medicine, unless the Royal College of Physicians of England, Scotland, or Ireland, shall give him a special certificate, to be laid before and approved by the council of health, that they have made inquiry into the manner in which such degree was conferred, and have ascertained that it has been granted after due examination and upon satisfactory certificates of previous study, including residence and study at the seat of one or more universities, during at least *three* years, one of them at least being at the university by which the degree is granted.

17. *Examinations in Midwifery.*—And be it enacted, that the council shall make regulations for instituting special examinations in midwifery of all persons who shall offer themselves for such examination, and for regulating the fees to be taken for such special examination, and for distinguishing in the register those registered persons who shall have passed such special examination satisfactorily.

18. *Court of Examiners of Apothecaries' Company.* (55. Geo. 3, c. 94).—And be it enacted, that so much of an Act passed in the fifty-fifth year

of the reign of King George the Third, intituled, "An Act for better regulating the Practice of Apothecaries throughout England and Wales," as provides that no person to be by the master, wardens and assistants of the Society of Apothecaries of the city of London for the time being chosen and appointed a member of the court of examiners shall be deemed to be properly qualified, unless he shall be a member of the Society of Apothecaries aforesaid of not less than ten years' standing, shall be repealed; and that after the *passing of this Act* no person shall be qualified to be so chosen and appointed a member of the court of examiners, unless he shall have been a licentiate in medicine and surgery registered for not less than *ten years* under this Act, or, until there shall be persons so qualified, an apothecary in actual practice for not less than *ten years*.

19. *Physicians and Surgeons to belong to a Royal College of the country in which they practise.*—And be it enacted, that every person registered after examination as a physician or surgeon under this Act, shall be admitted as an associate of the Royal College of Physicians, or as a fellow of the Royal College of Surgeons from which he shall have received his letters testimonial as physician or surgeon; and every such physician and surgeon who shall afterwards remove from that part of the United Kingdom in which he obtained his letters testimonial, shall be required, if he shall practise as a physician or surgeon in any other part of the said United Kingdom, to enrol himself as an associate of the Royal College of Physicians, or as a fellow of the Royal College of Surgeons, of that part of the United Kingdom to which he shall so remove, for the purpose of practising there, according to the nature of his testimonials, and in each case shall be entitled to be so admitted without further examination, and on payment of the like fees of admission, and on complying with the same conditions as are required of other persons who have passed their examinations and paid their examination fees for the purpose of being admitted associates or fellows of the said colleges respectively; and for this purpose the fees of examination and fees of admission shall be kept distinct by each of the said colleges.

20. *Licentiates to belong to the Royal College of Surgeons of the country in which they practise.*—And be it enacted, that every person registered after examination as a licentiate in medicine and surgery, shall be admitted as a member or licentiate of the Royal College of Surgeons in that part of the United Kingdom in which he shall have received his letters testimonial; and every such person who shall afterwards remove into any other part of the United Kingdom, and shall practise there as a licentiate in medicine and surgery, shall be required to enrol himself as a member or licentiate of the Royal College of Surgeons of that part of the United Kingdom to which he shall so remove, and in each case shall be entitled to be so admitted and enrolled without further examination, and on payment of the like fees of admission, and on complying with the same conditions as are required of other persons who have passed their examinations and paid their examination-fees for the purpose of being admitted members or licentiates of the said colleges respectively; and for this purpose the fees of examination and fees of admission shall be kept distinct by each of the said colleges.

21. *Qualifications and Fees.*—And be it enacted, that the said several colleges shall, from time to time, when required by the said council, prepare and lay before the said council a scheme or schemes of the course of study and particulars of the examination to be gone through by all persons applying to such colleges respectively for letters testimonial as physician, or surgeon, or licentiate, and of the fees to be taken for examina-

tion and admission into the said several colleges respectively; and the said council shall be empowered to make from time to time such changes in any of the schemes so laid before them as to the said council shall seem expedient; and the said council shall endeavour to procure, as far as is practicable and convenient, that the qualifications and fees for the said testimonials shall be uniform, according to the nature thereof, throughout the said United Kingdom.

22. *Restriction on Medical Degrees.*—And be it enacted, that after the *passing of this Act* it shall not be lawful for any University of the said United Kingdom to confer any degree in the faculty of medicine, except by special license of the Council of Health, upon any person, unless he shall have been matriculated in the same university, and shall have duly attended the courses of public lectures prescribed by the same university to students in medicine at the seat of the same University, or in the case of the University of London, at some medical school recognised by and in connexion with that University, during at least *two* years after he shall have been matriculated in the same University, and shall have been examined at some time before the grant of such degree by the proper examiners of such University, and found by them to possess competent skill and knowledge of medicine, and of the sciences connected therewith, and of the English and Latin languages at least; and every diploma or certificate of a medical degree granted by any such university after the *passing of this Act*, shall set forth distinctly the time which has elapsed since the matriculation of the person to whom such degree shall be granted, and the time during which, and place where he shall have actually studied as aforesaid, and the fact that he has passed such examination as last aforesaid.

23. *Inceptors in the Faculty of Medicine at the age of Twenty-two.*—And be it enacted, that it shall be lawful for any university of the said United Kingdom to grant the degree of inceptor in the faculty of medicine, subject to the restrictions hereinbefore contained concerning medical degrees, to any student of the same university who shall have attained the age of *twenty-two* years; and that every such graduate in the faculty of medicine, being also examined and having received letters testimonial of his qualification in the manner hereinbefore prescribed in the case of licentiates in medicine and surgery, shall be entitled to be registered by the said council of health as an Inceptor in the faculty of medicine, with all the rights, privileges, and liabilities of a licentiate in medicine and surgery, subject to such general regulations as shall be made by the said council concerning the registry of licentiates.

24. *Restriction on Bye-laws.*—And be it enacted, that no bye-law to be made by any of the Royal Colleges of Physicians or Surgeons of England, Scotland, or Ireland respectively, shall be of any force until a copy thereof, sealed with the seal of the same college, shall have been laid before and approved by the said council of health.

25. *Registry of Students.*—And be it enacted, that it shall be lawful for the said council to make regulations for ensuring that in every city and town possessing a medical or surgical school, an annual register shall be kept of all students of the several medical and surgical schools, whether connected with any university, royal college, hospital, or other public medical or surgical institution in that city or town, and to authorise the taking of a fee for such registration, not being more in each case than *two shillings and sixpence* for each annual registration, and for requiring all such fees to be remitted to the secretary of the said council, and returns to be made to them of the registration of all such students, in such manner and form as the council shall think fit, and all such fees shall be applied toward the expenses of this Act; and

no medical or surgical student shall be admitted to examination by any of the said colleges without certificates of his having been duly registered conformably to such regulations.

26. *Constitution of the Examining Bodies.*—And be it enacted, that where by this Act it is provided that the concurrence of more than one body is required for qualifying any person to be registered by the said council, the examination before such bodies for his degree or letters testimonial, or both, may be conducted either separately before examiners appointed by each body, or before a joint board of examiners, to be appointed by each body separately or conjointly, and the examiners shall be appointed in such number, manner, and form, and shall hold their examinations at such times and places as such bodies shall, with the approval of the said council, agree from time to time among themselves, or as shall be determined by the said council with respect to any point in which they shall not be agreed; and when there shall be separate examinations on different subjects before examiners appointed by each body, the subjects and fees of examination shall be divided among such bodies as they shall from time to time agree among themselves, or as the said council from time to time shall determine with respect to any point on which they shall not be agreed.

27. *For securing Efficiency of Examination.*—And be it enacted, that the said council may from time to time require returns to be made in such form, and including such particulars, as they shall think fit, respecting the examinations to be conducted as aforesaid, and it shall be lawful for any secretary of the said council, deputed by the council for that purpose, or for any member of the said council, being in either case a physician, surgeon or licentiate in medicine and surgery, to be present at any of the said examinations; and if the council shall be of opinion that the regulations prescribed by them for the examination and grant of letters testimonial as physician, surgeon or licentiate, have been infringed, evaded or neglected by any of the said examining bodies, it shall be lawful for the said council to refuse to register upon the testimonials of the body so in default, until the same be amended to the satisfaction of the said council.

28. *None but those registered to be appointed to Public Situations.*—And be it enacted, that, subject to the reservations hereinafter contained, no person after the *passing of this Act*, who is not registered by the said council, shall be appointed to any medical or surgical office in any hospital, prison, infirmary, dispensary, school, workhouse, or other public institution in the said United Kingdom, or for the relief of the poor, or to any medical or surgical office in her Majesty's army or navy, or in the service of the Honourable East India Company, except in India, natives of India duly qualified according to such laws or regulations as are or shall be made in that behalf by the governor-general in council; and wherever by law it is provided that any act shall be done by a physician or surgeon, or medical or surgical practitioner, by whatever name or title called, such provision shall be construed, after the *passing of this Act*, to mean a person qualified to be appointed to such medical or surgical offices as aforesaid; and the Council of Health shall be empowered from time to time to make regulations for specifying what institutions are to be considered public institutions within the meaning of this Act, and which form of testimonial shall be necessary to qualify the holder thereof for every such situation.

29. *Privileges of Persons registered.*—And be it enacted, that all persons who shall be registered by the said council as physicians, surgeons or licentiates, shall be exempt while registered and practising as such from being summoned or serving on all juries and inquests whatsoever, and from

serving all corporate, parochial, ward, hundred and township offices, but, subject to the reservations hereinafter contained, no person shall be entitled to such exemption, on the ground of his practising medicine or surgery, who is not so registered, nor shall the certificate of any such unregistered person, given after the *passing of this Act*, be received as the certificate of a medical or surgical practitioner in any court of law, or in any case in which by law the certificate of a medical or surgical practitioner is required.

30. *Registered Physicians may practise throughout the United Kingdom.*—(14 & 15 Hen. 8, c. 5.)—And be it enacted, that all persons who shall be registered by the said council as physicians shall be entitled without other license than such registry to exercise or practise physic throughout the United Kingdom of Great Britain and Ireland, and in all other parts of her Majesty's dominions, and shall be deemed qualified to be appointed physicians to any public or local institution therein, and shall be exempt from being sued or liable to any penalty under the provisions of an Act passed in the session of parliament holden in the fourteenth and fifteenth years of King Henry the Eighth, intituled, "The privileges and authority of physicians in London," or under the provisions of any other Act of Parliament passed or Charter granted before the *passing of this Act* in restraint of the practice of physic or the appointment of physicians in any place or to any office without such examination, certificate, or license as is mentioned in such Act or Charter respectively.

31. *Registered Licentiates not liable to the penalties of 55 Geo. 3, c. 194, or restrictive Acts.*—And be it enacted, that all persons who shall be registered as licentiates by the said council shall be entitled to demand and take reasonable fees for medical and surgical advice and attendance, and for medicines prescribed or administered by them to their patients throughout Great Britain and Ireland, and in all other parts of her Majesty's dominions, without other license than such registry, and shall be exempt from being sued or liable to any penalty under the provisions of an Act passed in the fifty-fifth year of the reign of King George the Third, intituled, "An Act for better regulating the practice of apothecaries throughout England and Wales," or under the provision of any other Act of Parliament passed or Charter granted before the *passing of this Act*, in restraint of the practice of medicine or surgery, or the appointment of medical or surgical practitioners, in any place or to any office, without examination, certificate, or license as is mentioned in such Act or Charter respectively.

32. *Persons now practising may be registered.*—Provided always, and be it enacted, that it shall be lawful for the said council, on the application of any person legally practising or entitled to practise at the *end of this Session of Parliament*, as a physician or surgeon in any part of the United Kingdom of Great Britain and Ireland, or as an apothecary in England, to cause the name of such person to be registered as a physician, surgeon or licentiate in medicine and surgery, as the case may be, on production to the said council of his diploma, license or certificate, or such other proof as shall be satisfactory to the said council, that at the *end of this Session of Parliament* he was so practising or legally entitled to practise, and on payment of a fee of *twenty shillings* in the case of fellows or associates of the said colleges of physicians and surgeons respectively, and of *five shillings* in every other case, which fees shall be applied toward the expenses of this Act; and during *twelve* calendar months after the *passing of this Act*, every person legally practising or entitled to practise at the *end of this Session of Parliament* as a physician or surgeon in any part of the said United Kingdom, or as an apothecary in England, and

during the period of *two* years after the *passing of this Act*, every person legally practising or entitled to practise at the *end of this Session of Parliament* as a physician, surgeon or apothecary in any of her Majesty's colonies and foreign possessions, although not registered, shall continue to enjoy the same privileges and exemptions, and be qualified to be appointed to the same offices, and to practise in the same manner as if this Act had not been passed, and no further or otherwise, unless registered under this Act.

33. *Penalty on unqualified Persons for practising in Public Offices.*—And be it enacted, that every person appointed after the *passing of this Act* to any medical or surgical office for which he is not qualified according to the provisions of this Act and the regulations of the said council, and who shall wilfully and knowingly act or practise in such office, shall for every such offence forfeit the sum of *twenty pounds*, to be recovered by action of debt or information to be brought in any of her Majesty's Courts of Record at Westminster, or in the Court of Exchequer in Scotland, or in Dublin, within *six calendar months* next after the commission of the offence, in the name of her Majesty's Attorney-General in England or Ireland, or of the Lord Advocate in Scotland.

34. *None but registered Persons or those already practising may recover charges.*—And be it enacted, that after the *passing of this Act*, no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance or operation, or for any medicine prescribed or administered by him, unless he shall prove upon the trial either that he is registered under this Act, or that before the *passing of this Act* he was legally practising or entitled to practise and entitled to recover such charge in the capacity in which he claims such charge.

35. *Penalty for false pretences of qualification.*—And be it enacted, that every unregistered person who shall wilfully and falsely pretend to be, or take or use the name or title of physician, doctor, bachelor or inceptor, in the faculty of medicine, or surgeon, or licentiate in medicine and surgery, or apothecary, or any name, title or addition implying that he is registered under this Act, or recognised by law as a medical or surgical practitioner, shall be deemed guilty of misdemeanor in England and Ireland, and in Scotland of a crime and offence, and being convicted thereof, shall be punished by fine or imprisonment, or both, as the court before which he shall be convicted shall award.

36. *Persons guilty of felony or fraud to be struck off the Register.*—And be it enacted, that if any registered physician, surgeon or licentiate shall be convicted in England or Ireland of any felony, or in Scotland of any crime or offence inferring infamy or the punishment of death or transportation; or if it shall be found by the judgment of any competent court that any such physician, surgeon or licentiate shall have procured the registry of his name by any fraud or false pretence, or that any such physician, surgeon or licentiate has wilfully and knowingly given any false certificate in any case in which by law the certificate of a physician or surgeon is required, it shall be lawful for the Council of Health, on production before them of a copy or extract of the conviction or judgment of the court duly certified, under the hand of the proper officer of the court, to cause the name of such physician, surgeon or licentiate to be erased from the register; and every person whose name shall have been so erased after such conviction or judgment as aforesaid, shall thereby forfeit and lose all the privileges of a registered physician, surgeon or licentiate, as the case may be, and shall not be entitled to have his name again inserted in that or any subsequent register, and shall also cease to be, and shall be disqualified from becoming, a fellow, associate,

member or licentiate, as the case may be, of any royal college of physicians or surgeons in any part of the said United Kingdom.

37. *Saving the privileges of Oxford and Cambridge.*—Provided always, and be it enacted, that nothing in this Act shall deprive either of the Universities of Oxford and Cambridge of the unrestricted right of granting degrees in medicine or physic and diplomas thereof, and licenses to practise medicine or physic in conformity with their respective charters, statutes, laws, and regulations; and that the said degrees, diplomas and licenses shall severally confer the same rights and privileges as heretofore, and that the persons to whom they shall be granted, shall in every part of England, not within the city of London, or within seven miles of the said city, possess all the privileges of physicians registered under this Act; and that nothing in this Act shall alter or give any power of altering the charters, statutes, laws, and regulations of the said Universities of Oxford and Cambridge, or either of them.

38. *Act may be amended or repealed.*—And be it enacted, that this Act may be amended or repealed by any Act to be passed in this session of parliament.

A BILL FOR ENABLING HER MAJESTY TO GRANT NEW CHARTERS TO CERTAIN COLLEGES OF PHYSICIANS AND SURGEONS.

Preamble.—Whereas the commonalty or fellowship of the Royal College of Physicians in London was incorporated by letters patent, bearing date, at Westminster, the twenty-third day of September, in the tenth year of the reign of King Henry the Eighth, which letters patent were confirmed by an Act passed in the Session of Parliament holden in the fourteenth and fifteenth years of the reign of King Henry the Eighth, intituled, "The privileges and authority of physicians in London:" and by the said Act certain other powers and privileges were granted to the said commonalty: and whereas since the making of the said letters patent divers other charters have been granted to the said college: and whereas it is expedient that certain changes should be made in the constitution of the said college, and particularly that new regulations should be made for the election of the officers of the said college, and that the present number of the members of the said college should be increased: and whereas the said college is willing that such changes should be made; but the same cannot be effected without the authority of parliament; be it enacted, by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present parliament assembled, and by the authority of the same,—

1. *New Charter may be granted to the Royal College of Physicians in London.*—That it shall be lawful for the said corporation to surrender all the charters which have been heretofore granted to them other than the said charter of King Henry the Eighth, and also so much and such part of the last-mentioned charter as shall be in anywise inconsistent with or repugnant to any new charter to be granted to them by her Majesty; and that it shall be lawful for her Majesty to grant, and for the said corporation to accept, any new charter or charters, for making from time to time such alterations as shall be deemed by her Majesty expedient in the name and constitution of the said corporation; and further, that when and so soon as the said Corporation, under their common seal, shall have accepted any such new charter, the acceptance thereof shall operate as a surrender of all the other charters heretofore granted to the said corporation, except the said charter of King Henry the Eighth, and as a repeal of the said Act of Par-

liament, so far as the same shall be inconsistent with or repugnant to such new charter.

2. *New Charter may be granted to the Royal College of Physicians of Edinburgh.*—And whereas the society and Royal College of Physicians of Edinburgh was incorporated by letters patent, bearing date, at Whitehall, the twenty-ninth day of November, in the thirty-third year of the reign of King Charles the Second, which letters patent, together with all acts, decrees and sentences of his Majesty's privy council, or of the lords of session, or of any other judicatory within that kingdom, conceived in favour of the Royal College of Physicians for making the patent above written and privileges therein contained effectual, were confirmed by an Act of the Scottish Parliament passed in the year one thousand six hundred and eighty-five: and whereas it is expedient that certain changes should be made in the constitution of the said college, and the said college is willing that such changes should be made, but the same cannot be effected without the authority of parliament; be it enacted, that it shall be lawful for the said college to surrender their said charter, and that it shall be lawful for her Majesty to grant, and for the said college to accept, any new charter or charters, for making from time to time such alterations as shall be deemed by her Majesty expedient in the name and constitution of the said college; and further, that when and as soon as the said college, under their common seal, shall have accepted any such new charter, the acceptance thereof shall operate as a repeal of the said Act of the Scottish Parliament, and as a revocation of the said charter of King Charles the Second, so far as the same shall be inconsistent with or repugnant to such new charter.

3. *New Charter may be granted to the Royal College of Surgeons at Edinburgh.*—And whereas by the municipal constitution of the city of Edinburgh, the surgeons' or chirurgeons' craft forms one of the fourteen incorporated trades of that city, and the members or fellows of the said craft are entitled to elect a deacon of craft to represent them in the conveyery of the said city: and whereas it is expedient that the connexion of the surgeons with the incorporated trades, and the conveyery and municipal corporation of the city, should cease; be it enacted, that if her Majesty shall be pleased to grant a new charter to the Royal College of Surgeons at Edinburgh, wherein it shall be granted that there shall no longer be a surgeons' or a chirurgeons' craft, forming one of the incorporated trades of the city of Edinburgh, then upon the grant and acceptance of the said charter to and by the said royal college, the incorporated trades of the said city shall consist of thirteen only, and it shall not be lawful for the surgeons or chirurgeons to elect a deacon of craft, or to be represented in any way in the conveyery, or to have any voice in the election of deacon convener, but the deacons of the remaining thirteen incorporated trades only shall compose the conveyery, and shall elect the deacon convener, and shall exercise the powers now in use to be exercised by the deacons of the fourteen incorporated trades; and all municipal privileges belonging to and now enjoyed by the members of the surgeons' or chirurgeons' craft, as one of the incorporated trades of the city, shall cease, and no person shall thenceforward be entitled to any such privileges by reason of his being or becoming a member or fellow of the body or Royal College of Surgeons of Edinburgh: provided always, that nothing herein contained shall be taken to deprive the Royal College of Surgeons of Edinburgh of any other corporate rights now enjoyed by them in virtue of any charters, statutes, letters patent or usage not expressly repealed or altered by this Act, or by any charter granted in pursuance of this Act, or of the right of presentation to the Trades' Maiden Hospital now

enjoyed by them, or to relieve the said Royal College of Surgeons from any obligation connected with such right of presentation.

4. *New Charter may be granted to King's and Queen's College of Physicians in Ireland.* (40 Geo. 3, c. 84, I.)—And whereas an Act was passed by the Parliament of Ireland, in the fortieth year of the reign of King George the Third, intituled, "An Act for repealing an Act passed in the twenty-fifth year of his present Majesty, intituled, 'An Act for establishing a complete school of physic in this kingdom;' and also for repealing an Act passed in the thirty-first year of his present Majesty, intituled, 'An Act to explain and amend an Act for establishing a complete school of physic in this kingdom;' and also, for extending and enlarging the powers of the president and fellows of the King and Queen's College of Physicians, and establishing a complete school of physic in this kingdom," whereby certain provisions were made which were deemed expedient and necessary for the good government of the last-mentioned college: and whereas it is expedient that certain changes should be made in the constitution of the said college: and whereas the said college is willing that such changes should be made, but the same cannot be effected without the authority of parliament; be it enacted, that it shall be lawful for her Majesty to grant, and for the said corporation to accept, any new charter or charters for making from time to time such alterations as shall be deemed by her Majesty expedient, in the name and constitution of the said college, and that the grant and acceptance of any such new charter shall operate as a repeal of the said Act of King George the Third, so far as the same shall be inconsistent with or repugnant to such new charter.

5. *Charters not to contain new restriction in the practice of Physic or Surgery.*—Provided always, and be it enacted, that nothing herein contained shall extend to authorise her Majesty to create any new restriction in the practice of physic or surgery, or to grant to any of the said corporations or colleges any new powers or privileges, contrary to the common law of the land; and that no such new charter shall in anywise prejudice, affect or annul any of the existing statutes or by-laws of the corporation or college to which the same shall be granted, further than shall be necessary for giving full effect to the alterations which shall be intended to be effected by such new charter and by this Act in the constitution of such corporation or college.

And be it enacted, that this Act may be amended or repealed by any Act to be passed in this session of parliament.

TO DETECT FIBRES OF COTTON IN LINEN TEXTURES, BY DR. R. BÖTTGER.—The author proposes to employ a solution of equal parts of caustic potash and water, which produces, at a boiling temperature, a very decided yellow colouring of the linen fibre, while the cotton remains nearly colourless, or, at the furthest, so slightly yellow that the two may readily be distinguished by the naked eye without the least chance of deception. The examination is effected in the following manner:—About a square inch of the linen under examination is placed in the mixture of equal parts of potash and water, which has been raised to a violent state of ebullition, left two minutes in it, then removed with a glass rod from the silver or porcelain crucible, pressed gently, without previously washing it in water, between a double layer of white bibulous paper, and then from six to ten fibres gradually detached from the web and warp edges. It will be seen immediately which fibres are cotton and which linen; the former being white, or of a pale yellow, while the latter have acquired a dark yellow colour. The test in question can of course not be applied to coloured textures.—*Liebig's Annalen.*

THE NEW TARIFF AND MEDICAL MEN.

The Government scheme of finance, if carried, will relieve altogether the following articles from all duties hitherto charged on their importation. Our readers may learn the amount of duties now levied, by reference to the drug list published in another number.

Alkanet Root	Gentian
Almonds, Bitter	Ginseng
Aloes	Gum, Animi
Alum	“ Arabic
“ Roch	“ Assafœtida
Amber, rough	“ Ammoniacum
Ambergris	“ Benjamin
Amboyna Wood	“ Copal
Angelica	“ Euphorbium
Annatto	“ Guaiacum
“ Roll	“ Kino
Antimony, Ore of	“ Lac Dye
“ Crude	“ Mastic
“ Regulus of	“ Seed Lac
Argol	“ Senegal
Aristolochia	“ Shellac
Arsenic	“ Storax
Ashes, Pearl and Pot	“ Tragacanth
“ Soap, Weed, and	“ unenumerated
Wood	Hellebore
“ unenumerated	Indigo
Asphaltum or Bitumen	Iron, Chromate of
Judaicum	Jalap
Balsam, Canada	Lapis Calaminaris
“ Capivi	Lard
“ Peru	Lavender Flowers
“ Tolu	Lcad, Red
“ Balm of Gilcad	“ White
and unenumerated	“ Chromate of
Balsams	Leaves of Roses
Barilla	Leeches
Bark, Extract of	Lignum Vitæ
“ Cascarilla	Litharge
“ Peruvian	Logwood
“ of other sorts not	Madder
for tanning or dyeing	Madder Root
Berries, Bay	Mahogany
“ Juniper	Manganese, Ore of
“ unenumerated,	Manna
commonly made use	Minerals and Fossils,
of for chemical pur-	unenumerated
poses	Moss, Lichen Islandicus
Bladders	“ other than Rock or
Bones of Cattle and	Iceland Moss
other Animals, and of	Musk
Fish (except Whale	Myrrh
Fins,) whether burnt	Nitre—Cubic Nitre
or not, or as Animal	Nuts, Kernels of Wal-
Charcoal	nuts, and of Peach
Borax refined	Stones, and of Nuts
Borax or Tincal, unre-	or Kernels thereof,
fined	unenumerated, com-
Boracic Acid	monly used for ex-
Brazil Wood	pressing Oil there-
Braziletto Wood	from
Brimstone, refined in	Oil, Animal Oil
Rolls	“ Castor
Brimstone, in Flour	“ Cocoa Nut
Camomile Flowers	“ of Olives, except in
Camphor, unrefined	Ships of the two Si-
Canella Alba	cilies
Caoutchouc	“ Palm
Cardamoms	“ Rock
Cassia Buds	“ Lard Oil
“ Fistula	“ unenumerated
Castor	“ Train, Blubber,
China Root	Spermaceti Oil, and
Cinnabaris Nativa	Head Matter, the pro-
Civet	duce of Fish, or crea-
Cochineal	tures living in the sea,
“ Dust	caught by the crews
“ Granilla	of British Vessels, and
Colocynth	imported direct from
Columbo Root	the Fishery or from
Copperas, Blue	any British Possession
“ Green	in a British Vessel
“ White	“ Seed Oils, viz.:
Cubebs	“ Hempseed
Cream of Tartar	“ Linseed
Drugs, unenumerated	“ Rapeseed
Galls	“ Walnut
Gamboge	“ Seed Cake

Oil, Seed Oil, unenu-	Senna
merated	Shumach
Olibanum	Skins, Kid, dressed and
Orpiment	died or coloured
Orris Root	“ Lamb, tanned or
Pink Root	tawed
Pitch	“ Lamb, dyed or co-
“ Burgundy	loured
Platina and Ore of Pla-	Dressed in Oil:
tina	“ Goat, tanned, taw-
Pomegranates, Peel of	ed, or in any way
Prussiate of Potash	dressed
Quicksilver	“ Lamb in the Wool
Radix Contrayervæ	“ Sheep tanned or
“ Enulæ Campanæ	tawed
“ Eringii	Specimens of Minerals,
“ Ipecacuanæ	Fossils, or Ores, un-
“ Rhataniæ	enumerated, exceed-
“ Senekæ	ing fourteen pounds
“ Serpentariæ, or	weight each
Snake Root	Sponge
Rhubarb	Squills, dried and not
Rosin	dried
Safflower	Stavesacre
Saffron	Talc
Salep, or Salop	Tar
Saltpetre	“ Barbadoes
Sanguis Draconis	Tartaric Acid
Sarsaparilla	Teasles
Sassafras	Teeth, Elephant's
Saunders' Red	“ Sea-Cow, Sea-
Scammony	Horse, or Sea-Morse
Seeds, Anniseed	Terra Japonica & Cutch
“ Beans, Kidney or	“ Sienna
French	“ Verde
“ Burnet	“ Umbra
“ Colchicum	Tortoise Shell, or Turtle
“ Cole	Shell, unmanufactured
“ Coriander	Tulip Wood
“ Cummin	Turmeric
“ Fenugreek	Turpentine of Venice,
“ Forest	Scio, or Cyprus
“ Garden unenum-	Turpentine, unless above
rated	the value of 15s. per
“ Grass, unenum-	cwt.
rated	Valonia
“ Lettuce	Vermilion
“ Linseed and Flax-	Walnut Wood
seed	Waters, Mineral
“ Lupines	Wax, Bees, in any de-
“ Maw	gree bleached
“ Millet	“ unbleached
“ Parsley	“ Myrtle
“ Quince	“ Vegetable
“ Rape	Weld
“ Shrub or Tree	Whale Fins, of British
“ Tares	taking, and imported
“ Worm	direct from the Fish-
“ Croton, commonly	eries, or from any Bri-
used for ex-	tish Possession in a
pressing Oil	British ship
therefrom	Woad
“ Hemp	Zaffre
“ Poppy	Zebra Wood.
“ Sesamum	
“ unenumerated,	
commonly used	
for expressing	
Oil therefrom	

Spermaceti 1 January 1849.

Sperm Oil of Foreign Fishing. Ditto

Train Oil, or Blubber of Foreign

Fishing 1 January 1847

Whales' Fins of Foreign taking

and not prohibited 1 January 1849

After the cessation of the Excise Duties on British Glass, the following Duties of Customs can be charged on the articles under mentioned, imported into the United Kingdom in lieu of the duties now chargeable thereon:—

Painted Glass or Paintings on Glass,—for every £100 of the value, £5.

All other Glass, and Glass Manufactures,—for every £100 of the value, £15.

In lieu of the Duties of Customs now chargeable on the articles under mentioned, imported into the United Kingdom, the following duties shall be charged, viz.:—

Isinglass	5s. per cwt.
Oils, Chemical, Essential, or Per-	
fumed	1s. per lb.
Refined Camphor	5s. per cwt.
Smalts	10s. per cwt.
Turpentine, above the value of	
15s. per cwt.	2s. per cwt.
Verdigris	5s. per cwt.

(To the Editor of "The Medical Times.")

SIR,—I transmit the following copy of the 'Petition of the College (Council) of Surgeons' by which they got their charter. You will at once perceive that the scantiness of its detail bears proof of the evident fact that the charter must have been concocted and agreed upon *before* the petition was presented, and that such petition was only to satisfy the forms of office, which require a petition as the foundation of every charter.

The Humble Petition of the Royal College of Surgeons in London;

Showeth,

That the said Royal College of Surgeons was incorporated and re-established under a certain charter, bearing date at Westminster, the 22d day of March, in the fortieth year of the reign of his late Majesty King George the Third, and the said college is now regulated and governed according to the provisions of such charter, and a certain other charter bearing date at Westminster, the thirteenth day of February, in the third year of the reign of his late Majesty King George the Fourth.

That the said royal college at present consists of members thereof constituted in manner provided by the said first-mentioned charter, and the governing body of the said college consists of a council of twenty-one of the members of the college, ten of them being also examiners of surgeons for the college, and one of such persons being the president, and two of them the vice-presidents of the said college.

That your Majesty's two principal sergeant-surgeons, and your Majesty's surgeon-general to the forces, provided they shall have been chosen members of the council of the said college, have at present a preference of being admitted examiners of the said college before all other persons, whenever vacancies happen in the court of examiners of the said college.

That it would further promote and encourage the study and practice of the said art and science of surgery, if a new class of members of the said college were created, to be qualified by attaining a greater age than is now necessary for members of the said college, and complying with such rules and regulations, and passing such special examination by the examiners of the said college, as the council shall from time to time direct.

That it is also desirable that the number of the members of the council of the said college should be increased, and that all future members of the council should be chosen from the class of members of the college proposed to be created, and should hold their office for a limited period instead of for life as heretofore, and that henceforth the right of electing members of the council be exercised by such class of members.

That it would also tend to promote the said art and science of surgery if certain alterations were made as regards the election, and admission, and continuance in office of future examiners of the said college, including your Majesty's future serjeant-surgeons and surgeon-general of the forces, and also if certain further powers and privileges were granted to the said college.

The said Royal College of Surgeons in London therefore humbly pray your Majesty to grant to your petitioners your Majesty's royal charter for effecting the above alterations in the present constitution of the said college, with such provisions, rights, powers, and privileges as are expressed in the draft of the proposed charter hereunto annexed.

And your Majesty's petitioners, as in duty bound, will ever pray, &c.

A base fraud has been committed upon the

profession and public in some quarter or by some party or parties. How dare any individuals to state in their prayer "That the said Royal College of Surgeons humbly prayed her Majesty to grant this charter," whilst the application for it was made without the advice, knowledge, or consent of its members, whom they describe in their petition as forming a very essential part of the college. If this is not fraud, nothing is. All the important provisions of the charter were agreed upon by some secret jobbing committee; and Sir James Graham, who, anxious to shine as a pseudo-medical reformer, unfortunately became the tool and puppet of a self-elected junto.

Surely, Sir, the farce enacted on Thursday last in the House of Commons cannot fail to open the eyes of all the members of the profession—the reciprocity of congratulations passed upon the bill between Sir James Graham and Mr. Wakley. Although the most obnoxious charter is left unscathed, against which he has so lately so vehemently protested, and although the bill, in all its essential points, is really not at all altered either for the benefit of the profession or the public. How comes it that the man who was to "dic on the floor of the House of Commons" in opposing them, has softened down to this expression in his leader of today? "The mitigations (!) in the measure now proposed by Sir James Graham indicate (?) that he is prepared to consider and weigh all the suggestions which may be offered to him by the body of general practitioners of this country. That his measure is still exceedingly imperfect, cannot be denied, and that it *s-c-a-r-c-e-l-y* approaches in its provisions the principle of a representative system of government in medical affairs (far short of the mark); but, at the same time, the new bill recognises the principle of protection in medical practice, mentions the penal provisions of the Apothecaries' Act (verbally recognises them, but renders them practically inoperative), and goes beyond that statute, in rendering any person liable to be convicted of a misdemeanour who shall, without legal sanction for so doing, assume the style and titles (although he may exercise the calling) of a qualified medical practitioner." What a weak get off! "*Montes parturient mus.*"

Regarding a subject upon which our interests and future bread are so staked, we have no right to be over nice in expressing ourselves, and there is now little or next to no time left for practical purposes. As it is with him respecting Irish affairs (see O'Connell's speech), general politics, and the poor-law, so is it in medical matters; he is evidently (but gradually and cunningly) truckling to the cabinet, changing his tone, praising the good intentions of Sir R. Peel regarding the former, and secondly, Sir James Graham, as to the latter. The whole profession will be struck with dismay and saturated with disgust at his hypocrisy; the credulity with which the profession have swallowed everything he has said, and "the patience with which they have received words instead of deeds," is past all precedent. Certain it is, we have had nothing but words, words, words—long trashy speeches—out of the House, and they have proved "cunningly devised fables;" for whilst the profession have been trying to get some semblance of justice, these *cheap words* and the *Lancet* jugglery have raised the expectations, misled the mass, and as often disappointed. The whole thing has proved "a mockery, a delusion, a snare." Does it not appear that in ratio as his conduct proves abundantly fruitful to his own pocket, so he proves himself thoroughly unfit to legislate for the profession, and unworthy of its confidence?

Might not the profession have augured the question whence the wind was to have blown, when, just antecedent to the treacherous upset of our proceedings in the Medical Reform Association a year ago, his brother, a perfectly obscure individual, reaped the kind, fostering care of the present cabinet, to the tune, I suppose, of an annual salary of about £2000 a-year; and have not the profession a right to conceive that it is only the precursor to a snug commissioner's appointment for himself under the new medical bill? There will, sure enough, be a posse of commissioners, the salary of each of whom would be ob-

tained from the registration funds of the members of the medical profession.

Will he not, then, tyrannise over those who have been the means of his elevation?—not openly—no—that's no feature in his character; he likes not fair, open fight, but for the most part by a cunning, secret system of personal persecution. He has now proved himself to the weakest-minded and most infatuated, a traitor to the profession. The whole course of affairs will prove, but prove too late, one fact. They will have learnt, by bitter experience, that they should have entrusted the cause of medical reform to leaders whose interests and prosperity in life were staked with their own upon its consummation, instead of feeding, fattening, and bloating a man up for work before 'twas done.

But what is the most ridiculous part of the business—whilst it too truly proves how the interest of the profession and the public have been sacrificed, and how the invaluable time and opportunities for insuring our rights have been twaddled away—is, that the very man who betrayed the cause of medical reform, and was the means of prostituting the association last winter to Wakley for party purposes and personal persecution, and was the cause of our practical measure having been stopped short, which we were commencing with so much energy, is now calling out against Mr. Wakley, on account of its results, whilst he himself, in connection with him, has been the cause of a double species of humbug—first, as it regards a few unlucky wights, who were made, unwittingly, their tools; and secondly, as it regards the manner in which the time, interests, and prospects of the profession have been irreparably sacrificed. The time for action has been expended in trashy speech-making—sacrificed to a mania, on the part of one or two speech-mongers, for self-display, would-be-manufactured O'Connells, whilst this vanity is too contemptible, in its spirit and principle, to last long. It will only cure itself when its mischievous effects are fully seen and developed.

Mr. Lynch states, that the "Committee of the Marylebone Association, have disgusted their profession by their arrogant assumption of unrecognised authority, as well as by their several sittings and cabals; that they more resembled the despotic Venetian Council of Ten, than an assembly of free-men, who had met for the purpose of effecting a great social movement; and that it had been marked throughout by wile, guile, and trickery of the meanest character." All this, sir, was applicable, and was most truly applied to the Medical Protection Association, when he was the principal mover in it, and when you and myself had the honour of withdrawing ourselves, and Mr. Withers that of expulsion, on the score of personal motives. The fact is, these misdeeds, (which were certainly applicable to a committee a year ago, and may be also to the Marylebone, for aught I know,) still stink in the nostrils of the profession, and will render every man with good intentions, cautious with whom he unites in his co-operations.

But to crown the whole. This very man, who has been one of the principal instrumental means of thus obstructing the fair course of medical reform by his trickery—one of the cabal of traitors—obtrudes himself to give the Hunterian Oration. Find any assurance or self-conceit to beat this if you can.

It must be insisted upon that a regular account be rendered to the public of all subscriptions and expenditure of the Medical Protection Society.

I will next week, with your permission, give a dissection of the bill.

Your obedient servant,

G. D. DERMOTT.

Charlotte-street School of Medicine, Bloomsbury-street, late Charlotte-street.

(To the Editor of "The Medical Times.")

SIR,—In your paper of Saturday, Feb. 22nd, you promise, when the excitement at present existing on the subject of medical reform is somewhat allayed, to turn a "watchful eye" to the lunatic asylums of Ireland, with a view to ameliorate their condition, by bringing them under the

notice of the *English portion* of the government. Allow me a small space for this letter by way of exordium.

Circumstances rendered it expedient in 1842, for the Lord Lieutenant and Privy Council of Ireland to revise the rules under which the government institutions were then regulated; what these circumstances were, must form the subject of a deeper and more extensive publication. The government, of course ignorant of those details in medical matters which were necessary to carry out their humane views of reform, entrusted the preparation of the new rules to the inspectors of prisons, two in number, and one of whom belongs to the Council of the College of Surgeons, Dublin. The latter gentleman, however, in all correspondence, appears to act the part of Cæsar, during the consulship of that celebrated character with Bibulus, "*Julio et Cæsare Consulibus*:"—of course your readers, that is, the English, Scottish, and Irish medical public, will think, that every reasonable inquiry, every mode of obtaining the views, opinions, and suggestions of the governors, the resident managers, and medical attendants of *all* the asylums would be resorted to in so delicate and so important a matter as the framing of rules for a class of public hospitals placed under their local control and management. Alas! no: but the mode of proceeding adopted by the inspector was so truly *Hibernian*, that were I to give it in any statement but that recorded by himself before the Lords' committee in their inquiry into the state of the lunatic poor of Ireland, I would be laughed at or disbelieved, and your journal considered as the vehicle of the ramblings of a madman.

Beginning at page 54, question 470.

470.*—Were these rules communicated to the respective governors of the asylums *before they were issued*?—They were not.

471.—Was any communication had with any of the local boards upon the subject before the rules were framed?—Not that I am aware of: there was no general notification made of them.

472.—Was any communication had with any individual member of these boards before these rules were drawn up?—With the exception of some of the medical officers, none!!! [Medical officers are in *no instance* members of any board.]

473.—Was any communication had with any manager of these asylums before the rules were drawn up?—Not that I am aware of!!!

474.—Then in fact these rules were drawn up without *any* inquiry from persons locally interested?—Without any inquiry immediately before they were made out.

Sir, is it any wonder that confusion, mismanagement, and a total disorganization should exist, when a code of rules, in whose preparation one or two pluralists most likely had the sole direction, has been thus stolen forward? Is it any wonder that strong doses of "maunselline" should be administered to Dr. Stewart of Belfast, by those who stand on "the seven† steps of Jacob's ladder," because in Belfast *alone*, there is in the person of Dr. Stewart, a resident physician as well as manager, an innovation too dangerous for imitation, especially as *one* or *other* of the steps in the aforesaid ladder might thereby be removed.

I have trespassed too far on your kindness, and remain, sir, your obedient servant,

A REFORMER.

* Extracted from Minutes of Evidence taken before the Lords' Committee on the State of the Lunatic Poor in 1843, (ordered to be printed on the 21st of July, 1843.)—And Examination of Francis White, Esq., Inspector, and Member of the Council of Dublin College of Surgeons.

† The brother of the joint editor of the *Dublin Press* holds the following situations:—1. Surgeon to County Infirmary, 100 beds; 2. Apothecary to County Infirmary; 3. Surgeon to Dispensary attached thereto; 4. Surgeon to County Jail; 5. Physician to Fever Hospital; 6. Physician to 180 lunatics; 7. Physician to two private lunatic Asylums of his own; and engaged in private practice also!!! Who will not say that we Irish are universal geniuses after t

THE VALUE OF A GIESSEN DIPLOMA.

(To the Editor of the "Medical Times.")

SIR,—Having now for some time resided in Paris, for the purpose of pursuing my medical studies, I have, of course, frequently read "Galigani's Messenger," and have, during the last twelve or fifteen months, several times observed the following curious advertisement:—

"DIPLOMA IN MEDICINE.—Any properly qualified practitioner, desirous of obtaining the degree of M.D., may, through the assistance of the advertiser, receive the same from one of the oldest continental universities without absence from home. Total expense, £50.—Address (prepaid), with full name and age, and nature of qualification, to Dr. J. Bond, 24, Cornhill, London."

If this had only appeared in a *medical* journal, it would have been principally read by members of our profession; but placed, as it is, before the public in general, who are already quite sufficiently disposed to seize all opportunities of ridiculing gentlemen of our cloth, it has had, no doubt, this very effect. Indeed, on several occasions, I have been much annoyed by the remarks which have been passed on this advertisement in connexion with the medical profession, and I resolved, if possible, to satisfy my curiosity respecting the nature of the M.D. diploma which might thus be obtained. For that purpose I wrote to the advertiser, requesting him to send me full particulars, at the same time saying I had passed the College of Surgeons, and was about to begin practising in Paris as "doctor," provided he could sell me the diploma, having been told it was only necessary to have such an authority to enable me to practise in France. In answer to this application, I received the following reply by return of post:—

"68, Mortimer-street, Cavendish-square,
London, Feb. 11, 1845.

"SIR,—In reply to your favour of the 9th inst., I beg to inform you that, since 1840, I have represented the University of Giessen here, and that, during that period, through me, a very considerable number of the profession have received the diploma of Doctor of Medicine. Within the last year particularly, many of the English practitioners in Paris, and other parts of the continent, have found it necessary to apply to me, and always with success. Indeed, only last summer, one gentleman in particular, doing a large practice among the English in Paris, was nearly destroyed, until I happily came to his aid, and he now bears the title of M.D. If you are very conversant with medical politics in Paris for the past year, I have already said enough to satisfy you, and to point out the gentleman to whom I allude. If you are desirous of graduating through me, I guarantee you the M.D. diploma within a month from the day of placing in my hands a copy of your diploma, paying into my hands, or (better still) causing to be paid into the Bank of England here, to the account of the university, the sum, or at least three-fourths of it, mentioned in the advertisement (the remainder when the diploma arrives), naming also to me a subject upon which the thesis is to be prepared, which, if you have not time to prepare, I will do free of expense. As I have acted in the capacity of medical referee to the university above named for several years, and have recommended a very numerous list of gentlemen, and hold for inspection the warrant of the university appointing me, there can be no difficulty in you, through a friend, satisfying yourself upon my honourable conduct on all occasions. Should you prefer sending the money direct from Paris, any banker will take it, and give an order for payment at one day's date. I have, within this year, received money from France three times, thus it is perfectly safe. I give you hereunder a register to fill up, which will save trouble.

"I am, dear Sir,

"Yours, very respectfully,

"JOHN BOND.

"PS.—Address to my private residence, 68, Mortimer-street, London.

Name,
Age,
Birthplace,

Years in practice,
Where in practice,
Hospitals studied at,
Qualification,
Subject of thesis,

"I do hereby certify the above to be correct.

"Dated this — day of —, 1845.

"PS.—In what paper did you see the advertisement? It must have been a considerable time past. I generally go every May to Paris on this business, but having now established my connexion, I doubt if I shall go there this summer. There are at least ten gentlemen in Paris now who have graduated through my assistance, amongst whom are several eminent French physicians, to none of whom I can refer without express permission."

I must confess I was not a little surprised to find that, in order to induce me to purchase his diploma, Dr. B. states that "*many of the English practitioners in Paris*" have obtained the same through his means. Then, fearing I might be too well-informed to believe this, he, in his eagerness to enlist me, has the *maladresse* to point out, very prominently, one English practitioner, whose professional misfortunes were advertised last year. Had I really had the ambition of possessing such a diploma, this uncalled-for information would have been quite sufficient to alter my determination. On the other hand, how fortunate must have been these "*many English practitioners*" who have obtained their diplomas without the usual "grinding" for examination, or even without the trouble of *compiling* their thesis as a test of qualification! What great and diversified acquirements must Dr. J. B. possess; he who undertakes to write a successful thesis on any given subject, and in so short a time! My first letter was only written to satisfy an idle curiosity; beyond this, I attached no importance to the subject; little anticipating a reply so encouraging and so well calculated to induce me to enter a little further into the secrets of obtaining so easily, and in so short a time, the highest title of our profession. It will be for me, Sir, a great satisfaction, if, through the means of your journal, these letters can be made public to our profession, for the sole purpose of pointing out to all unsuccessful candidates by what means and how easily they can grasp the title they have in vain laboured for so long. I now subjoin a copy of my second letter:—

"Paris, Feb. 16, 1845.

"SIR,—I beg to apologise for not answering sooner your letter of the 11th instant; the fact is, I wished, before making final arrangements with you, to have a letter from my friends on money matters. The information you give appears perfectly satisfactory, and I am certainly quite decided to avail myself of your kind services; for I am well aware of the good it has done the gentleman you allude to, and who (presuming it is Dr. Roberts) is a friend of mine. I just mention this *en passant* merely to let you know that, although we are intimate, I am not in the intention of telling him I have pursued the same course as himself; very probably he will suspect it, but never mind that. The principal object of this letter is to ask you whether it is absolutely necessary to pay the whole of the sum, as you have stated. It would be more convenient for me to pay one-half, and give a bill on an approved house in London, at five or six months, for the remainder. Respecting the thesis, I leave that entirely to your discretion; and, requesting an early answer,

"I remain, Sir,

"Your obedient servant,

"C. WILSON.

"To Dr. J. Bond."

To the above I received this in reply:—

"68, Mortimer-street, London,
Feb. 18, 1845.

"SIR,—I have to acknowledge the receipt of your favour of the 16th inst. I am considerably embarrassed to reply to your proposition. The transaction has always been strictly for cash in advance, and it is only on these terms that I am permitted by the university to act for them. Still, willing to do business, if possible, and willing to

meet your views as far as is consistent with prudence, I shall have no objection to take three-fourths of the sum named in my advertisement, and will take a bill for the difference on a good house at four months. The fact is, that our profession is so liable to accidents and so subject to reverses, always in hope and expectation, that, unless I rigorously adopted the plan of cash payments, I should very speedily find that I reckoned without my host. Of course, if you please, you can speak to Dr. R.; at the same time, I do not think it either necessary or politic. Dr. R. and myself are on extremely intimate terms. You will, of course, use your discretion in the business. I should not have mentioned his name without his *special permission*, even to gain a dozen clients. Dr. R. has already recommended me several gentlemen, who have, in consequence of his recommendation, become M.D.'s. I shall not certainly send off to the university until the last week in the month, and perhaps not until after the 28th, when I shall have to send for several diplomas. The thesis I will manage. I shall require a copy of your diploma made on half a sheet of thin paper, your age, and birthplace.

"I am, dear Sir,

"Yours, very respectfully,

"JOHN BOND, M.D.

"PS.—I will take £30 cash down, and the remainder at four months, payable here, and accepted by a London house of business. What subject for thesis?"

To terminate this curious correspondence, I replied to this last letter by saying that, being obliged to leave Paris for London in a very short time, I should, upon my arrival, call upon Dr. B. to talk more freely about this business. I am rather sorry that any name should have been mentioned in these letters, although, after all, it is but just that, if a man takes advantage of the opportunity of obtaining titles by mere payment, he must not expect to be regarded in the same light and treated on the same footing as those who have gone through the usual medical education. At the same time, I beg to observe that Dr. B. was the first to mention this gentleman, and I could not easily have carried on the correspondence, and obtained all the above information, had I appeared to know nothing at all on the subject. Many important observations might be added to the few remarks I have had the honour of submitting to your judgment, but knowing how far you can excel me in pointing them out to your readers, I think I cannot do better than leave the subject in your hands, should you deem it worthy of your consideration.

I have the honour to be, Sir,

Your obedient servant,

C. WILSON.

GENERAL MEDICAL PROTECTION ASSEMBLY.

The usual weekly meeting of this body was held on Monday evening, March 3rd, at Exeter Hall, a Mr. COOPER, of the parish of St. Pancras, in the chair. About thirteen gentlemen were present.

Mr. SIMPSON proposed a resolution to the effect that Sir James Graham would please to modify the late charter granted to the College of Surgeons, and allow members of the college all over the kingdom equally to participate in its privileges, which would have the effect of preventing any further clamour for a new incorporation: and to inform Sir James Graham that the "outlines of a charter," from 4, Hanover-square were unworthy of any notice, inasmuch as they had been drawn up without the sanction of the profession at large.

Dr. LYNCH could not account for that society's conduct, after all the professions put forward by Mr. Wakley in that room, as that "the Hanover-square association wanted nothing so much as the help of the Exeter Hall association," &c. &c. He would like to know how that gentleman could defend their paltry excuse. Many gentlemen of the city had refused to sanction the Marylebone proceedings.

Mr. ROSS suggested that a deputation should wait upon Sir James Graham.

Dr. LYNCH opposed the step.

Mr. COOPER expected to have heard to night from Mr. Wakley an explanation of the conduct of the Hanover-square committee. Mr. Wakley had promised that he would be there that night. Why he had not done so he could not tell.

Dr. LYNCH moved the thanks of the assembly to Sir James Graham, as the first minister of the crown who evinced a desire for medical reform. Others before had advocated reform, but failed, and Mr. Wakley had never attempted any thing of the sort. He supposed his multifarious avocations prevented him. Sir James Graham was, therefore, the more to be thanked for devoting to the consideration of medical reform some of his valuable time.

Mr. H. RUGG seconded the motion.

Mr. ROSS could see nothing either in Sir James Graham's intentions towards the general practitioner or his bill, on which he could compliment him. In his bill he talks of suppressing quackery; but has he brought in any special protective clause? Much talk had been made of that portion of the bill which renders it penal for any unqualified person to assume the title of doctor, surgeon, &c. He would ask if St. John Long, or any such quack, who had amassed princely fortunes by their practice, had ever assumed these titles? On the contrary, they despised them. Until he, Mr. ROSS, could see something really worth thanking him for, he should dissent from Dr. Lynch's motion.

Mr. JONES, both from private information and from personal experience, derived from a residence in France and Germany, where laws the most stringent for the regulation of the medical profession had been enacted, knew full well how difficult it was to prevent empiricism by such means. The city of Paris itself teemed with empirics.

Messrs. CURTIS, COOPER, and GODDARD, agreed with Mr. JONES.

Mr. HILLES, though willing to give Sir James Graham every credit for good intentions towards them, would beg to ask what good had his bill done? None, whatever. Persons might say, had it not thrown open the Apothecaries' Company? He would grant that; but the persons thus privileged were very few indeed. But, he would ask, did the bill interfere with their monster grievance,—the oligarchism of the College of Surgeons? It left to the council of that body their previous despotic power, that of the few over the many. He thought that the passing of any such resolution would at some future period exert a most injurious influence on the cause of medical reform. Six, twelve, or eighteen months after the passing of this resolution, if we sought any further portion of justice, we would have the members of the House of Commons turning round upon us, asking us "what we meant now, when some time since we felt so satisfied that we had been fairly treated, that we paid Sir James Graham a vote of thanks for his favours towards us?"

Dr. LYNCH moved his resolution, which was then put and carried.

(To the Editor of the "Medical Times.")

SIR,—You have done good service to the cause of rational medical reform in a variety of ways, but especially by combating the rancorous opposition of the *Times* and *Lancet*, to Sir James Graham's bill—opposition evidently arising from motives totally unconnected with the merits of the question, or the welfare of the public.

We, that is, all at a distance from the metropolis, honestly interested in the subject under consideration, are deeply indebted to the *Medical Times* for the only accurate and complete report that has reached us of the speech delivered by Sir James Graham in the House of Commons on Tuesday last, a speech characterised, I must say, by a degree of liberality highly creditable to the Home Secretary as a statesman.

Agreeing, cordially, with the sentiments generally expressed in your most excellent paper, I was rather grieved on reading your leading article on Saturday, to find you say "the bill's (Sir James Graham's) main defects are a second time its omissions," and that it will be in consequence of

its "shortcomings," if it do not pass—a calamity that need not be anticipated, I trust.

These sentiments, concerning the inadequacy of the Home Secretary's bill to accomplish the important objects contemplated, are surely inconsistent with the fact, which, to our great delight you announce, that "the three great principles of the bill remain as they were before," viz—

First. The establishment of a Council of Health and Medical Education, which shall exercise a general superintendence over the medical and surgical education throughout the United Kingdom, and which shall constitute a board in the metropolis of easy and useful access to the executive government in all those great questions affecting the health of the people.

Second. To secure to all *qualified* medical practitioners throughout the empire equal facility of practice: provision being at the same time made for securing equality of attainments, so far as that can be accomplished by a competent course of study and examination.

Third. A registration of all regular practitioners, by which the public may easily ascertain who really are qualified medical men.

A legislative enactment based on these principles, and capable of accomplishing these vitally important ends, will effect almost all that any reasonable reformer, lay or medical, could desire—almost all that legislation can achieve, will obviate the enormous defects of our present miserable medical polity, and be of incalculable benefit to the interests of science and humanity.

Sir James Graham has proved that he clearly understands the true principles of medical legislation. The principles on which he acts are precisely those inculcated by the wisest medical practitioners and the soundest political economists, who have expressed their sentiments on the subject, in the course of the last fifty years.

The difficulty of our intelligent Home Secretary's position is, that he is required to correct the evils resulting from erroneous medical legislation, since the time of Henry VIII. Even the latest medical enactments (that of 1815, in particular *) as has been well stated 27 years ago, by an able writer on the fundamental principles which should guide the legislature in regulating the profession of physic, have proceeded on narrow principles, and their operation instead of being beneficial has proved hurtful, especially by increasing the obstacles to a general methodical reform, in which the paltry jarring interests of individuals, and corporations of physicians, surgeons, and apothecaries should be disregarded, and the only rational object of a medical constitution, the providing for the wants and security of the public, should be kept steadily in view. That cardinal point Sir James Graham keeps steadily in view; and it is equally evident to all, who are not wilfully blind, that he is anxiously solicitous to pay due regard to existing interests, so far as he can consistently with his sacred duty to the community. In the estimation of the Home Secretary the *salus publica* is, obviously, the *lex suprema* of a legislator, and especially of one in his high official situation.

Through the instrumentality of the Council of

* Of all the disgusting specimens of legislation, said Mr. Wakley, in coarse but expressive language, the Apothecaries' Act of 1815 stands probably the most prominent. Divested of every comprehensive view of the subject embraced in its details, that odious document left the portals of the legislature one mass of unsightly confusion. "If the members of the legislature (in 1815) had understood the question, the bill on its first reading would have been trampled on the floor of the House. Medical legislation, however, was a new occupation, the heads and hands of our senators were unused to that description of labour, and hence the deplorable botch they had made of their work." "The lying preamble" of the hated measure, added the impassioned writer, alleges that the act was for the better regulating the practice of Apothecaries throughout England and Wales, whereas it was in reality designed to prevent the most competent individuals from discharging the functions of apothecaries'.—*Lancet*, Saturday, Sept. 1, 1832.

Health, and Medical Education, justice will be done to the public, to the profession, and to existing medical corporation.

Sir James Graham's medical reform, whilst sufficiently sweeping for almost all practical purposes, is still conservative,—amendment, not destruction, being his laudable object. Not one existing medical body will be annihilated—nay, more, none will be deprived of the power of doing good, whilst a wholesome check will exist to prevent the possibility of any doing harm from the moment that the measures contemplated by the new medical bill are consummated.

So far as Scotland and Ireland are concerned Sir James Graham's task is likely, it appears, to be an easy and a grateful one. The College of Surgeons of England is, it seems, the great monster grievance; and the principal impediment in the way of a speedy and satisfactory adjustment of this *questio vexata*, one of transcendent importance to the medical practitioners, and to all classes of society in the empire.

The impediment referred to may be removed without sacrifice of principle or interest on the part of the belligerents, I have no doubt; and, with all becoming humility, I conceive I can suggest the *quomodo*;—that intrepid, and it will perhaps be considered presumptuous attempt, shall, however, be made in a subsequent communication, in sufficient time for publication in the *Medical Times* of Saturday the 15th instant, if the present lucubrations find a place in its columns this week.

LUCIUS.

Devonshire, March 4, 1845.

EAU DE BERGAMOT (EAU DE COLOGNE), ACCORDING TO L. GISEKE.—Eight quarts of alcohol of 0.833 specific gravity, six ounces of oil of bergamot, three ounces of oil of cedar, half an ounce of oil of cloves, half an ounce of oil of cassia, half an ounce of orange flowers, one ounce of alcohol vanillæ, are mixed together. The alcohol vanillæ is prepared by digesting one part of comminuted vanilla with twelve parts of absolute alcohol for six or eight days, and then filtering. The alcohol must be perfectly free from fusel oil, and the oils must be of the best quality.—*Archiv. der Pharm.*

PAY OF DRUGGISTS' CLERKS.—Practitioners of medicine and druggists appear to have demanded an unusual share of legal attention, of late, in the city of New York. As the case here appended gives a glimpse behind the scenes, it is transferred to the Journal to illustrate the history of the times. It may be more useful to some annalist in a succeeding generation, than of immediate consequence to this. It proves the fact, however, that there is a starving policy even amongst druggists and apothecaries. "In the Court of Common Pleas, Joseph L. Shafer v. John and Theodore Cornell. —Action to recover 365 dollars for a year's wages of plaintiff's son in the medical office of Drs. Cornell, corner of Avenue D and Fourth-street, less 140 dollars allowed for money received and for board. It is contended that the 140 dollars is full compensation for the lad, who was seventeen years of age, and had been one year at the drug business previous to going with defendants. His duties were to put up prescriptions for defendants, and to stay in the office from seven o'clock in the morning till ten at night, and till two o'clock on Sundays. To show that the compensation had been ample in proportion to what other young men got in the same business, several druggists gave testimony; from which it appeared that the salary given to clerks in druggists' stores is very small. Mr. Delluc (firm of Souillard and Delluc), testified that the sum already paid to the young man is abundantly large. His firm have at present a young man who came to them with a good knowledge of the business, and is every way competent, and to whom they give 12 dollars a month, or three dollars a week, without board. Another gentleman (Mr. Wier), testified that he has a clerk in his employment who is thirty-five years of age, and has been at the business twenty-one years, and to whom he pays five dollars a week, &c. Other testimony was pretty much to the same effect."—*Boston Medical and Surgical Journal*.

PUBLIC HEALTH.

ANALYSIS OF THE "FIRST REPORT OF THE COMMISSIONERS FOR INQUIRING INTO THE STATE OF LARGE TOWNS AND POPULOUS DISTRICTS."

No. X.

Concluding Remarks.

In our last number we announced our intention of bringing the present series of analyses to a close, by a general summary of the evidence laid before the commission by medical men resident in the metropolis, and by such remarks as a perusal of our former analyses would naturally suggest. We hasten to fulfil this promise. The following facts are placed beyond a doubt, by the evidence laid before the commissioners.

1. That the districts inhabited by the poorer classes are badly drained and badly cleansed.

2. That in the houses of the poor, there is a general want of all the conveniences which conduce to cleanliness and decency: viz., supplies of water, proper privies, and house drains.

3. That the rooms inhabited by the poor are over-crowded and ill-ventilated.

4. That the shops and workshops of the metropolis, are also very imperfectly ventilated.

The consequences of this unwholesome state of the streets and dwellings of the poor, and of the shops and workshops of the metropolis, are,

1. An excessive prevalence of fever, and of the whole class of epidemic diseases; of scrofulous affections; and of pulmonary consumption: and, as a natural result, a very high mortality.

2. A heavy annual expense entailed upon the community in the shape of large contributions to hospitals and dispensaries and the general charities of the metropolis, and of increased assessments to the poor's rates.

3. Great pecuniary embarrassments among the poor themselves, arising from loss of work, or the expenses attendant upon the sickness or death of wives or children.

4. The sacrifice of self-respect, and the formation of habits unfavorable to morality and religion, among which the vice of intoxication holds a prominent place.

5. The over-crowding and the intermixture of persons of both sexes and of all ages in small and confined rooms, lead to the most revolting crimes.

The remedies for these evils are so simple as to be almost self-evident. They are:—

1. An efficient system of drainage, combining well constructed sewers with a proper supply of water, for the prompt removal of their more solid contents.

2. Water closets and house drains, communicating with the sewers.

3. An ample supply of water laid on to every room or flat of every house.

4. A free ventilation of shops, workshops, and dwellings.

5. The building of new houses for the poor, combining all these advantages, and the improvement, to the utmost possible degree, of existing houses.

We propose to make one or two remarks upon such of the foregoing propositions as seem to require illustration.

The evidence establishing the first four propositions respecting defective drainage and street-cleansing, scanty supplies of water, the absence of privies and water-closets, and the neglected ventilation of shops, workshops, and rooms, and indeed of buildings generally, must be too fresh in the minds of our readers, to require any further comment; we pass on therefore to the second group of propositions.

1. The excessive prevalence of fever, and the whole class of epidemic diseases is fully established by the evidence of Dr. Southwood Smith, and confirmed by that of Mr. Liddle and Dr. Aldis; that of scrofulous diseases by Mr. Toynbee; and that of pulmonary consumption by Dr. Guy. The amount of mortality due to these several causes, over and above what may be considered as a favourable average of deaths, is not readily calculated. If we refer to the table of mortality for 1844, the number of deaths from the class of

zymotic diseases (epidemic and endemic) will be found to be 11,142, from consumption (including pulmonary consumption and many lingering diseases of children,) 7099, and from diseases of children, chiefly of a scrofulous nature, 6107; making a grand total of 24,348. From the estimates of the possible saving of life put forward by Dr. Southwood Smith, Mr. Toynbee, Dr. Aldis, and Dr. Guy, it does not seem unreasonable to assume, that taking one of these fatal diseases with another, one half the lives, or 12,174; might be saved. A third of the whole number would amount to 8117.

But a still better mode of forming an estimate of the annual waste of human life from causes admitting of prevention, consists of a calculation based on the existing rate of mortality, as compared with a favourable standard. Referring, as before, to the mortuary register for the metropolis, for the year 1844, we find the rate of mortality to be 2.512 per cent. Now the average rate for the whole kingdom, which includes a great number of large cities, much more unhealthy than the metropolis itself, is as nearly as possible 2 per cent; and it may be fairly assumed to be possible by judicious sanitary measures to raise the existing rate for the metropolis to this more favourable standard. It appears that the total deaths in the metropolis for the year 1844, amounted to 50,423, but on the supposition that the rate of mortality, instead of being 2.512 per cent, had been 2 per cent, we shall have had 40,145 deaths, and a consequent saving of no less than 10,278 lives. This appears to us to be a very fair estimate of the annual waste of life going on in the metropolis from causes admitting of removal.

From data furnished by one of the medical witnesses, whose evidence is published in the first volume of the Report, it would seem that every unnecessary death represents no less than 28 cases of sickness; so that the preventible sickness will amount to 287,784 cases.

Allowing these estimates to be somewhat in excess of the truth, we are probably justified in stating, that the annual waste of life in the metropolis amounts to 10,000 lives, and the annual sickness, which admits of prevention, to upwards of a quarter of a million of cases.

2-3. The next points to which we would invite attention are the heavy annual expense entailed upon the community in the shape of large contributions to hospitals and dispensaries, and the general charities of the metropolis, and of increased assessment to the poor rates, and the great pecuniary embarrassments among the poor themselves, arising from loss of work, or the expense attendant upon the sickness or death of wives or children.

Our readers cannot have forgotten the striking facts stated by Dr. Southwood Smith, in illustration of the heavy expense entailed upon the parishes by fever cases, nor the cost of sickness and death in several instances adduced by Mr. Toynbee. They will, therefore, be prepared to expect a large estimate for the total cost of unnecessary sickness and death in the metropolis.

We have already shown that if the rate of mortality for the metropolis, during the past year had been 2 per cent. instead of 2.512 per cent. there would have been a saving of no less than 10,278 lives. Now these unnecessary deaths involve a vast number of losses and unnecessary expenses, among which the most obvious, are the loss of work, the cost of funerals, of sickness, of the support of widows and orphans, and the increased subscriptions to benefit societies, rendered necessary by the low state of health and premature death of the insured. An indirect result of this excessive mortality is an excessive reproduction with its attendant burdens. To these pecuniary losses, sustained either by the families of the deceased or by the community, must be added, the great inconvenience and actual loss to employers by the illness and death of skilled labourers, whose place cannot be supplied without some sacrifice. To the cost entailed by 10,278 unnecessary deaths, we have to add that of 287,784 cases of illness.

It is not by any means an easy task to calculate the money-cost of so many deaths and sickness, and nothing more than a rude statement can be reasonably expected; but this we shall endeavour

to supply. The plan we shall adopt for this purpose, is that of calculating the cost for the metropolis by the simple rule of proportion from data furnished to us by three different individuals, Mr. J. R. Coulthart of Ashton-under-Lyne, the Rev. J. Clay of Preston, and Dr. Lyon Playfair. We shall not trouble our readers with the calculations themselves, but shall merely give the results. They are as follows:

Cost of unnecessary sickness, and death in the metropolis, calculated according to Mr. Coulthart's estimate for Ashton-under-Lyne, £235,997.

According to Mr. Clay's estimate for Preston, £990,812.

According to Dr. Lyon Playfair's estimate for Manchester and Salford, £3,204,531.

We are convinced that the first of these estimates is much below the truth, but we are content to take it, with a slight addition, and we will place the money-value of wasted health and life, at a quarter of a million a year. This is certainly a very moderate calculation compared with the estimate for the city of Nottingham which Mr. Hawksley states at no less than £300,000 per annum. We shall presently shew that this £250,000 a year is not the only waste which takes place in the metropolis.

4. The sacrifice of self-respect, and the formation of habits unfavourable to morality and religion, among which the vice of intoxication holds a prominent place, is the next point to which we proposed to revert.

On this head we have not much to say. Every one who knows anything of the dwellings of the poor must be aware that everything within and without them is calculated to discourage cleanliness and comfort, and to promote filth, indecency, recklessness, and crime. The absence of sewerage, house-drainage, and supplies of water, must render a home repulsive, and add by contrast to the attractions of the public-house and gin-palace. To expect that children exposed to all manner of debasing influences should profit by a few hours of schooling a day; that men whose houses are filthy and comfortless should continue attached to them; or that religious teaching and exhortation should have their full effect on those who are ashamed to shew themselves in church, for want of the means of making a decent appearance there, is to evince but slender knowledge of the immense influence of the physical over the moral. As things now are, does it not admit of grave doubt whether even a clergyman might not be better employed in advocating the improvement of the dwellings of the poor than in the peculiar duties of his calling? These duties are infinitely more important in themselves than sewerage and supplies of water, but are not these latter necessary preliminaries to successful efforts for the moral and religious improvement of the poor?

5. The overcrowding and the intermixture of persons of both sexes, and of all ages, in small and confined rooms, leads to the most revolting crimes. This is a proposition of which one painful illustration was offered in the evidence of Dr. Aldis. It is so natural a consequence that we need do no more than allude to it.

We now come to the remedies for the existing evils which press upon the poor, in consequence of this unwholesome state of their dwellings.

1. The first remedy of which we shall speak, is an efficient system of drainage, combining well-constructed sewers, with a proper supply of water for the prompt removal of their more solid contents.

In this matter of sewerage there is a peculiarity which cannot be sufficiently insisted on. It is one of the few improvements which can involve no direct injury to any existing interest. The making of a sewer disturbs no man's property, and leads to no man's embarrassment or ruin; and provided that its contents are properly disposed of, there is no conceivable objection to it. There is no other great improvement of modern times of which so much can be said. You cannot make a railroad without nearly ruining some thousands of unfortunate persons interested in the traffic of the road which it is about to supersede. Your metropolitan improvements are made at the expense of the poor whom you displace, of the tradesmen of all the neighbouring thoroughfares,

and of the inhabitants of the parishes to which your ejected paupers resort. You cannot even abolish the most odious tax in existence without serious injury to large numbers of persons who had profited by its imposition.

Again, a sewer is of those things which admit of no abuse. You cannot put it to any other purpose than that for which it was intended. Not so with one half the efforts we make for the poor. Street charity, house charity, clothes, coal and soup tickets, mendicity tickets, burial clubs—even hospitals and dispensaries are open to abuse. They can all be put to purposes for which they were not intended; but, as we have just said, a sewer can only be used as a sewer. Whatever good it does is unmixed good.

Moreover, a sewer ought to have, and will, ere long, have two distinct uses—the one sanitary, the others reproductive. It removes from our streets and houses the fruitful source of disease, and it will soon be made to convey to our fields the means of increased fertility. At present we supply our towns with pure water, but ere long we shall furnish the country with dirty water, and that very much to the country's advantage. It has been lately proved to demonstration that the refuse of large towns may be applied with the best effect to land in the form of liquid manure, and that this manure has a high money value. Each inhabitant of a town, indeed, contributes in the course of a year, that, which applied to the purposes of agriculture has, at the very lowest, a money value of five shillings. It is often estimated as high, or even higher, than ten shillings. Now, if we assume that that part of the refuse of London which consists of the excrements of animals, the offal of markets, and the sweepings of houses, is already applied to the land, and that all the refuse contributed by human beings is at present thrown into the Thames, we shall have, as the money value of that refuse, no less than £500,000, or half a million of money. Can any one doubt that this immense sum might be saved by the application of all the liquid manure of London to the land, or that it would suffice to pay all the structural arrangements necessary for its collection and distribution? We cannot suffer ourselves to doubt that this great economical measure of sewerage will soon be carried out. It is the next grand achievement of the nineteenth century.

2. Water-closets, and house-drains, communicating with the sewers.

In another part of the evidence laid before the commission, it has been proved that water-closets may be constructed as cheaply as common privies. This being the case, we hope that this great improvement, combined with proper house-drains, will be introduced into the houses of the poor. It will not be easy to estimate the benefit of this great auxiliary to decency.

3. An ample supply of water laid on to every room, or flat of every house.

We need not dilate on the importance of a proper supply of water. If cleanliness be next to godliness, then must filth be near akin to sin. This, too, is an improvement scarcely admitting of abuse. The poor will not wash themselves or their clothes too much or too often.

4. A free ventilation of shops, workshops, and dwellings.

We regard this, as far more important than sewerage itself; but, unfortunately, it is by no means so simple a matter, nor does it yield any profit, as the application of the contents of the sewers to the land promises to do. Moreover, if we may judge by the cost about to be incurred for ventilating the new Houses of Parliament, it is by no means an economical matter. Unhappily, too, ventilation must involve not only expense, but some alteration of existing structural arrangements. Tall chimneys must be built, or machines must be constructed, or, at any rate, ventilators must be inserted into walls or windows. It is a very difficult matter to legislate about. Our scientific authorities are not sufficiently agreed to justify the legislature in dogmatizing as to the plan to be adopted, and there will be some difficulty in passing any law to render it obligatory. Some are for bringing the pure air in below, and

taking the foul air out above, others reverse the process. Some introduce the cold air through the floor under the feet, and others by the wall. Then, again, it is contended, that it is in vain to ventilate with cold air, and that you must contrive some means of bringing the air in warm.

In the midst of all these difficulties we would venture to make a suggestion or two. First, let the government enact, that all persons employing more than a certain number of men, say six, shall, under penalty, register themselves, and submit their places of work to inspection by persons appointed by government. Let the rule be laid down, that each man shall have 500 cubic feet of air to breathe at the least, and that any employer wishing to limit this space, must adopt some system of ventilation subject to the approval of the inspector. Let it also be enacted, that whatever system of ventilation may be adopted, it shall comprise arrangements for admitting the fresh, and discharging the foul air. In this way an end will be put to the infamous system at present in use of economising fuel by means of stoves and closed chimneys. If ventilation be thus rendered imperative, the task of finding out the best plan may be safely left to the employers and the workmen together. In the long run, none but cheap plans will be adopted, and we firmly believe in the possibility of procuring so great a blessing as pure air at a reasonable rate. The abolition of the duty on glass will have an excellent effect in facilitating the use of window-ventilation, which, after all that may be said in favour of more expensive methods, must, in conjunction with open chimneys, as vents for foul air, come into use in nine cases out of ten. Once surmount the great difficulty of draughts, and ventilation will come into general use; but, so long as this obstacle is in the way, all the legislation in the world will not suffice to secure it.

5. The building of new houses for the poor, combining all the specified advantages, and the improvement to the utmost possible degree, of existing houses.

The first of these most desirable objects thanks to the New Building Act, is being accomplished, the second is being carried into effect, on a very limited scale by the societies for improving the condition of the labouring classes, and for building new houses for the poor. We hope to see the Woods and Forests doing something in the same direction; they have lost many noble opportunities of setting a good example.

The improvement of existing houses should be made imperative. The legislature ought to oblige landlords to call things by their right names, and as the places they let as houses are now often little better than pig-styes, to oblige them to make them into houses properly so called. Happily it has been shown, in the evidence which we have analysed, and more completely in other parts of the report of the commissioners, that it is to a landlord's interest to improve his property. It has also been shown, that for the addition of a few pence to the weekly rent of each room, a poor man may have an abundant supply of water, a proper water-closet, and efficient drainage and ventilation. Never was a series of improvements proposed so certain beneficial to every party concerned,—to landlords, tenants, rate-payers, and the community at large.

The length to which this paper has already extended warns us that we must now hasten to a close. We have proved, as we think, to the satisfaction of all reasonable men, that the actual condition of the streets and houses of the poor, and of shops and workshops, is, in the highest degree, injurious to health, and fatal to human life; and that the causes of that unwholesomeness are defective sewerage, ventilation and supplies of water. We have also shown, that the sickness and premature deaths resulting from this unhealthy condition of houses, shops, and workshops, imposes a heavy burden, not only on the poor themselves, but also on the wealthier classes. It has also been demonstrated that it is to the interest of all classes that this injustice should be promptly repaired;—to the interest of the poor, who suffer severely in health and life, comfort and character; to the interest of the proprietors of houses, inasmuch as the

character of their tenants would be improved, and their means greatly increased; to the interest of rate-payers, who would escape the heaviest of their existing burdens; and to the interest of the state, which must benefit in every way by the physical and moral regeneration of its subjects.

The evils, as he have stated, are threefold—defective drainage, scanty supplies of water, and defective ventilation. The remedy for the first of them we have shown to be open to no possible objection, and subject to no conceivable abuse, while it may be made subservient to one of the most profitable undertakings,—the application of the refuse of towns to the purpose of agriculture. The second is subservient to the first, and like it as free from objection as it is incapable of abuse. Ventilation alone presents difficulties, which may interfere in some degree with its present adoption, and may act as a set off against its just and undoubted benefits.

In providing for a universal system of drainage, the Government will encounter no obstacles not easily overcome, but in insisting, as they are bound to do, supplies of water and ventilation, they must be prepared for some opposition by the short-sighted advocates of the so-called rights of property. There are one or two considerations which may not have offered themselves to those who are prone to magnify this obstacle. The most weighty is this, that the landlords of tenements occupied by the poor are abusing their right of property by injuring their tenants on the one hand, and the rate-payers on the other. Every landlord who lets an unwholesome house, and every employer who places his shopmen or workmen in an unwholesome room, is committing a double act of injustice. He is poisoning those who have no option but to live and work amid those causes of sickness and premature death, and he is imposing a burden upon his neighbours, in the shape of large contributions to the poor rate, to support the victims of his own neglect. This is the view taken of this matter by American and Belgian authorities, in discussing similar evils existing in their respective countries, and such must be the opinion of every reflecting Englishman.

We call upon the Government to rid all classes among us of this injustice, by putting a stop to the gross neglect of the holders of property, and employers of labour. Let them enter upon the great work that lies before them, with the determination to do strict justice to all parties, though it should become necessary to interfere with the so-called rights of those, who, whether wilfully, or from mere negligence, are imposing such heavy burdens upon all classes of their fellow-citizens.

Health, as far as its possession is contingent upon causes over which the public can exercise control, is a right, to the full as sacred, as any which property can confer. It is the peculiar property of those who have nothing else they can call their own. Hitherto, we have allowed the poor to be robbed of this their indisputable right, and it is our bounden duty to see that it is restored to them. If the government have not the courage to recognise and secure this precious right, it will be in vain that they issue commissions, and publish reports. The time for action has arrived.

And let no idle advocate of this system of *laissez faire*, no short-sighted supporter of the rights of property denounce their simple measures for preserving health, and protecting life as the pleasing visions of dreaming philanthropists. We are as fully alive as they can be to the manifold evils inflicted by those who, satisfied with pure motives and warm impulses, think themselves under no obligation to submit their philanthropic plans to the test, either of reason or experience. We are not of the number of those who think, that because the end aimed at is good, the means are necessarily justified. The good national Don Quixotism, for instance, which dreams of suppressing the slave trade, or any other trade, legal or illegal, which yields 200 per cent profit, by armed cruisers stationed off a long line of coast, excites our mirth, quit as much as the Knight of La Mancha's attack upon the windmills; and the cruel sacrifice of seven out of every ten of the wretched slaves whom we have condemned to the tortures of the *black hole* of the slave ship, to say nothing of our gallant sailors sacrificed to the

unhealthy climate of Africa, excites our deepest sympathy. We have no such schemes. Pure air and fresh water are undoubted benefits, which at the worst can hurt no one. If health did not require them, decency would; and if the body could do without the things themselves, the mind could not but suffer for the absence of those virtues to which they minister.

We take leave of our subject for the present, with the expression of a fervent hope, that the great boon so long claimed for the poor, and now at length promised, will not be longer withheld. Our readers shall have early intelligence of any legislative movement in this direction.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY
Feb. 25, 1845. Mr. Stanley, President, in the chair.

On the Mortality in Prisons, and the Diseases most frequently Fatal to Prisoners, by William Baly, M.D., Physician to the Millbank Prison, and Lecturer on Forensic Medicine at St. Bartholomew's Hospital.

This paper, of which only an abstract was read, contains the results of an enquiry into the rate of mortality, and the nature of the more prevalent diseases in the Millbank Penitentiary, and other penal establishments during the last fifteen or twenty years.

The annual rate of mortality in the different prisons in England, calculated from the average number of prisoners, and the number of deaths, exclusive of the deaths from Asiatic cholera, has ranged from 15½ per thousand to nearly 39 per thousand; in the state prisons, or penitentiaries of the United States, from 19 to 39 per thousand; and in Switzerland from 25 to 35 per thousand. In France the mortality, including deaths from Asiatic cholera, has ranged in the hulks from 39½ to 55½ per thousand, and in the Maisons de Force et de Correction from 30½ to nearly 87 per thousand. The annual rate of mortality amongst persons at liberty in the different countries and cities in which these prisons are situated, and at the periods of life of prisoners, has varied very little from 15 per thousand.

The excess of mortality has been much greater in some prisons than in others: but the amount of this excess of mortality is no measure of the degree in which the health of the prisoners is affected by the discipline, diet, and general arrangements to which they are subjected, since there are many circumstances independent of all systems of prison discipline and internal prison arrangements, which greatly affect the number of deaths occurring in prisons. The most important of these circumstances are: 1st, the extent to which the practice is carried of granting pardons to convicts in failing health; 2nd, the degree of predisposition to disease of the class of persons forming the population of the prison; 3rd, the length of confinement which the prisoners undergo; and 4th, their liability to endemic and epidemic diseases, owing to the situation of the prison.

The high rate of mortality which prisoners suffer is really the effect of their punishment, and is not owing to the unhealthiness of the class whence criminals are, for the most part, derived. This is proved by the increased mortality which attends an increased duration of imprisonment, and by the result of comparing the rates of mortality in English prisons with the rate of mortality of the population of Liverpool, the most unhealthy town in England. The mortality of persons of the ages of 15 to 70 in Liverpool during 1841 was 18 per thousand living. But the annual ratio of deaths amongst the prisoners in the county prisons of England has been nearly 23 per thousand; amongst those confined in the Millbank Penitentiary, at all periods of imprisonment, nearly 31 per thousand; and amongst those passing through the third year of their confinement in that institution, more than 52 per thousand.

In America, France, and Switzerland, as well as in England, the proportion of deaths occurring annually has been much greater amongst criminals

in prison, than amongst persons of a corresponding class of society out of prison. The diseases to which this increased rate of mortality has been chiefly due in the Millbank Penitentiary, and all prisons where criminals are confined for long periods, are the various forms of tubercular scrofula, and especially tubercular phthisis. No other class of diseases has produced uniformly in all prisons a higher ratio of deaths than the same class of diseases causes amongst persons at liberty; whilst the mortality from many diseases is less in prisons than amongst the free population. Even where endemic diseases have been prevalent, owing to the unhealthy site of the prison, the great excess of mortality has still been caused by tubercular diseases.

The causes which have rendered tubercular disease so frequent and so fatal in prisons are, in the author's opinion—1stly, deficient ventilation; 2ndly, cold; 3rdly, sedentary occupations, and want of active bodily exercise; 4thly, a listless, if not dejected state of mind; and 5thly, the poorness of the diet.

The diet in the Millbank Penitentiary and in the American prisons has been more abundant than that of the agricultural labourer; but in many other prisons the allowance of food has been very scanty. In respect of the diet, and also of the ventilation and warming, a great improvement has recently been made in the prisons of England, and it is to be expected that, after the lapse of a few years, a great amelioration will be found to have taken place in the health of prisoners.

Dr. Webster, after expressing his gratification that so very valuable a paper had been brought forward, stated that there was one observation in which, as far as his experience has gone with respect to prisons, he fully concurred; it was to the effect that a short imprisonment was not injurious to health. It was only after protracted confinement that the health began to suffer. This statement was confirmed by the records of the City prison, called the Bridewell, where, as the members of the society were aware, the dissolute and vagrant were admitted and kept prisoners for a short time only. It was a remarkable fact that those persons who were admitted into the prison in a state of ill-health, soon began to improve, and generally left in a much better condition than when they were admitted. This he could affirm from his own personal knowledge. There had occurred only one death during the past year out of upwards of one thousand prisoners who were committed during that period, and one death also during the previous year. During 1843 also there were only sixteen infirmity cases, and twenty-four patients were admitted into the infirmary in 1844; these were principally for trifling maladies. The death that occurred during the past year ought not to be attributed to the imprisonment, as the man was admitted with fever, of which he died at the end of a fortnight. He mentioned these facts as he considered them to be confirmatory of Dr. Baly's statement. The observations which had been made by Dr. Baly with respect to the frequency of phthisis in the Penitentiary were borne out by what had occurred in other prisons. This disease in that prison appeared to be the most general cause of its mortality, for of eleven deaths which had occurred during the past year, seven were from consumption, and the greater number of those who received pardon on account of ill-health were affected with pectoral disease. Dr. Baly, it appeared, was of opinion that, one of the principal causes of phthisis in the Penitentiary, was the want of due and proper ventilation, and in this he fully concurred. He would be glad, however, to ask Dr. Baly whether warming the prison with hot air might not be regarded as one of its causes. He (Dr. Webster) thought that the breathing hot dry air would cause irritation in the air-passages and cough, and this might produce consumption, especially in those who were already predisposed to that complaint. With regard to dysentery and howel complaints generally, he thought that the prisoners' diet had much to do with their production—quite as much as local causes. Although Dr. Baly's paper was devoted to the consideration of the diseases affecting the body, which were pro-

duced by long confinement, he would wish to learn his opinion respecting the influence of solitary confinement on the mind, a subject which Dr. Baly had left wholly untouched. This was a very important subject, interesting alike to the medical man and the philanthropist. He thought it not impossible Dr. Baly might hesitate in answering any questions upon this subject, considering the position he held at the Penitentiary, but he thought it but right to bring the subject before the society for its consideration. During the eighteen months prior to July, 1841, when the system of solitary confinement was in full force, fifteen of the prisoners were sent from the Penitentiary in a state of insanity. During the subsequent eighteen months the plan had been greatly modified, and the prisoners were allowed, under certain regulations, occasionally to hold converse with two or three others, their respective ages and offences being taken into consideration in choosing their associates, and then there were only five lunatics sent from the prison, and only two in the subsequent year. These facts he considered to be very important and very remarkable. His own opinion as to the influence of solitary confinement was a very strong one, but he should be glad if Dr. Baly would favour the society with his experience on the subject, and also would state his opinion as to the effects of solitary imprisonment on the mental faculties.

Dr. Baly remarked that as his paper had reference only to the effects of imprisonment in the production of bodily disease, he should decline at present alluding to its effects on the mental faculties. He would, however, reply to one or two other points which had been raised by Dr. Webster. His opinion had been asked respecting the influence of heated air in causing consumption among the prisoners. He had reason to believe that exposure to cold had proved much more injurious. He did not think that the use of heated air could produce consumption, and as yet there had not been any facts obtained from prisons which confirm that opinion. With regard to diarrhæa and dysentery, in every instance where they had existed for years, he believed they were traceable to the effects of a local miasm; and were not produced by poor diet, although the severity of the attack might be aggravated by improper and debilitating food, such as soups, &c. He had in his paper mentioned mental depression as one of the causes of ill-health, and it might therefore *a fortiori* be looked upon as thus acting under the influence of solitary confinement.

Dr. Webster explained that he did not mean to refer the occurrence of phthisis to the direct influence of heated air, but he thought that it might cause chronic bronchitis, and other maladies of the pulmonary apparatus, which might ultimately lead to consumption.

Dr. James Johnson observed that some very curious facts were mentioned in the excellent paper which had been read. In the most protracted state of imprisonment it would appear from the paper that the mortality was the least; to wit in the fourth year. If such were indeed the case, it would be a very curious fact, and he would be glad to hear Dr. Baly's opinion of its cause.

Dr. Baly replied, that the mortality was certainly less in the fifth year than in the fourth, and the same fact had also been established in the Eastern Penitentiary in America. There were always a certain number of prisoners who were especially liable to the invasion of scrophulous disease, which was rapidly developed by imprisonment. These generally died before the termination of the fourth year, and, consequently those only were left in the fifth year, who were not so liable to attacks of this disease.

Dr. Cursham enquired how long a period of time elapsed after the commencement of the imprisonment, before scrophula was developed in persons who had not previously exhibited any signs thereof?

Dr. Baly observed, that it first made its appearance during the second six months of the imprisonment, and seemed to increase rapidly during the next eighteen months. He had only a limited number of facts to prove this statement, but it seemed to be the case, that after the second year

of the existence of scrophulous disease, that it began to decline.

Mr. B. B. Cooper made some general observations on the nature of scrophula, and enquired in what form it shewed itself in the prisoners confined in the Penitentiary.

Dr. Baly stated, that in the abstract of the paper which had been read, he had distinctly designated the disease produced by imprisonment, *tubercular scrophula*. He could not regard any disease as scrophulous which was not characterised by the deposition of tubercular matter in some one part or other of the body.

Mr. Bossy remarked, that Mr. Cooper had enquired respecting the early indications of the scrophulous disease which shows itself among prisoners, and which Dr. Baly had characterised as tubercular cachexia. It first showed itself by a degree of paleness, debility, and general weakness, which were so well marked, that on inspecting a body of men, he could always readily discover those who had been long in confinement. Dr. Webster had inferred that persons who were imprisoned for a short time only, generally improve in health, and this is so far the case, that when they have but little exercise, and their diet is of a fluid nature, they soon get fat, but they also fail in muscular development. He had frequently received such persons at the hulks, and had found them on trial deficient in weight, and incapable of much bodily labour. These were the persons who were principally the subjects of tubercular disease resulting from long confinement. With regard to the observations which had fallen from Dr. Baly with respect to the mortality of the tubercular disease at the hulks, it had been much increased from their having received a large number of negro convicts, who, coming from a hot climate, soon fell victims to phthisis. They were sent as convicts from the West Indies to Van Dieman's Land, through England, and while at the hulks became affected with the tubercular diathesis. This was accordingly represented to government, as being equivalent to passing a sentence of death on these unfortunate negroes, and the practice was therefore put a stop to. At the hulks it should be borne in mind that pardons were never granted on the score of ill health. He did not agree entirely with Dr. Baly respecting the causes of diarrhœa and dysentery as occurring in prisons; he believed that those diseases were materially kept up by bad articles of diet. This statement he illustrated by the ill effects produced by the use of soup which contained a quantity of barley and husks, also by the employment of bad bread, which was furnished by the contractor. This bread was apparently made of wheaten flour, but it never rose properly, and was different in appearance from that in ordinary use. After it had been used for about six weeks, dysentery became very prevalent. The bread was then analysed, and was found to have been made of wheaten flour which had been damaged. The contract was accordingly rescinded, other bread was obtained, and the diarrhœa, etc., soon ceased. It was afterwards ascertained that the baker had purchased wheat which had been soaked in sea-water in consequence of a wreck, had vegetated, been dried, reduced to flour, and mixed by him with a better article. He had frequently noticed, that when the articles of diet which were furnished for the prisoners, were changed on the occurrence of bowel complaint, that that disease soon disappeared. With regard to the question of hot air, he fully agreed with Dr. Webster, that keeping the air at too high a temperature would cause catarrh and chronic bronchitis, if not phthisis. It had been found in the prison at Chelmsford, that the men who were kept in a hot atmosphere in the cells, were removed thence to the treadmill, and there exposed to the influence of cold air, and thence back again to the hot cells, were subject to repeated attacks of catarrh.

Dr. Webster was glad to find his opinion respecting the influence of hot air and bad articles of diet on the health of prisoners, so directly confirmed by the results of Mr. Bossy's experience. In the City prison of Bridewell, which was situated in a confined locality, near Fleet-ditch and Puddle-

dock, the prisoners had very little outdoor exercise yet neither bowel-complaint, nor any such disease was at all prevalent. Their food was very good; the corn for the bread was ground by their mill, and the bread baked at the House of Occupations. He would be glad to hear from Dr. Baly whether any of the prisoners who had been pardoned on account of their labouring under phthisis, had recovered after their discharge, as in that case the occurrence of phthisis would be brought directly home to the imprisonment. Four of the lunatics who had been sent to Bethlehem Hospital from the Penitentiary, had been thus cured, and afterwards removed thence by warrants from the Secretary of State.

Dr. Baly replied that a great number of prisoners who had been discharged from the Penitentiary, in consequence of receiving a pardon on the ground of ill-health, and who were in the advanced stage of phthisis at the time, afterwards recovered. In fact a marked improvement was evident as soon as they learned that they were to be pardoned. With regard to the observations made by Mr. Bossy, respecting the occurrence of bowel-complaints in prisons, he had misunderstood the tenor of his (Dr. Baly's) remarks. He never meant to deny that bad articles of diet may occasionally cause diarrhœa and dysentery, but he wished to state that when these diseases existed through several years, they were to be traced to the nature of the locality in which the prison is situated, and not to any peculiarity of diet. The facts which had been mentioned by Mr. Bossy, with respect to the badness of the food, as productive of disease could not be in existence for any length of time: there were other facts mentioned by him in the paper, which would prove this. These diseases were most prevalent at particular seasons of the year, in the spring and autumn, and also when present in the neighbourhood.

Dr. Gregory observed, that as the author had promised the society another paper on this subject, he would venture to throw out a suggestion, which if acted on, he thought would materially improve the paper, more especially with respect to age. He would recommend Dr. Baly to direct his attention to the occurrence of tubercular phthisis in a class of persons directly opposed to prisoners, such as soldiers. His attention had been recently directed to the occurrence of that disease, particularly among the guards, and he thought it a matter deserving of the utmost attention. It is a curious fact, that recruits who have been carefully examined with the stethoscope, and have been pronounced free from disease of the lungs, will, after a few months, begin to develop symptoms of tubercular phthisis, and fall victims thereof. It would be important to ascertain the causes which lead to the frequent occurrence of this fatal disease among recruits. The statistics he thought could be easily obtained, and they would add very much to the value of Dr. Baly's communication.

Dr. Baly was obliged for the suggestion, but he had not overlooked the fact that consumption was very prevalent among the foot-guards, much more so indeed than among the cavalry. He did not think, however, that they were so entirely opposed in their habits to prisoners, as Dr. Gregory seemed to think. The ventilation in their barracks, particularly in the Tower and in Portman-street was very bad indeed; they were also obliged to mount guard very frequently, and were exposed to all the vicissitudes of the weather. Another cause of the prevalence of this disease among the soldiery is the listless state of their minds, from the want of due employment for mind and body, a state which contributes very much to the production of tuberculous disease. He would certainly attend to Dr. Gregory's suggestion when preparing his next paper.

Mr. Cooper mentioned the mental depression of the recruit, and the extreme labour to which he is subject while on drill, as a cause of consumption.

Mr. Roberts suggested as an additional cause the well-known indulgence of the soldier in venery and drinking.

Mr. Macilwain complimented Dr. Baly on the exceeding value of his paper, as illustrating the causation of disease, and enquired whether

there was any peculiarity in the soil on which the prison was built, which could give rise to these diseases. He concluded his observations by some remarks on the effect of heated air on the lungs.

Dr. Baly observed that the disease was not the effect of the drainage generally, but of a humid state of the grounds to some extent around the prison. For instance, the Wakefield House of Correction, in which these diseases are very prevalent, lies in an extensive hollow, flooded during the winter, and quite dry during the summer. The subsoil was of a clayey character, the upper crust being of a rich vegetable mould.

ANNIVERSARY MEETING, March 1st.—Mr. Stanley, president, in the chair. After the scrutators of the balloting papers had been appointed, and prior to the ordinary business of the meeting being transacted.

Mr. Macilwain rose, and in allusion to the ballot about to take place, remarked that a proposal had been made two years ago, that the council should return to the society two names for each office, in order that the fellows might have it in their power to select whom they thought proper, instead of blindly following the dictation of the council. This proposal, unfortunately had not been adopted, although it was believed to be in accordance with the general impression, and it was expected that the council would have acted upon it. He looked upon it as the duty of the society under present circumstances, when the condition of the profession was under the immediate consideration of the Government, and there was a strong feeling abroad respecting the different grades into which the profession was divided, not to make any marked and painful distinction between themselves. All were to be regarded as gentlemen, and members of a liberal profession. He then alluded to the fact that gentlemen who had been fellows of the society for a long period, had had their claims disregarded, while others, their juniors in the society, had been elected to offices of honor and distinction in their place. This he illustrated by several examples, which tended to show that as the surgical members of the society attained rank and distinction in the College of Surgeons, so their position in the society seemed to improve, and their right to its honours to be regarded as paramount. He especially exempted the physicians from the import of this remark. He then referred to the charter which had been granted to the society in 1834, and observed that it provided that the 18 fellows should be selected from the society at large, to constitute with the three grantees of the charter the first council. The society consisted of physicians, surgeons, and general practitioners, and yet in the council then elected there was not one general practitioner. The rights of this last named class of practitioners had been specially recognized by the charter, and were also provided for by the bye-laws, one section of which states, that the society should not consist of more than one third of general practitioners. Without further alluding to the bad taste which dictated that bye-law which he supposed had been framed to prevent a preponderance of that class of medical men at the election, he was of opinion that they ought to be elected to fill the various offices of the Society, and to be members of council, equally with the two other classes, especially as the same mode of election, and the same amount of fees were enforced from all. From 1825 to the present time, there had not been more than ten or twelve general practitioners altogether elected on the Council. This must have been either accidental or intentional; if accidental, in God's name, let it be altered at once; if intentional, they should then make a still further distinction, and cause them to enter by a different portal, and occupy seats apart from the others. There were altogether 460 Fellows of the Society; of these 231 were physicians, 82 surgeons, and 140 general practitioners; the resident physicians were 120, surgeons 57, and general practitioners 74,* and

* Dr. Cursham here observed that the actual number of resident physicians was 132, of resident surgeons 56, and of resident general practitioners 57.

Mr. Macilwain argued from the large number of general practitioners supporting the society, that it was but right that the bye-laws and customs of the society should be so modified, as to cause all the fellows to possess equal privileges. He then referred to certain abuses respecting the reading of papers, and the mode of making selections for the Transactions, and mentioned, that a gentleman who had at the expense of much time and labor prepared a paper for the society, had had it returned to him, to make an abstract of it, before it had been examined, and after undergoing this additional labour the paper was sent back to him after all as unworthy to be read. The object of the writer of that paper was to oppose a certain line of practice, which he considered likely to be prejudicial to life, and he had quoted passages from text-books, published by two eminent surgeons, with a view to their refutation. These two surgeons were members of the committee by whom the paper in question was examined and condemned. He did not mean to imply a charge of injustice against those gentlemen, but he thought the whole system required revision. A member of the council had told him, that the name of the author weighed a great deal with the committee in selecting papers for publication, and as he thought this decidedly injurious, he advised that all papers should be sent with a motto in a sealed letter, and the letter not to be opened until after the selection had been made. Unless some such plan were adopted, the society must suffer.

The ordinary business of the meeting was then proceeded with, and the auditors report read, from which it appeared that the income for the past year amounted to £1189. 4s. 4d., the expenditure (including the purchase of the £300 consols) to £1147. 6s. 10d., leaving a balance in the treasurer's hands of £41 17s. 6d.

A vote of thanks was then presented to the donors of the several busts of medical men which adorn the society's apartments.

Mr. Stanley, as president then delivered the annual address, in the course of which he noticed the loss of several valuable members by death, and retirement, and pronounced a well merited eulogium on the late Dr. Dalton.

The scrutators, afterwards reported that 47 fellows had voted; 33 for the house list, 13 had amended it, and one ballot paper was defective. The following are officers for the ensuing year:—

President,—Dr. Chambers; Vice-Presidents,—Dr. Gordon, Dr. Watson, Mr. Perry, and Mr. Welbank; Treasurers,—Dr. Burrows, and Mr. Caesar Hawkins; Secretaries,—Dr. Cursham, and Mr. Curling; Librarians,—Dr. Todd, and Mr. Philips; the other members of council,—Dr. Neil Arnott, Dr. Baly, Dr. Barker, Dr. Pereira, Dr. Roots, Mr. Dunn, Mr. Nasmyth, Mr. Stanley, Mr. Solly, and Mr. Ware.

Baron Humboldt, who is at present in Paris, is about to print there a work, to which he gives the title of "Cosmos," and which contains a grand summary of all the views on the earth's formation and its various phenomena, moral and physical, which the studies and travels of a life have suggested to the illustrious author, corrected and arranged under the double dictation of advanced age and multiplied experience. The subject of this book is already known in Germany by Humboldt having, two or three years ago, made it the theme of a course of lectures at Berlin. In its new form, it will be the learned author's legacy to the world.

ILEUS.—Mr. Bernecastle narrates a case of ileus in a boy twelve years old, which terminated fatally by enteritis. On examining the body after death, the small intestines were found to be strangulated, and the ileum partly gangrenous as the result of constriction from the existence of the diverticulum ilei, which remained as a pervious cord, extending from the junction of the jejunum and ileum to the umbilicus. Mr. Bernecastle speaks of the case as unique, but such is not the case; the *lusus*, although rare, has been met with on previous occasions.

A SELECT PRACTICAL FORMULARY.

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

POWDER LAXATIVE: five grains of calcined magnesia, twenty grains of powdered cream of tartar, five grains of calomel prepared by steam, mixed together. Mode of exhibition—two or three packets, containing thirty grains each, in the course of the day.

POWDER OF LUPULINE (Magendie): two drachms of powdered sugar, four drachms of lupuline, mixed together. Mode of exhibition—ten to twenty grains three times a day in a little water.

POWDER, HAHNEMANN'S MERCURIAL: one to two grains of powdered opium, two grains of Hahnemann's soluble mercury, ten to twenty grains of powdered tragacanth or liquorice, mixed together. Mode of exhibition—four to six grains in the treatment of syphilis.

POWDER, MERCURIAL WITH THE CARBONATE OF MAGNESIA (Cheyne): twenty grains of the black sulphuret of mercury, twenty grains of the carbonate of magnesia, one to two grains of the bichloride of mercury, accurately mixed together. Mode of exhibition: five to six grains at bedtime, in the treatment of cutaneous affections.

POWDER, MERCURIAL FOR PREGNANT WOMEN: two grains of the proto-chloruret of mercury prepared by steam, twenty-four grains of powdered rhubarb, forty-eight grains of sugar, mixed together. Mode of exhibition—eighteen to twenty grains evening, morning, and noon, in a little pilsan. Only half this dose is given to very young children.

POWDER, NITRO-CAMPHORATED (Swediaur): ten grains of powdered nitre, four grains of powdered camphor, twenty-four grains of powdered gum, mixed together. Mode of exhibition—eight to ten grains as a dose, as refrigerant and diuretic.

POWDERS, OPHTHALMIC (Sichel): six grains of calomel, six grains of the golden sulphuret of antimony, twelve grains of calcined magnesia, one drachm of powdered gum arabic, mixed together, and divided into packets containing sixteen grains each. Mode of exhibition—one to twelve packets daily in a little sugared water, in the treatment of rheumatic and arthritic ophthalmia.

POWDER, OPHTHALMIC (Sichel): the preceding powder, with two grains of crude opium added.

POWDER OPHTHALMIC (Sichel): four grains of calomel, four grains of the golden sulphuret of antimony, four grains of resin of guaiacum, twelve grains of calcined magnesia, four grains of the extract of aconite, one drachm of powdered gum, mixed together, and divided as the preceding.

POWDER, OPHTHALMIC (Sichel): two drachms of antimonal *Ethiops*, one drachm of resin of guaiacum, or of rhubarb, twelve grains of calcined magnesia, one drachm of gum arabic, mixed together, and divided into packets, weighing from forty to fifty grains each. Mode of exhibition—from one to eight daily in a little sugared water, in scrophulous ophthalmia.

POWDER, OPHTHALMIC (Sichel): two drachms of antimonal *Ethiops*, two drachms of sulphate of quinine, mixed together, and divided as the preceding. Mode of exhibition—two to eight packets daily, in the treatment of periodic ophthalmia.

POWDER, OPHTHALMIC (Delile): cassia seeds deprived of their outer coat, and then powdered. Mode of exhibition—from one to twelve grains inserted between the lower eye-lid and the eye in serous ophthalmia.

POWDER FOR FERRUGINOUS GASEOUS WATER: this powder, which is composed, according to M. Quesneville, of four drachms of sugar, one drachm of acid citrate of soda, eighteen grains of bicarbonate of soda, eighteen grains of the double citrate of iron and soda, contains, according to the analysis made by M. Breton, a pharmacien at Grenoble, in the 100 parts, only 20.00 of bicarbonate of soda, 22.60 of tartaric acid, 00.95 of sulphate of iron, 56.45 of sugar. Mode of exhibition—half an ounce of this powder gives a sweetened acidulated drink, possessing a ferruginous savor, and it is easily borne by the stomach, on account of the excess of carbonic acid which remains in solution.

POWDER, PURGATIVE (Hopital de la Maternite): four grains of powdered jalap, two grains of powdered rhubarb, two grains of powdered cinnamon, mixed together. Mode of exhibition—four grains for a dose for infants.

POWDER, PURGATIVE AND ANTHELMINTIC (Pringle): twenty grains of powdered rhubarb, twenty to forty-eight grains of calomel, mixed together. Mode of exhibition—from twenty to forty grains as a dose in bilious fevers, and in cases of lumbrici.

POWDER, COMPOUND PURGATIVE (Polish formula): ten grains of calomel, one drachm of powdered jalap, twenty grains of sugar, mixed together. Mode of exhibition—fifty grains as a dose for adults.

POWDER, PLUMMER'S: one drachm of porphyrised calomel, two drachms of the golden sulphuret of antimony, mixed together. Mode of exhibition—six to ten grains daily in the treatment of scrophulous and venereal diseases.

POWDER FOR PREPARING THE COMMON PTISAN EXTEMPORANEOUSLY (Chaussier): four drachms of nitre, four ounces of white sugar, two ounces of dry extract of liquorice, two ounces of extract of dandelion, one ounce of gum arabic, mixed together. Mode of exhibition—a coffee spoonful in a glass of water, in the treatment of acute urethritis.

POWDER OF PHTHOREL: a sufficient quantity of bruised sulphuret of lime, divided into fifteen or twenty packets weighing half a drachm each. Mode of exhibition—used in frictions on the palms of the hands, evening and morning, in the treatment of itch, one of the packets having been mixed with a very small quantity of olive oil.

POWDER, COOLING, AND DIURETIC: forty-eight grains of marsh-mallow powder, forty-eight grains of powdered liquorice, eight grains of nitre, two grains of camphor, mixed together. Mode of exhibition—fifty grains three times a day in a glass of water. A very useful preparation for persons who are travelling, and are affected with acute phlegmasia of the urinary organs.

POWDER, REFRIGESCENT (Joel): three drachms of powdered sulphate of zinc, one drachm of powdered sulphate of copper, forty-eight grains of camphor, twenty grains of

saffron, carefully mixed together. Mode of exhibition—on to two drachms of this powder, macerated for twenty-four hours in a quart of water, give a liquid, which when filtered is advantageously employed in the treatment of chronic inflammation of the eyelids.

POWDER, ROUSSELOT'S: one drachm of powdered white arsenic, eight drachms of powdered cinnabar, eight drachms of powdered sanguis draconis, mixed together. Mode of exhibition—cancerous sores are sprinkled lightly with it, or else it is made into a thin paste, with a sufficient quantity of water or saliva, and is spread in a thin layer over the ulcerated parts, the wound being then covered with scrape lint, or with spider's web, and the whole kept in situation by compresses and an appropriate bandage. The eschar which is formed in a few days, becomes loose, and separates from the tenth to the twenty-fifth day, and leaves a red, soft, granulating surface, which soon cicatrises. The wound dressed with dry lint. This caustic, which it is sometimes necessary to apply two or three times before a perfect cure can be obtained, demands the utmost attention of practitioners, especially when the diseased surface is extensive, in fact cases have been mentioned where it has given rise to symptoms of poisoning.

POWDER, CAPITAL OF ST. ANGE: a sternutatory mixture, prepared with one ounce of powdered leaves of asarabacca, three drachms of powdered betony leaves, and one drachm of powdered leaves of vervain. Mode of exhibition—by small pinches.

POWDER OF SANCY.—A composition as yet unknown, but in which there are contained, they say, eight ingredients, seven vegetable, and one mineral, and in which there is not any iodine in the free state.

POWDER, COMPOUND SCAMMONY (English formula): two drachms of resin of scammony, two drachms of extract of jalap, half a drachm of ginger-root, mixed together, and powdered. Mode of exhibition—six to ten grains in an appropriate menstruum. *.* A drastic purgative.

POWDER, COMPOUND SQUILL: one drachm of powder squills, three drachms of sugar, two drachms of sublimed and washed sulphur, mixed together. Mode of exhibition—six to twenty grains against coughs and colds.

POWDER, SEDATIVE (Recamier): ten to twenty grains borax, one drachm of powdered sugar, mixed together.

POWDER, SEDATIVE (Wetzler): twenty-four grains powdered root of belladonna, ninety-six grains of sugar mixed together, and made into ninety-six equal doses. Mode of exhibition—two to six daily in the treatment of whooping cough.

POWDER OF SELTZ: five drachms and a half of tartaric acid, divided into twelve packets, and wrapped up in white paper, six drachms of bicarbonate of soda, divided into twelve packets in blue paper. Mode of exhibition—the acid is dissolved in a glass of water, after which the salt is added, and the mixture drank while effervescing. *.* A cool drink.

POWDER, STIMULATORY: one drachm of the leaves of marjoram, one drachm of betony leaves, one drachm of asarabacca leaves, one drachm of liron fancy flower, mixed together, and powdered. Mode of exhibition—same as the powder of St. Ange.

POWDER, STIMULANT AND NUTRITIVE: one ounce powdered osmazone, one ounce of powdered gelatine, four drachms of powdered gum, twelve grains of powdered cloves, twelve grains of powdered pepper, twelve grains of celery seeds, twelve grains of carrot, mixed together, and preserved. Mode of exhibition—three ounces of this powder, and a little salt, mixed with a quart of boiling water, form a very healthy and very agreeable soup. The liquid ought to be clarified and filtered through linen before it is used.

POWDER, STYPTIC (German hospitals): one drachm powdered kino, two drachms of powdered gum arabic, mixed together. Mode of exhibition—against traumatic hemorrhages, and those which result from leech-bites.

POWDER, SULPHURO—OR SULPHURICO-MAGNESIA: equal parts of sublimed and washed sulphur, and calcined magnesia. Mode of exhibition—twelve to twenty-grains every morning fasting, in a little water or decoction of dulcamara, in the treatment of the second period of a eczema.

POWDER, COOLING (Stahl): nine drachms of powdered sulphate of potash, nine drachms of powdered nitrate of potash, nine drachms of powdered persulphuret of mercury, mixed together. Mode of exhibition—six to twenty grains in a little sugared water. A sedative, possessing very little efficacy.

POWDER, TONIC: sixteen grains of powdered nutmeg, twenty-four grains of powdered valerian, eight grains powdered camphor, mixed together. Mode of exhibition—three to six grains daily, in water, or in the form of bolus pills in hysteria and epilepsy.

POWDER, VERMIFUGE: two to three drachms of powdered sennantion, three grains of calomel, mixed together, divided into three equal doses. Mode of exhibition—dose at bedtime, then the succeeding morning, and a third the morning after, in a cupful of milk, or water cases of ascariides or lumbrici.

POWDER OF VIENNA: equal parts of potassa caustica and powdered quick lime, mixed together quickly in iron mortar, and kept in a well stoppered bottle. A small quantity of this powder is mixed with alcohol, and applied to a soft paste, which is applied on the skin in the manner as for an ordinary issue, the whole being covered with a piece of plaster. The action of this caustic is sharp, and circumscribed.

POWDER, EMETIC: twelve grains of ipseacuanha, grain of tartarised antimony, mixed together, and divided into three parts. Mode of exhibition—one to be taken every quarter of an hour. If the two first are sufficient, the third need not be given. Vomiting is aided by making the patient drink a great deal of hot water.

PRECIPITATE, WHITE. a product obtained by treating together metallic mercury, nitric acid, and sea salt, which must not be confounded with the mercury of life insoluble ammonio-mercurial muriate, which is more active, and which only differs from calomel prepared by steam, by retaining a small quantity of water inter-

It is used made into an ointment with cerate of lead, in the treatment of scrophulous and syphilitic affections, &c.

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

A few days since we were considering the means for determining the presence of sugar in the urine. It was for a long time a matter of doubt whether sugar existed in the blood, but this has been set at rest for some years, first of all by an Italian, and subsequently, but nearly at the same time, by Dr. C. Mapeland, formerly a pupil of this school, who has stated that he has been able to extract molasses in considerable quantity from it. The test of fermentation has been applied to the serum of the blood, and it has been found to yield a considerable quantity of carbonic acid; and this was pointed out by Mr. M'Gregor, of Glasgow, who showed the applicability of the test; and what struck his attention particularly, was its high specific gravity over common blood serum, it being 10.28, whereas the ordinary specific gravity is 10.24.

The presence of sugar in the blood distinctly proves that the kidneys are not the chief seats of diabetes. The office of the kidneys is to excrete, and, therefore, if there is sugar in the blood, it goes along with the other matter excreted. The next question is, where does this sugar come from? whence is it derived? It was for a long time supposed that the kidneys were the seat of the disease; but *post mortem* examinations have determined the character of the pathology. Patients affected with diabetes go on for a long time getting thinner and thinner, weaker and weaker, until they ultimately pass into a state of phthisis. What seems very remarkable is, that in the course of the disease, the urine loses its saccharine quality a short time before death. It has been observed by Dr. Bell, that acute diseases, occurring in the course of diabetes, sometimes diminish the quantity of sugar in the urine; and another point, equally well established, is, that an exclusively animal diet will, in many cases, greatly diminish the saccharine matter of the urine. In patients who have died of phthisis, the kidneys have been found very large, and their texture altogether closer than usual. The whole of the vascular structure too, in such cases, exhibits an increased development, not only the blood vessels, but the uriniferous ducts. In a few instances, the kidneys have been found to exhibit some granular degeneration. An additional character of the urine in diabetes is, that it sometimes contains albumen, as well as sugar. The liver, too, is congested, and the bile presents an unnatural condition, being usually acid. The stomach is sometimes unduly developed, and at other times contracted. The lungs and other parts exhibit symptoms of tuberculous disease, though not to a very considerable amount, yet to a sufficient extent to curtail life. These are the chief lesions met with, but they are altogether inefficient to account for the disease. An opinion has been for a long time entertained, by a great number of persons, that it is owing to an error of digestion, such as would lead to the conversion of the vegetable parts of the nutriment

into sugar: the only objection, to this idea, being the non-appearance of sugar in the blood, but since the discovery of Mr. M'Gregor this view has received some corroboration. Sugar has been found in the alimentary canal, and it is clearly ascertained to be developed in the process of chylification. The quantity of sugar found in the alimentary canal of a healthy person was scarcely appreciable, whereas, that found in a diabetic person was very abundant. Another question is, whether the sugar is derived from the vegetable constituents of the food only, or those allied to sugar in composition, or whether it is owing to some further conversion of the fibrinous and gelatinous matter, or further, whether its presence in the stomach may not result from secretion? Some of Mr. M'Gregor's experiments settle the question. If it were dependant solely on the conversion into sugar of the vegetable constituents of the food, it might be stopped altogether by withdrawing those articles of food which contain the principles that are convertible into sugar. It was found accordingly by Rollo and others, that the quantity of saccharine matter was diminished under the exclusive use of animal food. Mr. MacGregor administered exclusively animal food to diabetic patients and at the end of three or four days the contents of the stomach still contained sugar, but in very diminished quantity. The mere fact of its containing any sugar would seem to be an objection to the theory alluded to, but I do not think it is a conclusive argument against it, for the sugar was very much diminished in proportion. There may be another source from which the sugar is derived:—i. e. as a secretion from the mucous glands and other parts of the secreting apparatus of the stomach. We find sugar in most of the secretions of diabetic patients, and why should it not be in the gastric juice? Sugar has been found in the excretions, in the alimentary canal, and in the saliva, but it has not been found in the perspiration, and this is the only secretion in which it has not been detected, though it is very probable, that if the excretion of the skin were more carefully examined, that sugar would be detected in it. We must not forget how closely to the saccharine principle, some animal matters, gelatine especially, are connected. However, whatever may be the cause of this saccharine production, the practical inference is, that the mode of treatment in the disease must chiefly have reference to the articles of food used, and the state of the function of digestion. Supposing this view to be the correct one, that the sugar collects in the alimentary canal, in the process of chymification or chylification—that process by which the food is converted into material fit for the nourishment of the body—and that the disease depends upon an error in this process, this will afford a very simple explanation of the cause of diabetes. Supposing the disease to originate in an error of the digestive power of the stomach, the question is, what is the nature of the error? We know that acids, particularly sulphuric acid, out of the body, have a tendency to convert starch into sugar. Is there anything of the same kind taking place in the stomach? We cannot answer the question affirmatively, but we know that acidity of the stomach is often greatly complained of by persons suffering

from diabetes. Magnesia has been said to remove this acidity, but in a vast number of instances it has totally failed. Different other remedies have been used under the idea that it is an error of digestion, and various tonics have been used; electricity has also been applied to the region of the stomach, with various other agents supposed to be capable of exercising an influence on the digestive powers, but very few of them have produced any good effect. As far as experience has gone, we have not much power of altering that error of function on which the excess of sugar depends; yet we should not despair of finding out some remedy possessed of this power. There are circumstances that seem to prove that this secretion of sugar is a functional disease. The production of sugar varies very much in diabetic persons; and independently of the quality of the food, the production of sugar will sometimes cease, and it is clear from this, that it may be stopped for a while. If we could get a therapeutic account of this temporary cessation we should then succeed in curing diabetes. Blood-letting has been used extensively, and Dr. Watt considered it a most effectual remedy. Dr. Bardsley, of Manchester, tried this, and found it useful in very early cases, but of no use in the subsequent stages. He does not look upon it as a means of cure in any case, but as being useful in diminishing the quantity of sugar and the quantity of urine, and allaying, for a time, the thirst, and other febrile symptoms connected with it. Blood-letting from the limbs has relieved the pain, and uneasiness of those parts, but no permanent effect has been produced. Application of leeches to the epigastrium has been observed to be followed by a diminution of the sugar in the urine, but these have their greatest influence in the earliest stages of the disease. Various other remedies, (among them hydrosulphuret of ammonia) have been used, under the idea of counteracting the vegetable tendency, but of all remedial agents none have been more favourable than opium. Dr. Warren first brought opium into exclusive use in this disease, though it was first recommended by Dr. Francis Horne. It diminishes the quantity of urine, and reduces the saccharine quality of it most considerably. It requires to be given in very considerable doses. The doses which have been sometimes given have amounted to as much as forty or fifty grains in a day, and yet, singular to say, its narcotic effect has not been produced; a sort of sleepiness has been produced, but none of its poisonous effects, as might *a priori* have been expected. However it is not necessary to give more than from six to eight grains a day, gradually increasing the dose as the patient will bear it. It is sometimes useful to combine it with antimony or ipecacuanha. Much good is derived from sudorifics, and the vapour-bath. The warm and hot-air baths have been tried. These remedies have been found in some degree useful in diminishing the quantity of urine, and the quantity of saccharine matter, but they are only subsidiary to opium which is the chief remedy. Aperients, particularly those that increase the secretion of the liver, are found necessary from time to time. Of all modes of treatment none appear to answer so effectually in giving

a chance of a total cure as the exclusive animal diet. Rollo first recommended this, and he gives some cases illustrating the efficacy of it. By keeping his patients on the fibrinous parts of animal, without any vegetable food at all, he reduced the quantity of urine from sixteen to twenty, or thirty pints down to three or four or five pints in the course of a few days; and with this reduction of the urine there was a great improvement of the symptoms. However, on closer examination of all these cases it appears, from the experience of Dr. Prout and others, that in none of them has the sugar been entirely removed from the urine. As the result of my own experience, I should tell you, there must be no compromise with regard to diet. Dr. Prout states that it is not necessary, altogether to withdraw bread, and that the patients may be allowed to have malt liquors. Now, I have tried that plan in several cases in the hospital, and I have seen it tried elsewhere, and it is remarkable how little impression is produced on the symptoms until the farinaceous food and malt liquors and all such things are wholly withdrawn. The chief difficulty attending the exclusive use of animal food, is that patients get disgusted with it and have not resolution to continue it. They seem to long for other things. In such circumstances a good substitute for the common bread is bran bread.

We now go on to gout. This is a disease I take up now, because it has a very remarkable connection with the diseases we have been lately considering. In the very same subjects in whom the red sand deposit takes place—that is, the lithic acid deposit—in these very subjects gout occurs. Gout takes its name from *goutte* or *gutta* (drop), the notion being that it is something falling into the joints, and producing mischief there. Various circumstances seem to confirm this humoral notion of the origin of gout. It is, doubtless, a disease of the blood especially connected with an imperfect excretion by the kidneys. This imperfect excretion refers to the lithic acid. It occurs to persons in whom this deposit is abundant, and where its excretion has been defective, and it may be excited by various circumstances which are known to produce an undue quantity of lithic acid in the system. Gout is of two forms: the regular, and the irregular. Regular gout is of an inflammatory character, and manifests itself in what is called a fit. A person who is going to have a fit of the gout, usually has some premonitory symptoms, which are not referable to the joints that are to be affected, but to the whole system: indigestion, acidity of the stomach, flatulence, with bowels more costive than usual; sometimes a feeling of flatulent distension and so forth. The symptoms are chiefly those referable to the stomach; sometimes, however, other functions are disordered. Palpitation and asthma may come on where there is a predisposition to them, with other functional derangements arising from something in the system at large. These premonitory symptoms vary, and sometimes assume a shifting character; the patient one day suffering from indigestion, on another day from palpitation, and at another time, from pains or aches in some parts. In a regular fit the gout has become localized, and the patient may have felt some uneasiness in the joints. The fit comes on in the night; he is awake by a pungent sharp pain—a stinging and aching at the same time, enough to wake and disturb him, and he finds there is considerable tenderness in the part. The pain increases, and in the course of a few hours, inflammation is visible on the surface, and the part becomes swelled, and extremely tender. The tenderness and swelling may extend to the whole limb. This goes on: the pain continues for five, six, or seven hours, and is accompanied by a considerable amount of feverishness; the pulse is quickened, the skin is dry, and thirst comes on, and there may have been, in the first instance, some chilliness, and symptoms of rigors. After some hours, perspiration ensues, and the patient gets some relief; the pain becomes trifling, and at last ceases, but the swelling and the redness remain. The pain returns the next night, and may last for a longer or shorter time. After a while, the inflammation diminishes; the skin that was so intensely inflamed, begins to

shrivel; the pain subsides, and becomes less livid and the swelling gradually disappears. Now as these paroxysms occur in the morning after a remission, the urine will be found to be very turbid, depositing a large quantity of the lithates of ammonia and soda. In the most remarkable cases, the deposit is most abundant, and the more abundant it is in connexion with the febrile symptoms, the sooner do the paroxysms come to a termination. If the urine is scanty, and the development of fever uncertain and irregular, then the gout is apt to remain for a longer time in the system. A regular attack may last two, three, four, or five days, a fortnight, or three weeks. We know that it may be cut short. I have already said enough to prove that it is an inflammation, not of a common, but a specific character, that there is disease in the system before the inflammation comes on, and that is often preceded by a functional disorder. Sometimes when the inflammation appears in the great toe or some other small joint, it shall suddenly disappear from that, and some severe disturbance will take place in some internal organ. At first the disturbance is of a spasmodic character; a violent cramp will seize the stomach accompanied by a terrible pain, and exhaustion, and sometimes syncope and violent nephralgia occur with shivering and renal irritation. Diarrhoea may occur, and sometimes delirium, and very violent palpitation of the heart. These circumstances shew, that the cause is something mobile, and not fixed in the part itself, and its fixity in the joints is a circumstance rather favourable than otherwise.

Now we have no hesitation in saying, that the disease arises from lithic acid, in some of its combinations, and is connected with a defective action of the kidneys, or gastritis dyspepsia, connected with plethora, and insufficient exercise, accompanied by high living and excesses in diet, more particularly excesses which exercise a stimulating influence on the kidneys. All these different circumstances point out the production of lithic acid in the system as the great cause of gout. The disease declines in proportion as lithic acid or its compounds are deposited in the urine.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY.

Delivered at ST. GEORGE'S HOSPITAL, by SIR BENJAMIN C. BRODIE, Bart.

(Reported by G. SAYLE, Esq., M.R.C.S., late Curator of the Museum of St. George's Hospital School.)

(Continued from p. 456.)

ON MORTIFICATION.

GENTLEMEN,—There are two or three points connected with our last week's lecture which, from want of time, were not sufficiently explained. The first point was the medical treatment of a patient suffering from mortification, the result of inflammation. This will vary according to circumstances; the state of the patient's constitution at one time requiring antiphlogistic treatment, and at other times, the employment of stimulants. Now, in these latter cases it becomes a question whether tonics are, or are not useful; bark had formerly the reputation of curing mortification; other tonics and stimulants have also been employed. The result of my own experience tends to show that these remedies are of little service while mortification is actually going on, and that the employment of bark at this period is productive of as much harm as good. The stomach does not digest it, and the latter becoming loaded, the proper digestion of food is prevented. Some are in the habit of giving ammonia in these cases; it acts as a temporary stimulant, and may seem to afford relief at the moment, but wine, if properly administered, is much better, more efficient, and its stimulating effects not so temporary. I must confess, after giving ammonia myself and seeing it given by others, that it is of little service, and its continued use weakens the constitution; its use introduces an alkali into the system, which produces the same debilitating effects as the long continued use of any other alkali. But when the mortification has stopped, and the sloughs are coming away, then matters are different. Bark

is now of eminent service in upholding the patient's strength during the process of sloughing and suppuration, and I think the old-fashioned decoction of cinchona is far preferable in these cases to the new remedy—quinine. Indeed, when the object is to give strength and tone to the system, bark is much the best. Quinine is very useful in intermittent fevers and neuralgic affections, but where there is a profuse and weakening discharge, bark is to be preferred. Other tonics will also be found useful at this time.—The second point is, with regard to the local treatment when the mortification has stopped and the sloughs begin to separate. Well, really I have little faith in any local treatment. It is customary to apply medicated and stimulating poultices; but the process which is going on is a natural one, and what I have seen leads me to believe that local applications do not much towards hastening the cure. When sloughs have come away, if there be a foul surface, some digestive ointment may be useful in cleansing the sore and inducing healthy granulations. The ung. elemi, or the common yellow basilicon will be found suitable for this purpose; but I need say no more on this topic, because, when sloughs have come away, the surface from which they have separated are but common ulcers, and the same treatment is applicable to both. I now come to speak of another variety of mortification,—that from ligature. A ligature applied round any part of the body may produce mortification; for example, round the arm, or the intestine; and may cause the part to perish; but the effects of ligature are not the same in all cases. A moderately tight ligature produces mortification in one way; a very tight one in another. When you perform the common operation of venesection, you apply a bandage round the arm previous to opening the vein, and by this means stop the circulation in the superficial veins, without affecting that of the deeper seated. But it may be so tight as to stop the circulation in many of the veins, perhaps in the arteries also to a certain extent, yet without producing the death of the part. At first the veins swell, but if you remove the ligature, they immediately subside; but leave it on twelve or fourteen hours, and then the whole hand is found swollen; it is something more than common obstruction of the veins. With this there is œdema, the result of effusion into the cellular membrane. A bandage round the arm produces œdema of the hand and all that part of the arm below the seat of constriction. A ligature round the intestine, as in hernia, produces effusion into the hernial sac; the blood is prevented from returning to the right side of the heart, the capillaries become distended, and whenever this occurs, from any cause, some portion of the serum of the blood is poured out to relieve them. This is the explanation of all the forms of dropsy, that of the pericardium, or pleura. Thus, any tumour pressing on the vena portæ may produce dropsy of the belly and parts below. Suppose the ligature is allowed to remain on still longer, then low inflammation is set up, which may terminate in mortification. This, then, is one mode in which ligature may produce mortification; first, by producing distension of the veins, then effusion of serum into the cellular membrane, followed by a slow kind of inflammatory action, which speedily runs on to gangrene. But a ligature, applied only moderately tight, may remain on a long time before it produce mortification. When I was experimenting upon animals with different poisons, I found that arsenic, or woodrat introduced into a wound in the leg speedily began to act as a poison, but if previously to introducing the poison I applied a ligature firmly round the limb, no such effect was produced. The poison in some cases did not operate in an hour and in some instances not at all. I have allowed the ligature to remain on for three hours, and I have then removed it, and the limb has recovered perfectly. You see the same thing in a strangulated hernia. It may be that the stricture is tight enough to produce mortification, but if it is not, congestion, and a low kind of inflammation are produced, but when the stricture is divided, the part recovers itself. But suppose it should arrest the arterial circulation also, what then happens? Why the part from

not receiving the proper supply of that fluid on which its vitality depends, dies almost immediately. You may put a ligature on so tight, that the part will be separated in half an hour. There are many diseases in which you will see the effects of different degrees of ligatures: thus a woman has femoral hernia, the curved ring is perhaps small, but a large portion of intestine is driven through it; in such a state of things the intestine may be dead in half an hour, but if the opening be larger, or the quantity of intestine less, then instead of the immediate death of the parts, you have venous congestion, effusion of serum, and inflammation, which will end in mortification in the course of two or three days, but not sooner. Again a man comes to you with para-phymosis, the prepuce has been forcibly drawn back, its orifice acts as a ligature upon the penis, the part becomes swollen and inflamed; and if not relieved, it will speedily mortify. Or, again, a man has piles which protrude at the anus, the sphincter ani muscle contracts upon them and acts as a ligature, the venous blood cannot return; they become inflamed, mortify, and slough off, and the patient is cured. From these examples you will now understand the principle on which ligatures are applied in surgical operations. You can cure piles by the application of ligatures, but if you do not draw them tight, the veins swell and inflame, and may cause the man's death, but draw the ligature very tight, and prevent into them the flow of the arterial, as well as of the venous blood out of them, and they die directly and the patient is cured. Recollect that in all surgical operations the ligature should be applied as tight as possible. In curing *naevi*, or tumours of the tongue by ligature, this is to be particularly observed, as it materially lessens the patient's sufferings, where if it be not drawn tightly the part does not die, and severe constitutional disturbance may follow; your object should be to stop the flow of arterial blood as soon as possible. You might suppose half an hour would be sufficient for this purpose, but such is not exactly the case: when a ligature is applied to an artery its middle and inner coats are at once divided, the outer coat sloughs, and in a fortnight the ligature comes away: but cut the ligature in two when it has been on but half an hour and the outer coat recovers itself, and the circulation in the artery may or may not be stopped. I had a patient with tumour of the tongue, and in accordance with Sir E. Home's plan of cure, I applied a ligature around its base: in an hour the part became quite livid, in the evening I saw him again and as he was in great pain I cut off the ligature, and to my great annoyance the part which I thought quite dead had recovered itself next day. In fact the ligature must be left on until the part is separated by a natural process. We come now to consider mortification arising from another cause—namely pressure. Any part of the body may be destroyed by pressure—which is merely a ligature applied over an extended surface—acting on the trunks of vessels and capillaries altogether. This kind of mortification is chiefly observable when pressure is made on parts over a bone, where there is no cushion of flesh between the skin and bone; in these cases if the pressure be great, it may produce mortification immediately. When I was a student, a man was brought to the hospital with fractured leg, the surgeon applied common splints, binding them to the leg as tight as possible; the next day the bandage was removed and a broad slough had formed just above the instep. I have frequently seen sloughs produced as it were instantaneously, in consequence of bandages being applied too tight. Generally, however, when mortification is the result of pressure, it does not occur immediately, but after some little time: not as a direct but as a secondary effect. For instance, a man is bed-ridden, he lies upon a hard mattress, becomes very thin, the skin over the sacrum gets thin and inflames, is of a dark colour and vesications form upon it, and the inflammation goes on till the part mortifies. So I say, although pressure may produce mortification immediately in some few instances, it does so, more frequently by producing inflammation first, which—the pressure being yet continued—terminates in mortification. This kind of mortification from pressure takes

place under certain circumstances more rapidly than in others, as for example, in the debilitated state of the constitution following continued fever.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c., Translated with Notes illustrative of some important doctrines in Physiology, Phrenology, and Moral Education.

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

ACUTE ALTERATIONS OF THE GREY SUBSTANCE.

In this substance, the afflux of blood necessary to excite an irritation sufficient to produce a permanent delirium, determines in the long run, a particular decomposition; the cortical substance when this has taken place, appears to consist of three distinct layers. 1st, The first and most internal of these layers, that which is contiguous to the white substance, preserves its natural grey colour with but slight alteration; 2nd, The second thicker and of a vivid red or violet hue, seems as if entirely formed of sanguineous vessels highly engorged. This layer when it presents a vivid red appearance, and its consistence is augmented, is in my opinion the seat of all maniacal symptoms and of all morbid exaltations of the intellect. In such cases, the consistence varies a little according to the more or less advanced state and acuteness of the disease, being more firm in the beginning, and less so towards the decline; 3rd, The third layer much thinner, is of a pale whitish hue, arising from the albuminous exudation which we have found so strongly marked in some cases, and which in all others is distinguished from the middle layer by its greyish appearance.

The most remarkable alteration is the deep red colour and inflammatory thickening of the second layer. It is the consequence of an active concentration of blood in this vascular tissue, where its presence by exalting the energy of these parts, produces acute delirium with all the explosions of mania. When the acute delirium is mitigated, and has a tendency to become indolent and chronic, this red colour also undergoes a change; the blood retires, the hue is changed from red to brownish, and the cerebral pulp becomes less firm. These changes mark the moment of transition to a favourable resolution, to a tendency to recovery which should be skilfully seconded by the treatment. If this favourable moment be neglected, and time is allowed to pass away, the irritation instead of being resolved, passes insensibly into the chronic, incurable type; the grey pulp, altered, decomposed by long congestion, shrinks, loses its colour, turns white or pale, and loses all its excitability; the intellect following in the track of these organic alterations passes successively from excitement, to enfeeblement and extinction.

ACUTE ALTERATIONS OF THE WHITE SUBSTANCE.

The white substance being more compact than the grey, and formed, notwithstanding what may be said to the contrary, of fasciculi of fibres that are perfectly evident, is less penetrable to sanguineous injection, and consequently the phenomena resulting from morbid irritation of its tissues are less easily recognised than in the other substance; they may, however, be recognised by the following signs:—its normal colour of dead white is slightly altered, and in its stead we find a livid hue resulting from a deep injection of the capillaries; blackish spots and ecchymoses more or less extensive may be observed. One of the most constant effects of irritation of the white substance is the destruction of its fibrillary arrangement, which is sufficiently obvious in its healthy state.

If the disease be not arrested in its first stage true inflammation supervenes, softening the white substance, rendering it diffuent, and giving it the appearance of crushed cheese. This fresh alteration is soon fatal; if it last any time, it terminates in suppuration in the centre of the softened mass, or a hæmorrhagic ecchymosis. When the

irritation subsides, and is dispersed, the delirium becomes calm. But when on the other hand, the irritation passes into the chronic type, the white substance undergoes the slow induration which is found to accompany demency.

The brain, like all other organs is liable to be irritated, inflamed, and disorganized; like them it may be diseased partially or totally; the action of thinking, feeling, and moving, the cerebral function, in a word is disordered, exalted, or destroyed, wholly or partially according to the progress, extent, or seat of the alterations of the brain, as well as according to individual predisposition.

The irritation of the cerebral pulp, such as has just been described, is the particular affection that gives rise to furious delirium or acute mania, when the irritation is violent, accompanied by redness, and morbid congestion of the cerebral pulp.

One of the peculiar characteristics of this irritation, is the great facility with which it becomes chronic, returns on slight cause, and thus tends to incurability. This disposition is inherent in the brain itself, than which there is no organ more disposed to habit and periodicity.

We know that irritation has existed in the brain when we find after death, red coloration, and decomposition of the grey substance into three layers, and a violet coloured injection of the white substance. This redness and injection occur also in the nerves, a fact which I had abundant opportunities for verifying during Beclard's course of experiments on the nerves; the section of the nerves giving rise to lesions similar in every respect to those of the irritated brain, and the cicatrization being effected by an inflammatory process perfectly resembling the red coloration of the brain in cases of furious mania.

Let us, moreover remark, that in this acute alteration of the cerebral substance, the exaltation extends not only to the intellectual faculties, but likewise, and with equal intensity to the motility and sensibility. The muscular power is extreme, the sensibility exquisite, and the senses perceive more keenly: the exaltation of the power of speech, shews itself in continual shouting or song, and hence we must not be surprised if, in the chronic state, we see these cerebral lesions, producing profound disturbance, not only in the intellect but also in the muscular and sensitive apparatus; and such we shall find to be the case hereafter in demency and general paralysis. The facts thus seen shed a light on muscular tremor, and the hesitation and difficulty in pronouncing articulate sounds.

III.—ACUTE MONOMANIA.

Maniacal exaltation may be the result of a single idea, or of a constant series of the same ideas, although the reason seems to remain sound on other subjects. This partial delirium may give rise to all the symptoms of mania; we are now speaking of delirium or monomania of the intellect, which we distinguish from monomania of the propensities, that is from acts so strange, and often so deplorable, which are the consequence of perversion of certain instincts. We consider this distinction, to be one of great importance, not only as regards the history of insanity but its applications in medico-legal questions. For the present however we mean to speak only of the monomania of ideas.

The ideas which characterise the monomaniacal delirium arise generally from ambition, or pride in men, and from vanity, love, or religion in women. It is to an excess of pride that we must refer the idea of believing one's self to be God, a king, a prophet, or an emperor; and to vanity rather, that which makes women believe themselves princesses or queens; for they care less for authority, than its emblems of dress and glitter. Religious and political exaltation, erotomania, or the exaltation of amorous passion, nostalgia, and misanthropy, may be enumerated among the variable causes of monomania. The mania without delirium described by Pinel, which consists of an invincible propensity to ferocity, must be classed with monomaniacs of the instincts and propensities.

Acute monomania whatever be the predominant idea, closely resembles acute mania by the continual agitation by which the patient is tormented, and the cries, invectives, and fits of anger and

fury to which he gives way. This fury is the more vivid, from their being convinced of the reality of their chimeras, and capable of maintaining by close reasoning the reasonableness of their delirium, persuaded that they are in perfect health, and that their detention is only the result of envy, or odious machinations; these monomaniacs are irritated by any, even the slightest cause, and are the most indocile, insupportable, and dangerous beings in the establishment. If some of them appear sombre, silent, and profoundly absorbed in their meditations, the calm is only a deceitful one; their studied abstraction confirms them still more in their delirium, which soon breaks out again with greater violence.

Suicidal monomania is embraced in the distinction here established; there is a species of suicide resulting from a perversion of the instinct of life, which ordinarily nothing can prevent, and which is soon accomplished: this is a kind of monomania which we refer also to the history of the diseases produced by the perversion of the instincts, and which we shall describe hereafter. But there are also suicidal monomaniacs, desiring to destroy one's self, that are exclusively intellectual, and that proceed from a false idea, a false perception, or a false judgment.

An insane person falls from a fourth story because he takes a window for a door leading into a garden. Another thinks that he has become odious to his family, or that he is accused of the greatest crimes; he will not survive his shame—he tries to kill himself, in consequence of an erroneous conviction. A third pretends, in destroying himself, that he is only obeying the Almighty, and thus escaping eternal damnation; this again is an instance of false reasoning. A feeble mind is easily overthrown by religious error. The patients who are thus under the influence of a ruling idea, the secret of which they often conceal with great care, employ a patient perseverance in the execution of their plan;—they sometimes resort to cleverness and extraordinary ruse to gain the confidence of their attendants, in order the better to throw them off their guard. A remarkable characteristic of such is, that they refuse to die by any other mode than the one they have chosen, and on this point of their history, the most singular hizareries might be related. The determined suicide on the contrary destroys himself by any means that offer.

In this respect, the deliberate suicide of the English, from spleen as it is termed, can only be the result of a want of ideas: it is generally those who have exhausted all enjoyments, and who pass suddenly from an active, commercial life to the leisure of fortune, in whom this kind of monomania occurs in the prime of life. This tendency is favoured both in France and England by a variety of causes: the absence of religious ideas in the masses, and that continual affectation of contempt for life; and then the disproportion of fortunes, two extremes tending to the same point,—satiety of life; and the chances of commercial speculations, debauchery, the abuse of liquors and of pleasures that conduce to impotency, diseases of the bladder and urinary organs, epilepsy, and in a word to all causes that undermine and wither life in the very sources of its joys.

IV.—CEREBRAL HALLUCINATIONS.

By hallucinations, we mean certain sensations which having been perceived by the insane, seem to be aroused again in the brain solely through the excitation of the organ, and without the actual presence of the objects which those sensations represent.

In a healthy man, for instance, dreams present a striking example of these hallucinations; in dreams, we hear, we touch objects which undoubtedly are neither in our bed, nor in our room. But what happens in healthy sleep, occurs also in the state of malady to certain insane persons; thus they experience, as it were spontaneously, false sensations without any external cause, which suggest incessantly words and actions, that seem strange to us, but perfectly reasonable to them, and to which on this account, they cling the more tenaciously.

We reserve the term, illusions, for those diseases of the senses, and of the sensibility, although in

ordinary language, they are still called hallucinations: illusions of sight, of hearing, of touch, of smell, of the cutaneous sensibility, &c.

Cerebral hallucinations are the most important to be studied, as they precede almost always, the explosion of fits of mania, and as when they persist, they alone will suffice to account for the patient's tenacity to erroneous ideas, and the secret motives of his determinations. This subject is extremely well handled in the works of Ellis.

OBSERVATIONS ON THE HUMAN FORM, &c.

WITH A THEORY OF BEAUTY, APPLIED TO THE ANTIQUE STATUE AND THE HUMAN FORM.

Under this title, in the *Practical Mechanic* for January, is published the first of a series of papers from the pen of Dr. Knox, the celebrated anatomist, of Edinburgh, and corresponding member of the French Academy. These subjects in themselves naturally so interesting to educated minds, are rendered doubly so, by the elegance of style, and terseness of language exhibited by the writer.

The paper opens with an expression of the generally admitted fact, that in the sculptures of ancient Greece, the proportions of the human form are chiselled with an accuracy which in vain is looked for in the works of later ages; except in the few and far between, memorials, which Canova, and a few others have left behind them—"proofs of their power of truthful copying from the antique."

By the "antique" Dr. Knox would imply, not the works of Pheidias or Praxiteles, but those, which, reliques of Egypt's glorious proficiency in arts and sciences in ages long anterior to the civilisation of Greece, still attest her claim to the supremacy of mind. A tasteful appreciation of the merits of these "antiques" he allows may not and does not generally, exist among those, whom, from natural talent and education one would imagine capable of appreciating their beauties. Such persons he divides into those *who do not see* and those *who either from an affected or real prejudice in favour of the reliques of Greek art, will not see*. Among the latter he classes Mr. Haydon, and after recognising his due claim to universal approbation for his primal discovery in this country of the beauties of the Elgin Marbles, and paying due and deserved honour to his artistic skill, gently intimates, that in upholding the "Antinous," the "Theseus," &c., as peerless, and unapproached by any efforts of more ancient art, Mr. H. is but riding a very excusable hobby, in company with many others of recognised claim as connoisseurs in matters of *verlu*. He next proceeds to criticise the metaphysical opinions as to what constitutes "beauty," and maintains that the definitions given of it by metaphysicians, from the days of Socrates down to those of Alison, the author of the celebrated "Theory," and later still, to those of the Bridgewater treatise-writers, have been in reality identical, though guised in different language—and, as being metaphysical, necessarily erroneous.

"Mr. Haydon, Sir Charles Bell, and others, endeavour to adapt our notions of beauty to circumstances altogether external and extraneous; sometimes they said it was the contrast with the brute form which made us think them beautiful; at other times it was the intellectual character. The notions of Sir C. Bell and of Mr. Haydon on all these points we shall find so contradictory as to be scarcely worth a serious refutation; and my noticing them so particularly is merely in compliment to the genius and ability which these distinguished artists clearly possess."

In Dr. Knox's opinion, "the term 'Beautiful' is strictly applicable, but to the outline of certain human forms, which to the eye of the educated connoisseur, at once appear faultless." Such forms are beautiful entirely or partially. Among the former are the Ariadne, the Bacchus, the Mars, the Niobe, &c., and among the latter the Medicean Venus. The hands of this statue when examined strictly, strike the observer of taste as being imperfect in execution, and not in keeping with the chiselled representation of the other parts of the statue. How is this? The fact is explained,

when he recollects that the present hands of the statue are not those originally executed by the nameless sculptor, who fashioned this otherwise faultless work. They are the production of a later period—the work of Bernini, and completely unworthy of the skill of the artist.

Dr. Knox proceeds to ask:—"But is it not natural for the least reflecting person to say, were there no fine hands on the Italian women which the Italian sculptors from Buonarrotti to Canova might have copied, and thus replace the antique hands of the Venus? It appears not. Either no such hands were to be found, or no such artists as the antique sculptors; or, (and this is generally admitted as the difficulty of restoring all lost parts in ancient statues), the theory of the ancients on which they constructed their works has been lost. To those who have not deeply studied the matter, an avowal of this kind must appear quite mysterious; and they very naturally say, were there never then any human beings like these antique statues? And if there never were, how came there to be artists, with thoughts so sublime, and yet so accurate, as to carve figures without any visible type in nature? * * * *

"According to some, the ancient sculptor selected all the finest forms he could muster, choosing from them the beauties of individual parts, and adding them to his ideal figure. This theory still lingers about the schools; but wherever such a system is tried, it could only give rise to monsters, not the less monstrous that in some portions they were beautiful. But here these authors forgot to state in what the beauty of these individual parts consisted; the female head, when beautiful, must be small, really and comparatively; the feet and hands small, the loins broad and full, the arms and limbs tapering, the hair full and flowing. Now, *why* are these proportions and forms beautiful?"

He next proceeds to prove from the paintings found in the tombs of Thebes and Memphis, that the birth of the productions of the palette and chisel must have been contemporaneous, that they must have grown together, and have been brought to perfection by the one people. To the ancient Greek, as to a descendant of that people, would he be inclined to award the praise of helping to bring to perfection, these arts, which the painters and sculptors of modern times (under which classification he places, the most brilliant artists of the Italian school,) have done nothing to improve; for this simple reason, that by the Greeks and their Eastern primogenitors, the Copts, were painting, and sculpture began, and brought to perfection. These nations have effected for the fine arts alluded to, what Euclid has done for geometry, what Homer has done for poetry, and what the "Great Unknown" who built the Hundred-gated Thebes has done for architecture. They have placed before the world, specimens of humanity delineated so truthfully, and (for this reason) so strikingly beautiful, that men have wondered, and said, "can these be the work of human hands, wrought from the conceptions of human minds?"

The paper winds up by giving a summary of the divisions under which the author purposes to treat these interesting subjects. These divisions, three in number are, "A consideration of the human frame." "The representation of the human figure by the Egyptians." "The same as represented by the Greeks." A chapter is also to be devoted to a consideration of the productions of the modern school of art, comprising those of such "clever men," as Michael Angelo Buonarrotti, Titian, Reynolds, &c. who being no more than mere skilful imitators of ancient perfection are entitled just to so much praise.

The second paper not yet published has been placed in our hands: we give from it the following extracts.

DEFINITION OF A PERFECTLY FORMED HAND.

"To decide on the perfection of the hand as a 'beautiful object' it is necessary to see it in connection with the wrist and a portion of the forearm, but more especially the wrist. This latter part must be rounded, full, polished, smooth; no prominent veins, no stringy tendons, no wrinkles, no projecting bones, which above all things are abhorred; sinews and starting veins are bad enough, but those are still worse. Much has been

said about making visible or concealing the extremity of the ulna, the smaller head, as it is called, and styloid process of the ulna, the bare mention of which naturally concealed parts banishes from the acute mind all ideas of beauty—beauty! the most timid, the easiest frightened, of all our instinctive feelings. Now, the less prominent these said portions of the ulna are made the better; they had better not be shown at all; in some positions of the hand they are invisible: in no effort of the beautifully formed hand does this bone ever become distinctly prominent; if represented at all, it must be by management of light and shade, giving to it the most delicate roundness possible. Represent it as the end of a bone; bring out its anatomical character; let the mind discover that a skeleton lies under that fair skin, and every idea of beauty flies from the mind with the speed of lightning. The fingers must taper gradually to correspond with the arm, which tapers uniformly from the shoulder; not too long or short, but proportioned to the hand; the hand proportioned to the wrist, projecting but little, if at all, beyond it; there must in fact, be no short projections, no angles from the shoulder downwards, all must taper generally, and rise or fall in gentle curves. A straight line on the inner side of the hand would destroy its appearance, however beautifully formed otherwise; so also would perfectly straight fingers." After thus describing the essentials of a beautiful hand, Dr. Knox next proceeds to consider that formation of the human female foot which in his opinion deserves the name of "beautiful."

"1st. It should retain the *form of youth*; the infantile form prior to any, even the slightest alteration.

2d. It should be proportional and symmetrical; proportionally to the height, considerably less than the male, in accordance with the whole delicacy of the form, the gentleness of her nature, the qualities of her mind, and by contrast, the qualities of man's.

3d. The second toe should be the longest; the first somewhat apart; the nails small and regular; no sharp angles or visible projections of bones. The ankles should be round and polished; the heel small; and the tendon achilles invisible.

REMARKS ON A COMMON DEFORMITY OF THE FOOT.—The human foot like every other part of the body, is liable not merely to great variety in form or shape, still confined within natural bounds and a strictly human form, but also to a number of deformities congenital and acquired. The deformity to which I allude is that peculiar dislocation of the great toe, or change in its direction, from a straight line with the inner plane of the foot, (or even arched inwards), as it once was, to that of an angle, more or less acute, with the metatarsal bone supporting it, until at last it produces a plaiting, as it is called, of the toes, the large toe passing either under or over the second. This plaiting leaves exposed the distal, large, rounded end of the metatarsal bone, which some surgeons mistake for a tumour, and treat as such, calling it a bunion; the internal lateral ligaments give way: they spread out, in fact, become lacerated, and reduced slowly, but surely, to mere shreds; occasionally, a small bursa or two forms just over these ligaments; at last, the bone appears, which the surgeon next attacks as an exostosis, and morbid growth, the anatomist knowing all the time that the whole of this surgical view is a delusion, an inconceivable error; that the metatarsal bone, is, in fact, in its place, and that nothing whatever has happened excepting a slow but constantly increasing change in the direction of the great toe, merely producing a plaiting of the toes, a stretching of the lateral ligaments, much uneasiness and positive pain; and, should the dislocation proceed so far as to expose the joint, it produces much real distress and suffering. In respect to the internal condition of the joint, I may here briefly remark, that the cartilages of incrustation disappear from the surface of the bones, which become smooth and not unfrequently take on an ivory polish.

Here, then, is one cause for the destruction of the cartilages of the joints, but seemingly not abrasion; these cartilages have disappeared, not by too much friction exercised on a part, but

rather by too little, a cause just as effectual in causing absorption or disappearance of cartilage from the extremity of bones, as the opposite; it may indeed be laid down as an axiom in regard to the diarthrodial cartilages, that they are affected, more or less, by every change of the joint, whether the change refer to an alteration of the mode of leverage, or to the mere exercise of the individual parts.

The dislocation outwards of the great toe I have just described, sometimes in one foot, sometimes in both, is one of the most common deformities met with in the human foot.

A SURGICAL REMARK APPLICABLE ALSO TO OTHER JOINTS.—I have never seen it in any savage race, but so far as I can judge, (and in Scotland opportunities for observing the naked foot at all ages are by no means infrequent), the deformity is quite common amongst all ranks and every age, with the exception of the very young. It seems to me to arise from a congenital predisposition; everything I have seen, everything I have observed, and all the dissections I have made, are in my mind, subversive of the theory of Mr. Key, and others, who maintain that it may be traced to tight and short shoes, to too much standing erect, aided by age and corpulency.

Thus all I have seen during the last twenty years convinces me that the deformity in question is not caused, generally at least, by the use of tight shoes (theory of Mr. Key, and of all shoemakers), nor by the instructions of the dancing master directing us to turn our toes outwards in walking, nor by ill made shoes generally, but arises mainly, if not solely, from a congenital tendency or disposition in the foot of some persons to assume this form; and that—

First, it occurs at nearly all ages, often at five or six.

Secondly, in males and females indiscriminately, whether heavy or light made, and whether they have worn shoes or not.

Thirdly, it may be confined to one foot, or found on both.

Fourthly, it leads to an atrophy or disappearance of the cartilages of incrustation, and of the synovial membrane; and as this cannot be by pressure, nor inflammation, nor apparently by ulceration, it must originate in the altered form of the joint, and the non-use of the cartilages themselves.

Before returning from this digression on a pathological condition of the human foot, I shall take the liberty of adding a few remarks in respect to a point or two which, to me, seems not well understood. It is well known that a short shoe or boot, although always unpleasant, may be put up with so long as the person remains seated or laying down; but let him walk about, then the distress becomes insupportable with a rapidity dependant on the shortness of the "chaussure." Now, how is this? Anatomy explains it perfectly. The arch of the foot is not a solid osseous arch, unyielding and inelastic; but, on the contrary, possesses within itself the power of elongating itself (when the weight of the body is on the arch), by means of the calcéo-scaphoid ligament. The elongation may amount to nearly half an inch. The elongation is due to the elasticity of this ligament. Now, if the shoe merely fit the foot *at rest*, it cannot fit it *in action*; for under the weight of the body, the arch, by means of the ligaments, will lengthen about half an inch: this it is which so speedily renders the short shoe unsupportable.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

James Brookes, a carman, 45 years old, was admitted, August 31st, under the care of Mr. Partridge, under the following circumstances. He had been driving a potatoe cart, about half past three, A. M., into Covent Garden Market, when from some cause or other, the horses took fright, and ran away. In endeavouring to stop them his left knee and thigh became jammed, as he supposed, between one of the wheels and a lamp-post. On his admission, he complained of severe pain in the loins, leg, and thigh. He was very faint, and

vomited a thin, yellow matter. His pulse was intermittent and so weak that it could scarcely be counted. On examining the painful limb, a lacerated wound, half an inch long, was discovered about two inches above the internal condyle of the femur. Through this wound the finger could be easily introduced into the cavity of the knee joint, into which a fracture of the lower third of the femur extended. About an inch of the track of the popliteus, could be detected by the finger introduced into the joint: the internal vena saphena was not injured, though there was a good deal of venous hæmorrhage from the wound. About four inches below the knee, the tibia and fibula suffered comminuted fracture. He was placed in bed, with the limb temporarily laid upon a straight splint, until re-action should set in. His feet are cold—to have foot-warmers applied, and the following draught every second hour:

R. Spt. ammon. aromat. ʒss.

Mist. camphoræ, ʒj. M. Sumatur tempore præscripto, adjunctis vini rubri ʒij.

6, A. M.—Somewhat better; is still vomiting; complains of the same pains in the loins, and left thigh; pulse but 70 and feeble; countenance pale and anxious.

Continuatur haustus ammoniæ vinosus.

10, A. M.—Somewhat better. Mr. Partridge who has now seen him for the first time has determined to remove the limb, as soon as re-action shall have set in more fully. The catheter has been passed and a few ounces of clear urine drawn off. To have some beef tea.

For the first time an extensive ecchymosis has been perceived, extending over the left buttock, a little way down the left thigh, and upwards towards the lumbar region, and lower ribs, but no fracture of the pelvis, or any of the ribs can be detected.

12, A. M.—The patient had rallied so far from the shock under which he laboured at his admission, that Mr. Partridge proceeded to amputate the leg; the patient being placed upon the table, and the usual preliminary steps having been taken, the limb was removed by the flap amputation. After the operation, the patient, who had not lost more than six ounces of blood during its performance, expressed himself as somewhat easier: complains still of pain in the loins. 6, P. M.—The pulse has begun to fall and grow intermittent, the vomiting has returned with increased violence; everything taken, wine, ammonia, &c. now comes up. He continued to grow fainter and more faint, until seven o'clock, when he died, despite all that could be done to avert the fatal termination, by means of stimulants of every description.

Section cadaveris:—twelve hours after death. On examining the abdomen, the intestines were found distended with flatus, but healthy, with a slight bloody effusion beneath the peritonæum, near the brim of the true pelvis; upon a careful examination of the bones of the pelvis, the horizontal and descending rami of the pubes were found broken without displacement; the sacrum was broken in its long axis, from its base to its apex, external to the sacral holes; the extremity of the coccyx, as well as the anterior, superior spinous process of the ilium, was also broken, and the latter was completely detached; there was also very extensive effusion of blood under the pelvic peritonæum, as well as over the left gluteal muscles; the wound above the knee-joint communicated freely with the joint itself, the internal condyle was broken, the fracture extending to the outer condyloid notch; the popliteal artery and vein were laid bare, partly forming the walls of the wound, which extended to the joint; the tibia was broken into nine separate pieces, besides minute fissures, extending into the joint, and others, corresponding to its long axis; the fibula was also broken into three separate pieces, among which was a considerable quantity of coagulated blood.

Remarks.—This was an instance of extensive injury of the pelvis, not detectible during life, partly from the situation of the principal fracture, namely, that of the sacrum, and partly obscured by the effusion of blood, and partly from the stoutness of the patient, and the complete apposition of the fractured bones of the pelvis. Mr. Partridge mentioned, in illustration of serious injury from

obscure fractures, the case of a very muscular man, whose forearm and elbow were so extensively lacerated by machinery, which at the same time struck him down, that amputation became necessary. The man before the operation was pallid, and complained of extreme faintness with acute pain across the upper part of the chest; fracture of the ribs was suspected, but the most careful examination of the chest failed to detect it; the patient was revived by stimulants, and the arm removed by double flaps; soon after being put to bed the faintness returned; the pain in the chest increased, and he died in about three hours after the operation. On *post-mortem* examination, the pectoral muscles were removed *en masse* at their origins from the chest, and turned towards their insertion, in order to examine the upper ribs, a fracture of which was still suspected; they were found fractured in front, lacerating the pleura in several places; rupturing the intercostal arteries, the blood from which flowed into the pleura, and produced death. Upon restoring the pectoral muscles to their places, and upon examining the chest afterwards, no crepitus or sign of fracture could be detected, so fleshy were the pectoral muscles, and so complete the cushion which they formed over the injured ribs.

WEST NORFOLK AND LYNN HOSPITAL.

Case 7.—Wm. Wicks. æt. 25, admitted Oct. 27, 1844, under Mr. Cotton, at 10, P. M., labouring under strangulated inguinal hernia of the left side. He complains of pain and tenderness in and around the tumour. Pulse sharp and quick; countenance anxious. States he was unloading a cart of manure on the morning of the 25th, when the hernia came down and he could not return it; since that time, vomiting and nausea have been present. He now is labouring under stercoraceous vomiting. The taxis, warm-bath, bleeding to syncope, and tobacco enema proved ineffectual for reduction, and at midnight the operation was performed.

A pretty bold incision from top to bottom of the tumour exposed the sac, of a glistening exterior and very like intestine; it contained two or three ounces of a bloody fluid, on the escape of which the strangulated parts presented themselves, consisting chiefly of omentum, with a knuckling in at the internal ring (the seat of stricture) of a small portion of the intestine. After the stricture was divided the parts were easily returned. The omentum was very much congested. Two sutures completed the operation.

Oct. 28th.—Pulse soft and quiet, 80. Tongue clean. No sickness, and feels comfortable. No pain or tenderness of abdomen.

R. Sodæ mur. magnes. carb. aa. coch. min.

Syrup. papav. ʒiss. aquæ ad ʒiss. s. s.

Vespere.—Feels a desire to have a motion but cannot. The administration of a castor oil injection brought away a free feculent stool.

R. Calomel grs. ij. pulv. opii. gr. j. statim.

29th.—Occasional gripes—slept well. No pain or tenderness of the abdomen. Pulse 96, rather full and firm. Tongue clean and moist. Bowels have been acted upon in the night. To have ʒj. sulph. magnes. in ʒiss. cinnamon water every hour.

Vespere.—Bowels have been acted upon freely. Pulse 84, soft and compressible.

Omitt. sulph. magnes. Rp. Pil.

Oct. 30th.—Has slept badly. Wound uneasy. Bowels not moved since last evening. Tongue covered with a creamy fur.

R. Magnes. sulph. ʒss. aquæ ʒj. 4tis. horis. Linseed poultice to the wound.

Vespere.—Much the same. Has been unable to pass his water. Sixteen ounces of urine were drawn off.

Omitt. pil. h. s.

31st.—2, A. M. Complains of colic pains in the abdomen; eructations of flatus. Nausea and general uneasiness. Pulse 84. Fomentation to the wound.

R. Morph. acet. gr. ʒ.

Acid. hydrocyan. gtt. ij.

Aquæ ad ʒj. Sumatur statim.

11, A. M.—Foul dark-coloured discharge from

wound. Bowels moved three times. Twenty ounces of urine drawn off.

Rp. Haust. si opus sit.

Nov. 1st.—Wound freely discharges a dark fluid. Bowels have been moved; feels comfortable. Tongue whitish. To have porter Oss. and mutton chops.

2nd.—Was attacked early this morning with pain in the stomach, nausea, and vomiting, for which the anodyne draught and fomentations were repeated. Pulse 72, weak. Tongue foul. To have egg emulsion and a little brandy and water.

R. Quinæ disulph. gr. j.

Acid. nitric. dil. gtt. x.

Syrup. aurant ʒj.

Magnes. sulph. ʒss.

Aquæ cinnam. ʒiss. Ft. Haust. secunda q. q. hora sumendus.

4th.—Going on well. Bowels moved twice. A slough has come away from the wound this morning.

6th.—Much improved. Pergat. To have full house diet and a pint of porter. The slough that separated on the 4th was examined by Mr. Sayle this morning and found to be the glans testis.

16th.—Progressing favourably since last report. Bowels have not been moved for the last two days.

Augeatur dosis magnes. sulph. ad ʒj.

17th.—Bowels moved freely. Granulations too high.

App. solutio cupri sulph.

Dec. 12th.—Convalescent.

About the 30th ult. an inguinal hernia of the opposite side made its appearance. Ordered a double truss. Gone out, cured.

ST. BARTHOLOMEW'S HOSPITAL.

Concussion of the Brain.—Thomas Edwards, æt. 17, sailor, admitted Dec. 2nd, 1844, at 8, P. M. with concussion of the brain, under the care of Mr. Green.

At the time of his admission he was insensible, but the people who accompanied him state, that while working on board his ship, lying off the Tower, he was struck by a cask, and knocked into the hold, a depth of 11 feet, striking in his fall the anterior part of the left side of the head. He was conveyed to the hospital in a state of insensibility. The pupils were dilated; the pulse was quick and indistinct; he felt very cold and was shivering. The only outward injury was a small wound on the forehead. A short time after he was taken into the ward he vomited considerably. It was stated on his admission that he had not been drinking, and the contents of the stomach verified the statement. He was immediately put to bed, had hot water applied to the feet and hands, and ʒss. of brandy, in water, was administered to him.

At 10, A. M. he seemed rather better, and could give direct answers to questions put to him. He complained of some one having knocked him about the head.

R. Hydr. chldi. gr. v. stat. sumend.

Cat. lini. vulneri applicetur.

3rd.—Is much better; can talk rationally, but complains of pain in the head. There is considerable swelling about the wound.

R. Hydr. chldi. gr. ij. om noct. capiend.

Admov., hirudines xx. temporibus.

4th.—Complains of rather more pain in the head; the tumefaction about the temple appears to be rather increased in size. Mr. Solly directed several small punctures to be made over the part with the point of a lancet; the part to be well fomented with hot water to encourage the bleeding, and afterwards a large cataplasm to be applied.

5th.—Feels much better. Matter appears to be forming where the punctures were made.

6th.—The matter which yesterday was thought to be forming, has this morning burst, and is now discharging freely. Omit the hydr. chl.

R. Pulv. hydr. c. rheo. ʒj., stat. sumend.

Habeat mist. sennæ. co. cras. mane.

7th.—Another opening has appeared in connexion with the former, thus forming a sinus, which was dilated. He is going on very well; complains of little or no pain.

Jan. 6th.—He continued progressing favourably up to this time. The wound is completely healed,

and he complains of no pain or uneasiness, he was therefore, presented, Cured.

Anæmia et Amenorrhœa.—Eliza Overmant, a servant, æt. 22, of a sallow complexion, was admitted into Mary's ward, under Dr. Burton, on the 19th, Nov., 1844.

States that she has been in ill health three years, but that she has got worse within eight days past. Has menstruated only twice during the period of her ill health, and that she has suffered from pain and general debility, with occasional faintings, bad appetite, and thirst, during the whole three years.

For the last eight days she has suffered from severe pains in the lower extremities and abdomen, which are increased by pressure and the movements of the body. She complains of pain from the slightest pressure of the surface of the skin, owing apparently to a morbid sensibility of that tissue. She lies with her knees drawn up, as if for relief.

Her tongue is smooth and clean, and her bowels are moved daily. She has no vomiting; her skin is warm. Pulse quick and soft; she has no cough. Ordered simple diet, and beef tea.

R. Fomentus abdomini. ex. dec. papav. applicetur.

R. Pil. galban. co. gr. x. om. noct.

Træ. valerianæ co. ʒj. træ. hyoseyam. ʒss. mist. camphoræ. ʒj. ft. haust. 6tis. horis sumend.

Nov. 22nd.—Ferri sulphat. gr. ij. o. n.

26th.—The quantity of ferri sulph. was increased to gr. iij.

29th.—She has had since yesterday a cough and pain over the left side of the chest. There is now *bruit* on the left side of the sternum, over the mitral valve, synchronous with the radial pulse. There is less irritability of the surface. Omit tent. pil. galb. et. mist.

R. Træ. digitalis. m. xv. træ. hyoseyami m. xxx. mist. oxymellis co. ʒj. ter. dic. sumend.

R. Pil. cal. c. col. gr. v. stat. Mist. sennæ co. si opus sit. cras. mane.

Applicetur hirudines xv. regioni cordis.

Dec. 3rd.—Still complains of the pain over the left side of the chest in the region of the heart; says the mixture does not agree with her. Omit tentur mist. digital. et habeat,

R. Vini colchici. m. xv. Træ. hyoseyam. ʒj. ex. infuso gentianæ co. ʒiss. ter. de die. sum. Hirudines xij. regi. cordis applicentur.

6th.—The *bruit* is less distinct, and she feels better. Applicetur hirudines xij. regi. cordis and substitute for the inf. gent. co. the mist. menthæ, bis in die.

10th.—Feels stronger; wishes for more food. To have common diet. Sumatur mist. om. noct.

R. Quinæ disulph. gr. ij. om. mane.

13th.—Omittentur mist. et pil. quinæ: et habeat R. Ol. cajuputi m. viij. syr. papav. ʒj. mist. ol. amygdalæ ʒiss. ter. die.

31st.—Feels much improved. Omittatur mist. cajuputi.

R. Dec. aloes co. ʒj. Inf. gentian. co. ʒss. om. mane. sumendus.

Jan. 3rd.—The catamenia have returned for the third time in her life on the 1st inst., and continue of good quality, and proper quantity, without pain or uneasiness. The *bruit* is not perceptible now. Her general health is good, and she was this day presented, Cured.

OBLIQUE INGUINAL HERNIA.

By CHARLES YOUNG, M.D., M.R.C.S. & Newport.

M. M., aged 36, the mother of five children, had oblique inguinal hernia of the right side for eight years; has worn a truss, although the rupture has never been completely reduced. Her constitution is weak and delicate, and has late suffered from a dangerous and protracted attack of peritonitis. On the morning of the 15th December, I was sent for, and found her labouring

under severe pain in the tumor; the bowels had been freely opened the day before, and on getting into bed at night, the pain suddenly came on; she attempted frequently to reduce it, and having failed I was sent for. I endeavoured by gentle and long-continued manipulation to reduce the tumor, which I found large and painful, but could not in any position make any impression on it, and for the next six hours I put into requisition every means in my power, such as general bleeding, the warm bath, large enemata of warm water thrown up by means of a long gum-elastic tube, calomel and opium, ice to the tumor, &c., &c. These means having failed, I proposed immediate operation, but to this my patient would not consent. I then met in consultation Dr. Martin, of the 73rd Regiment, who used every means in his power to effect reduction, but failed: and it was not until the morning of the 4th day, and when every hope of life had vanished from our patient's mind, that she consented to the operation. Her abdomen was then large, tympanitic, and painful; she had intense pain in the tumor; great prostration of strength; hiccup; and continued fecal vomiting: such was her state, that nothing but an anxious desire to give my patient the only chance left to save life, would have induced me to operate under such apparently hopeless circumstances.

From the large size of the tumor, my external incision was nine inches in length; the cellular membrane was very much infiltrated with serum; and when I had divided the ordinary coverings, and cut open the sac, I found contained in it, as I suspected, a large mass of omentum, of a dark matted appearance, strongly attached to the walls of the sac by old and firm adhesions; these, when removed, brought into view about an inch in length of small intestine; it also was partially attached to the omentum by adhesions, which I broke up. Afterwards, I attempted to reduce it, but could not succeed, till I divided with a bistoury the strictured part at the internal ring, then I was enabled to reduce the intestine perfectly.

The question now was, what should be done with the large mass of omentum? I proposed its removal, and the ligature of any vessels that might require it. On this point I gave way to Dr. Martin, who thought it would be better to leave it in the sac; this done, the edges of the wound were brought together by the interrupted suture, and straps of adhesive plaister, which were secured by an elongated pad and bandage. My patient was then removed to bed. After some time, I gave her small doses of a weak solution of Epsom salts, which relieved the bowels effectually, after which she enjoyed some sound, refreshing sleep. I placed her on small doses of calomel, and Dover's powder, and for three or four days all matters went on most satisfactorily; all tenderness of the abdomen and every other bad symptom vanished. After this period, the wound began to discharge considerably, and emitted a most offensive, gangrenous smell. On dividing the sutures and adhesive straps, I found this proceeded from the mass of omentum, which had become changed into a black slough; this state of matters was in a few days corrected by the aid of fermenting poultices, and the chloride of lime lotion, with the internal use of quinine, wine and other nourishment, so that in a week I removed the slough with a scissors. Granulations which continued daily to increase, appeared at the bottom of the wound, and at the end of a month, the large cavity became filled up; soon after the wound healed, when for further security, I ordered a truss to be worn for some time. She soon recovered strength, and is now in better health than she has enjoyed for many years.

We hear with regret that Dr. James Johnson has given up the *Medico-Chirurgical Review*, so long and successfully sustained by his industry and utility. We hear of other changes as forthcoming in *Medical Periodical Literature*, in which indeed the *Medical Times* may congratulate itself on having achieved (and for the good of the profession) no trifling revolution.

Dr. Warneford has given another thousand pounds to the Queen's College, Birmingham, to promote the Christian Improvement of Medical Students.

POISONING BY MACKAREL.

Dr. Christie, of Dublin, sends us a case of poisoning from the use of the above fish which occurred in his practice. The *Princess Royal*, a vessel of which Dr. C. was medical attendant, on her homeward voyage from Calcutta, put in at St. Helena, for water. The lengthened mastication of salt junk, had given the officers of the ship a relish for fresh provisions. Accordingly, on leaving the island, they, *inter alia*, took in a supply of fresh mackarel, having dined upon it at the Hotel in St. Helena, when they pronounced it excellent. Having directed it to be cooked next morning, they breakfasted heartily upon it, and found no inconvenience result for about an hour. Dr. Christie was the first attacked. The symptoms of poisoning began with a sensation of heat and constriction about the pharynx, slight nausea, fullness and swelling of the face, particularly the eyelids, which could not be fully opened. Then followed headache, and throbbing of the temples, and slight dyspnoea. Looking around, he saw others similarly affected. Suspecting at once what had caused the mischief, Dr. Christie took himself, and administered to the others, an emetic of hippo. After its action had subsided, and the stomach had been well cleared out, he prescribed some ether in camphor mixture to remove the nervous uneasiness and languor which remained behind. This languor was not quite removed for some days. The captain, as well as two children who had partaken of the fish, were similarly affected. A dose or two of purgative medicine removed all the unpleasant symptoms from the children; but the captain (who refused to take anything) remained weak and languid for eight or ten days after. Dr. Christie thinks that the poisoning in this instance could not have been owing to individual idiosyncrasy, or so many persons would not have been attacked at once. He says that he can ascribe it but to two causes: the first, to slight decomposition of the fish—an event likely to happen quickly under a tropical climate; and the last—which he does not think very probable—namely that the species of mackarel, used on the last day, was different from that had at the hotel, and one of the two poisonous species of that fish, said to be met with in the tropics.

PROGRESS OF FRENCH SCIENCE.

FROM OUR OWN CORRESPONDENT.

Paris, March 6th., 1845.

On a new species of suture in wounds of the intestines, by Dr. Gely, Surgeon to the Hotel Dieu, Nantes. To procure union in wounds of the intestines, it is necessary, 1°. That the divided bowel be placed in perfect apposition. 2°. That the opening be hermetically closed, to prevent all risk of immediate or consecutive effusion. 3°. That the ligature be tied so, that its ends can be cut close to the knot, and that the ligature shall fall into the intestinal tube. 4°. To adopt a suture easily executed, and applicable, if not to all, at least to almost every case. 5°. To be able to close immediately the wound of the abdominal parietes so as to obtain union by the first intention, thus obviating the danger attendant on the penetration of air into the peritoneal cavity. The author considers the foregoing conditions are accomplished by the suture he now proposes, and which is performed as follows:—A silk thread, well waxed, is furnished at each extremity with a common needle, whose size is somewhat greater than that of the thread, so as to render the passage of the latter easier. One of the needles is then passed into the intestine, parallel to the wound, at about two lines outside, and behind one of its angles, and brought out after piercing the interior of the intestine about two lines from the wound; the other needle is made to perform the same manœuvre on the opposite side. The ligature is then made to cross the wound, the right needle becomes the left, and *vice versa*. This is repeated as often as may be necessary to close the whole wound; the threads, at the spot where they cross each other, are next seized with a dissecting forceps, and the edges of the wound, while the

threads are gently drawn upon, must be pushed inwards, by which means the opening is hermetically shut. When all the sutures are thus tightened, the two ends must be tied, and cut off close to the knot. In order to proceed with greater rapidity, as the threads are not visible at the part where they cross each other, a knot may be made for each suture, thus avoiding the necessity of tightening them separately when the operation is terminated. Care must be taken to pierce all the coats of the intestine in a direct line (to accomplish this, the edge of the wound must be seized between the finger and thumb, and gently pressed); the stitches must be of equal length, so that both sides may correspond exactly. As the distance between the spots where the ligature enters and comes out of the intestine, is about three lines, there will be ten stitches, when the tube is completely divided, its circumference then being two inches and a half. Dr. Gely, after shewing that his method is applicable to all kinds of intestinal wounds, even where there is a loss of substance, proceeds to combat the objections which may be made against it, the number of times it is requisite to pass the needle through the coats of the intestine; (this, though really a cause of irritation, is less dangerous than the peritonitis, which may be produced by the passage of the contents of the intestine into the peritoneum)—the liability of the formation of an obstacle to the passage of the feces. This, though possible in dogs, and smaller animals, can hardly ever take place in man, for in estimating the normal diameter of the intestine at three-quarters of an inch, and taking into account the portion of the parietes turned inwards by the muscular contraction, and the inflammatory swelling, an opening of about three or four lines will remain in the centre of the diaphragm thus formed. For many other reasons this momentary obstruction is not so dangerous as may be supposed—the stomach is generally emptied, shortly after the accident, by repeated vomiting—the peristaltic action of the intestines is probably suspended during the inflammatory stage, and finally, the patient taking no food whatever, the intestines consequently can contain no matter. The following case is a proof of the advantage of this method:—Mathurin Magré, *ætat.* 16, on the 4th December, 1841, at 8 P.M., after a hearty meal, received several stabs, with a knife, on the left arm, shoulder, buttock, and flank; the first three were slight, penetrating only a little below the skin, the last, on the contrary, was very dangerous, situated near the inner edge of the quadratus lumborum, about the centre of the space comprised between the last rib of the os ilium. On examination being made soon after the accident, a portion of the intestine was discovered projecting out of, and strangulated by, the wound in the abdominal parietes. In this state he was brought to the Hotel Dieu. The projecting portion of intestine, at least 27½ inches in length (some of the students said it was three feet and a quarter) together with a portion of omentum, spread out upon the flank, was exposed to the cold air, and to friction from his dress, for about two hours; the former was distended, voluminous, highly injected, and of a violet colour from the accumulation of venous blood. The wound having been dilated with the usual precautions, the intestine was then reduced, each portion being carefully examined before it was returned. Two wounds were now discovered in the centre of the protruded intestine. They were parallel to the circumference of the bowel, and were situated, one just before the other. Their extent and position may be conceived, by supposing that the circumference of the bowel on its return was three or three and a half inches; to the extremity of the semicircle formed by each wound, the omentum was attached for a length of about four lines, and the portion of bowel that divided each wound was ten lines in length. The opening in each wound was obliterated by a sort of hernia, formed by a protrusion of the mucous coats of the intestine, owing to the contraction of the muscular fibres of the bowel. Gas alone escaped from the wounded gut. Each wound was then united by the suture above described, the intestine replaced in the abdomen, the wound in the parietes united by strips of sticking plaster, and prevented from re-opening

by graduated compresses placed on each side, confined by a bandage round the body. Venesection was ordered as soon as the pulse became stronger, and was performed two hours after; abundant vomiting took place during the night. No consecutive accidents took place, and twenty days after, the patient could eat bread without inconvenience, and soon after was as well as before the accident. (*Annales de Chir.*—No. 48 and 49.)

Vagino-labial hernia.—By Professor Stolz of Strashurg.

Mrs. P., ætat. 53, thin, delicate, about the middle height, and of a highly developed lymphatic temperament, became pregnant, for the third time in July 1843. She was subject to attacks of hæmoptysis, which were supposed to depend upon deposition of tubercles in the lungs. Owing to these attacks, she had never suckled any of her children. Her former pregnancies, and parturitions presented nothing extraordinary; nor in this latter instance was there any deviation from the natural rule. During pregnancy she had suffered much from constipation, to relieve which she was forced to use frequent enemata. After her confinement, her cough still continued, accompanied with an abundant expectoration, sometimes mucous, and occasionally purulent. Towards the end of December, Mrs. P. remarked, that the right labium swelled, especially when she had been standing some time or was fatigued: the swelling was accompanied by colic, and an unusual tension of the abdomen. All these symptoms disappeared as soon as she laid down, and came on again when she stood up. Dr. S. was called in on the 8th January 1844, and on examining Mrs. P., discovered that the right labium was larger than the left, soft, and not painful; on pressing the tumour gently, it disappeared with a rumbling noise, and re-appeared as soon as the patient made an effort or coughed. To ascertain whether it was a bubonocoele, after reducing the tumour, a finger was placed on the orifice of the inguinal canal, and the patient requested to cough. The hernia instantly appeared, indicating that the intestine did not pass through this opening; the swelling was situated in the posterior, instead of the anterior, half of the labium; neither could it be a hernia of the foramen ovale as in this case the tumour would be at the upper and internal part of the thigh. The intestine was then reduced a second time, and the walls of the vagina were firmly pressed against the ischium, with the indicator and medius fingers of the right hand. This manœuvre prevented the re-production of the hernia, and shewed that the intestine had descended between the vagina and ischium, and reached the posterior portion of the labium after making an opening through the fibres of the levator ani. The vagina did not present the tumour pathognomonic of hernia vaginalis. The only mode by which the swelling could be kept reduced would be the application of a pessary, but, as this might be productive of accidents, Professor S. ordered Mrs. P. to keep the bowels open by enemata; to avoid all violent exercise; to make use of a mild diet, to place herself in a horizontal position as soon as pain came on, and finally to reduce the swelling by gentle pressure whenever from its size it became a source of inconvenience. On the 4th March uterine hæmorrhage took place which yielded to rest, cooling drink, and the loss of a little blood from the arm, leaving only slight colics, which on the 18th were changed into real labour pains, and after four hours, Mrs. P. was delivered of a female child. *The hernia did not appear during labour.* After remaining quiet in bed for ten days, the patient was permitted to sit up, and a few days after to move about, taking care, however, to avoid all fatigue, to use a cooling and mild diet, and keep the bowels open. By these means, pursued with perseverance, the disease on examination three months after had not re-appeared. The author accompanies this case with the opinions of the different authors who have studied the hernias, which affect this region and concludes, that females are more exposed to hernia of the perineum than males, because in the former, the dimensions of the outlet of the pelvis are larger; that they may be affected with a species of hernia not so frequent as the preceding

on account of the difficulty of its formation, and which may be denominated *vagino-labial*, because the intestine glides beside the parietes of the vagina, to reach the labium; and that the last species of hernia, after pushing the transversus perinei backwards may extend beyond the labium and distend the perineum.—*Gazette Medical de Strasbourg.*

Cæsarian Operation Successfully Performed.—Dr. Breseiani De Borsa was called to attend a young woman who had been in labour for two days. The pelvis and theca vertebralis were deformed, there was considerable lateral deviation of the latter, and the spine of the left ilium was several lines higher than that of the right; the sacrum projected forwards to such an extent that the diameter of the inferior aperture of the pelvis was not more than two inches; the uterus hung over the spine of the right os ilium, the os uteri presented a narrow opening, extending diagonally from the right cotyloidean cavity to the left sacro-iliac symphysis, with its lips thickened on each side, between which a soft, flat, vertical tumour, a few lines in thickness, could be felt. Instant relief was needful, as the contractions of the uterus were sufficiently powerful to cause fears that a rupture of that organ might ensue. Version was fruitlessly attempted; the forceps was inapplicable, and embryotomy was out of the question, as the child was alive. The Cæsarian operation was, therefore, decided upon. It was impossible to follow the usual methods, and Dr. Breseiani operated as follows:—After ascertaining the precise position of the epigastric artery, near the edge of the rectus abdominis, an assistant was requested to keep his finger on it; an incision was made beside, and in the direction of, this artery, through the skin and abdominal muscles; the peritoneum was next opened with a probe-pointed bistoury, the uterus divided and the child and placenta rapidly extracted; the parts were then sponged with cold water, and the incision united by the twisted suture, leaving an opening inferiorly of about an inch and an half in which a tent was placed. Puerperal peritonitis supervened, but yielded to active antiphlogistic measures: slight convulsions likewise took place; but in spite of these untoward circumstances, added to that of a dreadful fright she experienced on the 43rd day after the operation, she ultimately recovered.

Phrenic Hernia: recorded by Dr. Paccini, of Lucca.—A postillion, ætat 33, an habitual dram drinker, was seized with hectic fever, and died. Ten years before his death, he had fallen on the abdomen from off a horse, and in consequence of this accident was attacked with enteritis which had nearly proved fatal. A second fall from a window, sometime after his recovery, caused no further accident. At the *post-mortem* examination, the arch, and a portion, of the descending colon, were found in the left side of the chest. The small intestine was united to the base of the lungs and pericardium, at about an inch from the clavicle, by cellulo-fibrous adhesions. The stomach was situated behind the heart, its greater curvature directed upwards and outwards, and its smaller, downwards and toward the left side. Its orifices were inferior, and parallel to each other, and the extremity of the œsophagus formed an acute angle with the cardia, so that the food was necessarily obliged to ascend in its route to the stomach. The opening in the diaphragm, through which the stomach and intestines had passed, was upwards of four inches in diameter; the left lung was atrophied, and did not descend below the first rib, and the right was hepatized and cavernous.

Inoculation of Syphilis from Man to Animals.—M. Jules Davasse, formerly interne of the Hospital de Louraine, gives the details of several experiments performed by Dr. Cullerier, M. Auzias, and himself on Guinea-pigs, a dog, and an ape, all of which prove the impossibility of this transmission. The author states, that the animals were kept in the hospital two months after they appeared to be quite well, in order to be certain that this actually was the case, and that nothing similar to syphilis was remarked: but the ape weak and puny, grew gradually thinner and thinner, was seized with a teasing cough, and died from a tubercular

affection of almost all the parenchymatous organs and glands, the tubercles, however, being not at all syphilitic. That there are no syphilitic symptoms in animals long after their having been inoculated; for instance, a dog is now at the hospital, which M. de Castelnau inoculated with syphilitic pus two years ago, and which presents no symptoms of this disorder. It is true that ulcers of various aspects may be produced, and that by irritating their surface, or by introducing purulent matter, inflammation or small pustules may arise; still this is far from being the affection known under the name of syphilis. That all the apes and monkeys fall victims to a tubercular diathesis, is a fact recorded by Dr. Roupeau. Now, tubercular affections of the bones being very common, care must be taken, in cases of inoculation, not to confound, at the *post-mortem* examination, this lesion with those of tertiary syphilis. Finally, that as affirmed by Hunter, Rund, and others, syphilis is an affection peculiar to man and cannot be transmitted to animals.—(*Gaz. des Hos.*)

Academy of Sciences.—*Sitting of the 4th March.* Mr. Elie de Beaumont in the chair. Received, "Final Report of the Geology and Mineralogy of the State of New Hampshire, with Contributions towards the Improvement of its Agriculture and Metallurgy." By Ch. T. Jackson, M.D. 1844. M. Elie de Beaumont in presenting this work, quoted the following curious description:—"Four and a half miles from Canaan village, in Orange, on the west side of the turnpike, and near the summit of the elevated land, which divides the waters flowing into the Connecticut, from those which flow into the Merrimack, a series of deep pot-holes occur in the solid granite rocks, one of which, from its great depth and regularity, is called the well. It is 472 feet in diameter at the top and two feet at the bottom. One side has been broken away, so that a concave portion of a semi-cylinder is to be seen from the top on that side to the bottom of the well; the perpendicular depth is 11 feet, and on the opposite side, where the surface is level with the road, the depth is eight feet. The abraded surface, or interior of this ancient pot-hole, is polished smooth, having the same appearance as is observed in those of more recent origin at Bellows' Falls. The inhabitants of the neighbouring village had cleared the rocks, soil, and water from this well for the sake of inspecting it, so that a good opportunity was offered for a full examination of its surface and depth. I was informed that the stones which were found in it were rounded and polished, resembling those usually found in the pot-holes at Bellows' Falls. On exploring the immediate vicinity, we found a great number of more shallow holes of a similar nature, and on the surface of the rocks where they had been recently uncovered, numerous drift-scratches were observed. On examining by the compass the direction of the pot-holes, they were found to range parallel to the drift scratches or N. 10° E., S. 10° W., indicating that they were produced by the same current that excavated these deep cavities in the rock. On the eastern and western sides of this mountain pass, there are rocky hills, but no stream of water originating from them has passed over this spot, which is the summit dividing the tributary streamlets of the Connecticut and the Merrimack, and is from 900 to 1,000 feet above those rivers, or 1,229 feet above the sea." M. Elie de Beaumont presented at the same time an extract of a letter from Dr. Jackson, dated Boston, 29th Dec., 1844, relative to the copper and silver mines situated at Kewena Point, on the south bank of Lake Superior. The copper exists in a pure state or mixed with silver, sometimes veins of pure silver are met with in large masses of copper, containing only from 1-1000 to 3-1000 of silver.

On Vaccine.—Dr. Serres terminated his report on this subject, examining the two last questions. 1° In admitting that the preservative qualities of the vaccine matter grow weaker and weaker, ought it to be renewed, and by what means. The methods proposed are: to inoculate the cow with the serum obtained from a disease affecting the legs of the horse (eaux aux jambes), and variola: to restore to vaccine matter its primitive force, by transmitting it from man to the cow. After

examining each mode in detail, the conclusions of the report were, that as the experiments performed by Drs. Bousquet and Fiard, relative to the first being in direct opposition with those of Dr. Loy, the subject is deserving of a further trial; that variola being transmitted to the animal seems to indicate that vaccine and variola are identical; that the experiments of the author of the memoir No. 20, began in 1830, show that the transmission of vaccine matter is possible; finally, that the third mode is the best. 2^o Is it necessary to vaccinate the same individual more than once, and if so, after how many years must re-vaccination be performed? To answer this question, the committee examined the numerous facts contained in the memoirs presented, in order to ascertain the correctness of the statistical tables published in Germany. The first thing that attracted attention concerning revaccinations was the different results obtained in the various countries where they were performed: thus, whilst at the Foundling Hospital, at St. Petersburg, the successful revaccinations were three per cent; in France, with the old vaccine matter, ten per cent, and with the regenerated, 20 per cent; in Prussia, 50 per cent, and in some parts of Wurtemberg, as high as 70 per cent. This, perhaps, is owing to the fact that in France, revaccination is said to be obtained only when general symptoms exist; whilst, perhaps, in Germany, the local symptoms alone suffice. Otherwise, how comes it that in the kingdom of Wurtemberg, revaccinations in the department of the Danube were 29 per cent, and in that of Jaxst 70 per cent? As to the cicatrix, though it ought not to be neglected, still it does not indicate that the preservative qualities of vaccine still persist; thus, in the *baillage* of Bael-tenger, out of 2,718 individuals revaccinated, 1,322 presented perfect cicatrices, the successful cases were 65 per cent; on the contrary, of the 1,134 which presented imperfect cicatrices, the number of successful cases was less. In the kingdom of Wurtemberg, out of 14,384 soldiers revaccinated, 7,845 presented normal cicatrices: or the successful cases, were 31 per cent; of the imperfect, the successful operations were 28 per cent. The same result was obtained in Hanover in the years 1837-38-39, by the numerous experiments of the authors of the memoirs Nos. 20, 7, 22, and especially by the author of memoir 24. To resume. The success of revaccination is incontestable, but it remains to be shown, whether revaccinated persons can again readily contract variola. The reporter then proceeded to examine the aptitude presented by vaccinated individuals, to be revaccinated, and after quoting Jenner's opinion, that though vaccine is a preservative from variola, still it does not prevent revaccination, mentions the following facts:—Dr. Heim obtained on his brother, *etat* 39, true vaccine pustules, three weeks after an attack of variola, though he had been previously vaccinated. Professor Moreau obtained the same result three successive times on himself. In 297 individuals revaccinated in Wurtemberg, the result was 95 true pustules, 76 modified pustules, 126 failures. Out of 1,436 revaccinated at Kasan, Russia, 271 presented true pustules, 84 modified pustules, 1,081 were failures. The utility of revaccination, proved from the following facts. In the College of Sorreze, at the Foundling Hospital, Mantua, and in Germany, it not only preserved persons from variola, but likewise put a stop to the progress of the disease. Dr. Horlocher prevented by its means an epidemic from penetrating into his districts. Dr. Fritz obtained the same result in the epidemic of Nérépheim, and Dr. Heim in Wurtemberg. Dr. Robert during an epidemic at Marseilles, revaccinated twenty-four persons, and though only two were successful, still all were preserved; similar results as being produced on 685 individuals revaccinated in 1836 and 1837, are related by Dr. Newman of Strassburg, and by other practitioners at Nantes, Geneva, and Malta, in 1841-42. Finally, the utility of revaccination is shown by the diminution of the number of cases of varioloid which is only nine per cent, and in Wurtemberg only two cases out of 44,248 individuals.*

* In order to revaccinate successfully, the vaccine matter must be taken on the third or

The answers given to the questions proposed by the academy may be resumed as follows:—1^o. The preservative property of vaccine matter is absolute for the greater number of individuals, temporary for very few, and even then is absolute until adolescence.—2^o. That variola seldom attacks persons before the tenth or twelfth year after vaccination, and that it is principally from this period to the 30th or 35th year that they are liable to be affected.—3^o. That besides its preservative properties, vaccine matter introduces into the system, qualities which attenuate the symptoms of variola, abridge its duration, and considerably diminish its danger.—4^o. That the cow-pox gives a marked intensity to the local phenomena of vaccine pustules; its effects are more certain than those of the old vaccine matter, but after having been transmitted to man for several years, its local intensity disappears.—5^o. That the preservative qualities of vaccine matter do not appear to have any direct analogy with the intensity of the local symptoms.—6^o. That to preserve these qualities it is necessary to regenerate the vaccine matter.—7^o. That among the means proposed to effect this regeneration, the only one in which any confidence can be placed, is to collect the matter at its source.—8^o. That re-vaccination is the only means that science possesses to distinguish the power which the former vaccination still has on the individual.—9^o. That the success of a second vaccination does not certainly establish the fact that the person may not contract variola.—10^o. That in general revaccination ought to be performed after the 14th year, but much sooner if an epidemic is reigning. †

A New Comet.—Mr. E. J. Cooper addressed a letter from Naples stating, that on the 7th Feb., at eight P.M., while examining Mauvais' comet he perceived a second. Its apparent place at 8h. 30m. M. T. at Naples, was about 2h. 23m. 52'. A.R. and 23° 28'; its brilliancy was equal to that of M. Mauvais' in August, 1844; it has a visible nucleus, and an oval course, besides a faint and pretty broad tail.

Academy of Medicine.—*Sitting of the 4th March*, M. Caventou in the chair. The president announced to the academy the death of M. Campanelli, corresponding member.

Professor Velpeau presented, in the name of Dr. Chaumet, of Bordeaux, the details of a case of prolapsus uteri cured by a new method.

Dr. Bernard, of Angoulême, presented medicinal cartoons, destined to be employed instead of poultices and blisters.

Discussion on Vesico-vaginal fistula.—Before giving the reply of Professor Berard, it is necessary to record the opinions of the members heard in the previous sitting. Professor Moreau said, that the disease under consideration was one of the most disgusting infirmities to which a female is subject, therefore, far from disapproving the attempts made to obtain a cure, he thought they ought to be encouraged when they did not go beyond certain limits. As to the operation proposed by Dr. Vidal de Cassis, and performed on the present

fourth day after its appearance, not the eighth, as usually practised. This mode, recommended by Dr. Bousquet, who pursues with laudable zeal his researches on this interesting subject, is worthy of attention.—G. de B.

† To complete this question, the following conclusions, drawn from a report addressed by the Minister of Commerce to the Academy of Sciences, may be added: 1^o That variola may affect children in the womb; to preserve them the mother must be vaccinated. 2^o That variola is less dangerous in vaccinated persons. 3^o That vaccine matter loses its power as the individual grows older, it being only after ten, twenty, or twenty-five years, that variola takes place. 4^o That revaccination is as efficacious a preservative, as vaccination. 5^o That the only mode of renewing vaccine is to take it from its source on the cow. A document just published, and added to the report, states that out of 910,337 children, born in France in 1843, 547,646 were vaccinated; 11,779 had the small-pox, of which number 1,294 were severely pitted, and 1,379 died. The sum expended for vaccination amounted to about £8,230.

occasion, he considered Professor Dubois quite right in stating that it was *irrational*, and to the arguments brought forward against it by his hon. colleague he would add some others. By obliterating the vagina in a young woman, the surgeon changes an infirmity into a real disease, for the catamenial flux no longer able to escape, will produce all the accidents attendant on its retention. As to its flowing freely by the urethra, he did not think this possible, because of necessity its mixture with the urine will make it lose its fluidity, and the coagula thus formed not only would prevent its escape, but likewise might become nuclei for calculi. As to the possibility of the obliteration of the vagina, he did not think it could be obtained. The case observed by Dupuytren could not be introduced here, since it was not only vesico-vaginal, but also recto-vaginal fistula, the former being above the ureters. This case is highly interesting; the pessary was not as had been stated ivory, but box-wood; inflammation appearing, the woman was brought to the Hotel Dieu. Dupuytren, after ascertaining the presence of the pessary sought to remove it, the usual forceps failing, he introduced a small smith's tongs, seized the pessary, broke it, and withdrew it piecemeal. He did not think complete obliteration possible, consequently, that the success of the operation was very problematic, and that there was nothing in the present case sufficient to encourage practitioners to repeat it. As to the fact of the woman being deprived of the attributes of her sex, he would say nothing, in order not to complicate the practical question, though it was one of the greatest objections that might be made against this method. Professor Roux did not think the operation proposed by Dr. Vidal as dangerous as some supposed, nor, that it was the cause of death in the present instance, yet he did not consider the operation of any utility. It was a serious thing to place a woman in a state preventing her from becoming a mother, the more so as cases have been recorded in which pregnancy took place once, and even oftener in persons affected with vesico-vaginal fistula. He could not conceive how such an operation could ever have been attempted, the object that should be sought for by surgeons, being not to cause an infirmity, or destroy a function, but to restore lost parts and attributes. But was the operation itself possible? The partisans of the method say that it is, since cases are recorded in which it took place spontaneously. This, however, proved nothing, for how often do we fail in producing what nature effects so easily: and who was unacquainted with the difficulties sometimes experienced in preventing the abnormal adhesion of parts morbidly affected, difficulties which in some cases cannot be overcome. Again, some females had the orifice of the meatus urinaris situated so far back, that the occlusion of the vulva would prevent the urine from escaping. As to the accidents said to be produced in the vagina from the presence of the urine, though these were not unfounded, still he thought they had been exaggerated, since we often see vesico-vaginal fistulae exist without giving rise to any serious symptoms in that cavity. To conclude, he thought the operation though not so dangerous as had been stated, was useless, contrary to sound doctrine and reason, and to crown all, impossible. Professor Velpeau:—In the present instance, there are two things to be considered, 1^o the case communicated by Professor A. Berard, and 2^o the method employed. He was astonished at the blame which some of his colleagues seemed inclined to throw upon the distinguished operator who did not take such a determination without mature reflection, and whose skill and professional knowledge ought to have been sufficient to prevent such an imputation. The operation was said to have been the cause of death: this opinion showed how apt we are to judge an event according to the result, and to suppose a constant affinity between an operation and the accidents which perchance may follow it. We reproach others with this tendency and we forget ourselves that coincidences exist in almost all medical facts. How many modes of treatment, how many theories, how many systems had prevailed, solely because we neglected these coincidences? At length, it happens that a remedy which after having long been successful, fails; the reason is,

sought for, and it is discovered that a cure would have taken place had nothing been given and that it was entirely owing to the efforts of nature, that this was the bright side of the medal, and facts were not wanting in support of the reverse as the following case would shew. While he was surgeon at the *Pitié* a man was received in his wards to be operated upon for two lachrymal tumours. The day before he intended operating, fever and peritonitis declared themselves, and he died. Again a woman entered with polypus uteri, and on the very morning that he purposed removing it, peritonitis appeared and proved fatal. Now, in these two cases, had he unfortunately operated, would not the result have been attributed to the operation. They should, then, be careful how they interpreted such facts, and should remember that what distinguished the real savant, was the reserve with which he explained them. As to the present case he saw nothing which proved the accusations made against the operation; death, here, was one of those unfortunate coincidences which art can neither foresee nor prevent. The Professor, after mentioning the cases in which Dr. Vidal de Cassis recommends his method, said that it might be attempted, for supposing only a partial obliteration to take place, it would be preferable, since it is easier to prevent the passage of the urine through a small opening than through the natural orifice of the vagina. As to the accumulation of blood during the catamenial flux, he did not coincide in opinion with Professor Moreau. The blood, deprived of fibrine, is very fluid, so much so, that some physiologists have stated that it is not blood, but a peculiar fluid, and the fact published by Dr. Vidal proved that it might escape *per urethram*. Finally, Professor V. concluded by saying, that though he did not consider the operation deserving of the blame that had been thrown on it, still he did not wish to be supposed a partisan of infibulation. Professor Blandin stated, that he did not say the method was irrational, he only opposed the conclusion drawn by Professor A. Berard; viz., that the present case would encourage other practitioners to make similar attempts. The operation did not succeed, since the patient died: surely there is nothing encouraging in that; therefore it is of no utility. As to the absorption of pus, Professor Blandin persists in his former opinion. Professor A. Berard, That fact was so interesting, and its solution so important, that he trusted he would be excused if he repeated what had already been discussed. It might be comprised in the following question. In a woman affected with vesico-vaginal fistula, with loss of a considerable portion of the septum, ought the cure to be attempted by obliteration of the portion of vagina, situated anteriorly to the fistula? Before replying to this question, he would present a few remarks: 1^o *On the accidents which result from a large vesico-vaginal fistula.* All writers had described how great are the sufferings and the danger attendant on this infirmity, and the disgust it inspires. The incessant passage of the urine through the vagina and the vulva, irritates these parts; the skin covering the buttocks and thighs, constantly wet, becomes the seat of an erysipelatous inflammation; the patient has an intolerably urinous smell; she cannot walk about; and if to these be added the pain experienced during coitus, and the disgust she creates, it is easy to conceive why she is sad, why her health becomes impaired, why suicidal ideas manifest themselves, and finally, why death sometimes is produced; 2^o *On the treatment of this affection.* All surgeons denied the possibility of obliterating a vesico-vaginal fistula with a considerable loss of substance; some even doubted whether in any case such a result could be obtained. Thus, a disease highly dangerous existed and the usual means failed in giving relief, and it is in presence of such facts, that the new method had met with such opposition, and was considered as irrational, dangerous, and contrary to nature, &c. The objections to it may be comprised under the following heads: 1^o *The obliteration of the vagina is impossible.* After passing in review the various causes capable of preventing the union, the professor concludes thus: "I firmly believe that the

obliteration of the vagina is not more impossible than the suture of the velum palati.—2^o *The operation may be productive of immediate accidents.* Of the five patients operated upon, only one died, and in this case the woman for twenty days presented no untoward symptom, when, after having been exposed to a draught of cold air, she was seized with inflammatory symptoms and died. At the *post mortem* examination, what was discovered? Inflammation of the pleura, and of the peritonæum covering the diaphragm.—3^o *Admitting that the obliteration is obtained, serious consecutive accidents will be the result.* The catamenia will be retained and produce similar results to those observed in imperforated hymen; or in passing through the urethra it will stop it, and cause retention of urine. These arguments are not applicable to aged persons, or those who are affected with amenorrhœa, owing to the fistula, and the number of which is greater than usually supposed. Dr. Leroy d'Etiolles quotes six cases in his memoir on vesico-vaginal fistula, and a similar one is now in my wards at the *Pitié*. Clots may be formed in the bladder; this is possible, though not very probable—the blood being very fluid. In the case published by Dr. Vidal, the blood flowed freely when mixed with the urine. *Calculi will be produced:* the urine of these women having a great tendency to deposit its solid portion. J. L. Petit quotes several cases in which the parietes of the vagina were incrustated with calcareous deposits; but may not this be owing to the permanent flow of the urine, which prevents the modification produced on it by the walls of the reservoir? May it not happen that in restoring the function, the normal condition will likewise be restored? *The urine will cause inflammation of the mucous membrane of the vagina, the uterus, and even of the peritoneum, after penetrating into the latter cavity through the uterus and Fallopian tubes.* This may be, but on the other hand, the contrary is possible, nay, more, probable, for in Dr. Vidal's case there was neither vaginitis, metritis, or peritonitis, nor did any of these accidents occur, as in Professor Velpeau's patient, though only a very small opening had existed during eight or ten years. *The woman, by this operation, is deprived of one of the attributes of her sex;* this objection cannot be serious, as the operation will never be performed without previously warning the patient of the result. I think I have replied to the various objections that have been made, and, in conclusion, repeating my question, I ask what must be done to a poor woman afflicted with a large vesico-vaginal fistula? In my opinion, the operation ought to be performed, and, in a similar case, I would not hesitate repeating it.

Discussion on Professor Blandin's case of autoplasty.—After some remarks from Drs. Roehoux, Begin, Professors Berard, Roux, and Gerdy, (the two last preferring the skin of the temple and cheek to that of the forehead,) Professor Blandin replied that it was his intention not to re-form a perfect lid, as recommended by Dr. Martinet de la Orlasse, but to put a bit of sound skin on the spot on which the cancer had re-appeared four times, in order to prevent, if possible, its return for the fifth time.

GARLAND DE BEAUMONT, D.M.P.L., & S., &c.

Honorary Physician to the Spanish Embassy.

Erratum in last number.—Page 459, col. 3, line 39, instead of, "when the plug is had recourse to, it ought to be against hæmorrhages, as recommended by J. L. Petit," read "when the plug is had recourse to, it ought to be in the mode recommended by J. L. Petit against hæmorrhages."

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M. D.

Chorea Sti. Viti cured by Assafœtida. A delicate girl of 9 years of age became affected with Bulimia in 1842. Notwithstanding her enormous appetite, she did not increase in size, but became emaciated and more weakly. After some time her sleep became broken—occasionally, while asleep, she screamed, opened her eyes, looked wildly and anxiously about and then fell asleep again. At other times she walked in her sleep. During the

day she frequently complained of pain at the navel, —this being particularly increased by acid food. These symptoms by degrees became more intense. The reporter of the case who was called to see her for the first time in February, 1843, found the patient throwing herself about, in a state of great anguish; her head, hands and legs were in a constant, unnatural motion; the face was greatly distorted, the tongue was swollen, and of the eyes nothing could be seen but the albuginea. From constant pressure of the tongue caused by chewing it, her mouth was constantly filled with mucus. She articulated indistinctly, as though her utterance was prevented by sobbing. Her pulse was small, contracted, and somewhat quickened, the tongue was whitish, abdomen distended, but soft, and her appetite bad. Consciousness remained undisturbed. Her muscular power was much impaired. She could not walk at all, and whenever she caught hold of anything, she retained it with the greatest difficulty. The limbs though convulsively agitated at any time, remained at rest when taken hold of; but became affected again with spasm, when allowed to be at liberty. The reporter looked upon the case, as one of chorea, caused by worms. He ordered her powders of valerian, calomel and cinnamon, and a beverage of infusion of valerian and chenopodium. The next day there was no improvement, except that she fell asleep about 11 o'clock p. m., and remained free from spasm, until she awoke, in two hours after. In consequence of an attack of diarrhœa, the calomel was discontinued in two days after, without having produced a vermifuge effect. The spasms were aggravated by the diarrhœa. The diarrhœa was checked by a mixture of infusion of valerian with cinnamon, and carrot juice. The spasms continued unmitigated. Clysters of assafœtida were now administered, with marked benefit. The spasms became less violent, and distinctly intermittent. Articulation became more distinct, the sobbing less violent and she could sometimes stand without support. That this improvement was owing to the assafœtida was evident from the fact, that the spasms were lessened, only while the assafœtida enema was retained. This induced the author to administer assafœtida internally with liq. ammon. succin. After it had been taken for three days, the disease was much mitigated. The spasms ceased wholly at night and the patient enjoyed refreshing sleep; while during the day, she was in a great measure free from them also. The periodical pains at the navel gradually disappeared, the general health improved daily and in five weeks after commencing the use of assafœtida she was completely recovered. No worms having been voided during the treatment, the author believes, that they must have been destroyed by the assafœtida and afterwards evacuated in a decomposed form. He frequently used the remedy combined with valerian against worms with great success.—*Dr. Hoffmann of Ballenstadt in Pr. Vereins Zeitung.*

On the Encephalitis of Children.—Under the general denomination of *hydrocephalus acutus* a great many different diseases are confounded. These are, 1. Inflammation of the cerebral substance. 2. Inflammation of the pia mater and arachnoid, (the most frequent form of the so-called *hydrocephalus acutus*). 3. Congestion of the brain. 4. An exanthematous inflammation of the brain. 5. Effusion of water into the brain, in consequence of myelitis. 6. Meningitis tuberculosa. Encephalitis is generally combined with meningitis. Encephalitis appears in an acute or chronic form, according as a larger or smaller part of the brain is affected. Generally one hemisphere only is affected at first, whilst the appearance of coma and loss of consciousness show the participation of the whole brain.—(*Dr. Rosch in Wurtemb. Correspond. blatt.*)

Nævus cured by Vaccination.—The nævus was situated upon the left ala nasi of a little boy. At first it was but a mere red spot from which it had increased to a considerable size. Among other modes of cure that were unavailingly resorted to for its removal, was the actual cautery. On the failure of this last remedy, the boy's father determined to bring him to Stuttgart. Previous to leaving home, his father wished to have the boy

vaccinated. Dr. Durr, who performed the operation, determined to try the effect of vaccine upon the nævus. With this view he made four transverse incisions through the nævus, to the healthy parts, with a lancet dipped in cow-pox matter. Vaccination proceeded regularly till the eighth day, when, in consequence of being scratched by the child, the vesicle spread considerably, exciting violent inflammation in the adjacent parts. When the crust fell off on the 21st day, the former situation of the nævus was found occupied by an ulcer, which extended to the root of the ala nasi. The ulcer was dressed for a few days with the ungt. narcotico-balsamicum; when some remains of the erectile tissue were perceived. These were blood-vessels which bled freely on being touched with nitrate of silver. These vessels were again perceptible on the next day, when the eschar caused by the caustic separated. Under these circumstances, Dr. Durr, ordered the following lotion. R. Alum. crud. ℥ij. Aq. anthem. nobil. ℥iv. laudan. drachm. dimid. M. Lint moistened with this was applied to the ulcer morning and evening. In a few days the vessels contracted and the ulcer began to heal; the healing process was completed in a week, when the ala nasi was natural in appearance, save, that a small, white cicatrix remained, marking the former site of the nævus. The lotion was still ordered to be continued. At the time of drawing up this report three months after the vaccination of the nævus, the cicatrix yet remains: no trace of the erectile tissue can, however be discovered. (*Whittinger in Wurtemb. Correspond. Blatt.*)

Treatment of Palpebritis purulenta.—Considerable improvement has taken place of late years, at the Military hospital Miasdow at Warsaw, in treating this class of diseases. In 1837, out of 6019 patients affected with ophthalmia, 53 left the hospital blind of both eyes, 28 of one eye, while in 1843, out of 2966 patients, only 5 left blind of both eyes, and one of one eye. Two thirds of the patients suffered from blepharophthalmia purulenta. The author admits that this affection has been mild of late years. This improvement he ascribes to the treatment pursued, not to any change in the habits or pursuits of the soldiers. The treatment adopted, consists in washing the eyes very well. The patient is then placed on his back in bed, the eye-lids are widely opened, and covered with a layer of alcoholised and perfectly pure calomel. This in some time produces a degree of crisyelatos inflammation of the eyelids, when a pledget of fine cotton, large enough to cover the whole eye, is placed over that organ, and lightly secured by a bandage. Towards evening the eyes are again cleaned and the application of the cotton is again repeated. The internal medicine consists of a bolus of gr. vj. calomel and half a drachm of jalap. The lancet is employed but in plethoric subjects, or where severe head-ache exists. Leeches are never resorted to. Occasionally cupping-glasses are applied to the neck. Afterwards an antimonial plaster is applied on the site of the cupping-glasses. For the first days the diet is purely antiphlogistic, but afterwards nourishing. The wards are moderately lighted, and after the removal of the violent inflammatory symptoms, the patients are allowed to move in the open air. They are not permitted to sleep after dinner. This plan of treatment has been attended with marked success; the cure being speedy and perfect; granular blepharitis never appearing when it has been employed. The application of calomel even to the healthy eyelids, produces a sensation of burning, and its stimulant effects run on to violent inflammation if the patient is, or has been lately, using iodide of potassium. If the calomel does not produce the required effect, or if ulcers of the cornea exist already, another plan of treatment is pursued. The closed eyelids are covered with a piece of lint dipped in a solution of ʒj. nitrat. argent. ad aq. distillat. ʒj. and secured by a bandage. The pain produced by this application disappears as soon as the pledgets of lint become dry. This application sometimes requires to be repeated, twice or thrice, before it produces its effect. Its outward effect upon the lids, is the production of a greyish eschar, which sometimes requires from four to eight days to detach. On the

second day after the outward application of the lunar caustic, a few drops of a collyrium of one grain of the above salt to an ounce of distilled water, are dropped into the eye, twice or thrice a day. Should the affection not yield to these conjoint plans, the result will be granular conjunctivitis, which always presents more or less of a chronic form. Here, cauterisation with nitrate of silver, or sulphate of copper, will be found useful, or the employment of a lotion of nitrate of silver containing from 2 to eight grains of the salt in an ounce of distilled water. Benefit has been derived from the use of an ointment composed of one grain of the nitrate to a drachm of lard, and sixteen minims of Goulard's extract. The eyelids are smeared with this, by means of a camel-hair pencil, twice or thrice a day. Much advantage has ensued from the alternate use of sulph. cupri argent. nit. and hyd. præcip. rub. as caustics, in granular conjunctivitis. Should trichiasis ensue, the eyelashes must be extracted. In cases that have resisted all remedies, a lengthened residence in the country, joined to a complete abstinence from all plans of treatment, has often effected a cure. The author concludes that cases will be met with, which will resist all that can be done for their cure. (*Dr. V. Maganizer, in Medicinische Zeitung Russlands.*)

On the Constitution of Yeast with reference to the Phenomena of Fermentation, by Dr. Jul. Schlossberger, late assistant-physician to the Catharinen Hospital of Stuttgart and at present Assistant-teacher in Dr. Gregory's Laboratory at the University of Edinburgh, (from Liebig's *Annalen* August 1844.)—At the commencement of his paper the writer quotes a remarkable passage from a work published more than an hundred years since by Stahl, the author of the famous "Theory of Phlogiston." This contains an opinion upon the nature of fermentation, almost similar to that put forth by Liebig within a recent period. Stahl says: "A body in a state of putrefaction, easily produces decomposition in another, non affected body; nay a body with internal movement may induce internal movement in a quiescent body, inclined towards internal movement." This language is almost the same with that of Liebig's new theory of putrefaction, fermentation, and decay; but it unfortunately was not understood by Stahl's contemporaries, and it remained forgotten and unknown, till discovered a second time by Liebig. Owing to Stahl's celebrity, this theory was generally received in the medical schools of that day, as explanatory of the causes of miasm and contagion. Experiments on yeast must form the proper basis of all enquiries into the nature of the process of fermentation. Chemists, have in a great measure hitherto, neglected the chemical composition of yeast, though they have devoted ample time to its microscopical observation. Their respective researches into its nature by chemists and physiologists were long deemed contradictory. Thus Berzelius declared that the observations of Schwann and Latour were poetical fictions. On the other hand, physiologists endeavoured, in the organic nature of the yeast cells, to find an irrefragable argument against Liebig's theory of fermentation, which according to him is nothing more than "the extension of decomposition to another body, from one in a state of decomposition." The physiologists committed an error in logic, to conclude in the present instance that the maxim, *post hoc ergo propter hoc* should prove true. With these introductory remarks, the writer next attempts to reconcile the views of both. Chemical and microscopical observations taught him to recognize cells in the yeast globules, which must thus be classed among organic beings (though of the lowest order). On the other hand it appears to him certain, that beings merely alive are in a constant state of transformation, and thus are, according to Liebig's theory, decomposing substances which most easily communicate decomposition to other bodies. (For further particulars as regards historical facts and former works on the subject, the readers may refer to the original treatise in Liebig's *Annalen*.) The author, by washing beer-yeast with water, alcohol, and ether, succeeded in procuring pure yeast. It was tasteless and inodorous, white like flour, and consisted of numerous

globules, partly roundish and partly elliptical. Some were nucleated. An elementary analysis of these cells promised to be interesting, because an opportunity was now offered for the first time, of analysing a primary cell. The author obtained results varying according to the age of the yeast; thus perfectly fresh yeast, dried at 100° C, and burnt with chromate of lead, yielded

C 50.05; H 6.52; N 11.84; O 31.59.

Lower yeast which was kept for 6 days at the temperature of 10° C, yielded

C 48.03; H 6.25; N 9.80; O 35.92.

He found, from his experiments, that fresh yeast contains the greatest abundance of azote, and that during fermentation a loss of nitrogen takes place, probably on account of the formation of animal salts. The experiments, instituted by him, proved that during the fermentation of beer no trace of sulphuretted or phosphuretted hydrogen is developed. But he succeeded in discovering sulphur, and a great abundance of phosphates. He never found as much azote in yeast as Dumas, but always less than in any other proteinic substance. He further succeeded in separating the membrane of the yeast globules from its contents; this he performed by digestion with potash. (Mulder with acetic acid). Potash dissolves the contents easily, leaving the membrane almost unaltered. a. The cellular membrane obtained in the above manner was of almost similar composition with starch and vegetable cellular tissue; its composition was

C 45.45; H 6.87; O 47.68.

This analysis was confirmed by the circumstance, that the membrane of the yeast cell could be transformed into grape-sugar by boiling with diluted sulphuric acid: certainly a remarkable result to prepare sugar from yeast! From this experiment the yeast cells ought, it seems, to be classed among vegetables, and removed from animals, contrary to the view of former observers. b. The contents of the yeast cells was a so-called proteinic substance, similar to albumen or caseine, but much more decomposable than the latter. It was composed of

C 55.53; H 7.50; N 14.01; O 22.96.

Besides these, it also contained sulphur and phosphates. During fermentation this azotized part seems chiefly to be decomposed, and, ultimately, a non-azotized substance, the so-called hordeine of certain authors is left behind, which is probably nothing else but the yeast globules. How the yeast cells are formed, the author does not attempt to give a decisive opinion, but he directs attention to the analogy between the conditions of crystalline conglomeration, and the formation of yeast cells. According to Gay-Lussac's experiments, no crystals form *in vacuo*: so in concentrated crystalline solutions, and in saccharine vegetable juices, no yeast is formed where air cells are excluded. Some other experiments of the author seem to be of great importance; thus yeast, added to super-oxides of hydrogen, or to sulphuretted hydrogen, very rapidly decomposes these two bodies, but it does not decompose them, or, at least, only very slowly, if it (the yeast) has been previously boiled. Corrosive sublimate and strong mineral acids suddenly arrest fermentation; arsenious acid does not produce this effect, which can not be easily explained according to the former theories of fermentation. Lastly, the author observed, that countless infusoria were formed when yeast putrified under these circumstances, but the power of causing fermentation was lost.—

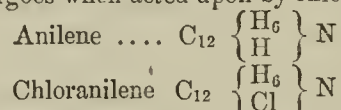
Note.—Liebig adds a note to the above treatise, in which he expresses his satisfaction, that Mulder's results perfectly agree with those obtained by Dr. Schlossberger, though the experiments of both were performed independently of each other, at the same time, and conducted by different methods; Mulder, for instance, extracted proteine with acetic acid, Schlossberger with diluted potash. The constitution of yeast thus appears determined by the two celebrated chemical schools of Utrecht and Giessen; the immaterial differences in the observations of both are partly explained by the different methods which were pursued in obtaining the above described substances, and partly by the difficulty of analysis which the subject presents

GERMAN CHEMICAL SCIENCE.

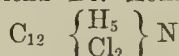
Prepared for the "Medical Times" by Dr. JAMES SHERIDAN MUSPRATT, Fellow of the Chemical Society, and Translator of "Plattner on the Blowpipe."

(Continued from p. 486.)

I gave in my last communication to you a full description of anilene and its properties, and concluded with the first substitution which its hydrogen undergoes when acted upon by chlorine; *e.g.* :

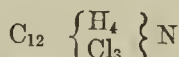


I shall now continue this interesting series of compounds, which have been so diligently investigated by my friend Dr. Hoffmann. The dichloranilene



was not obtained in sufficient quantity either for analysis or for the study of its properties. I have, therefore, only given the supposed formula. Indigo was directly treated with chlorine, and the products mixed with a quantity of potash, submitted to distillation. Dr. Hoffmann, in this process, obtained, besides chloranilene, a second substance which crystallized in long prisms, collecting together upon the surface of the fluid, and these, he remarks, are dichloranilene.

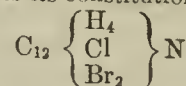
The trichloranilene (amachlophenose) is obtained by the action of chlorine either upon anilene or the chloranilene. A stream of chlorine gas is passed through anilene, the mixture is next treated with potash, and the whole distilled, when the trichloranilene passes over with the aqueous vapour and collects in crystalline needles in the recipient. This substance is so exceedingly volatile, that a refrigerator must be adapted to the retort. The crystals are very sparingly soluble in water, but dissolve with the greatest facility in alcohol and ether. It combines neither with alkalies nor acids, and, therefore, can be distilled over unchanged from these menstrua. Dr. Hoffmann obtained so very little of this substance, that there was only sufficient for a carbon and hydrogen determination, and these led to the annexed formula :



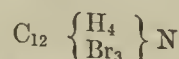
Dr. Hoffmann, finding the hydrogen so readily replaced by chlorine, thought that compounds might be obtained in which equivalents of hydrogen were replaced by bromine, and also by chlorine and bromine, and on pursuing his investigation, he found that this was really the case. I shall now describe the different compounds which he procured.

Chlorodibromanilene is obtained as a white precipitate when bromine-water is added to a solution of the chlorine base. By collecting the precipitate on a filter, dissolving in boiling spirits of wine, and allowing the menstruum to cool, the chlorodibromanilene crystallizes out in needles. It is perfectly insoluble in water, but soluble in alcohol and ether. It melts in hot water to a brownish oil, which passes over very readily with the aqueous vapour, condensing on the sides of the recipient in shining needles.

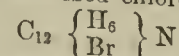
In its relation to other bodies, it resembles the trichloranilene; *i.e.*, it is not affected by the ordinary acids or alkalies: with fuming nitric acid, however it suffers decomposition. The following formula represents its constitution :



A body very similarly constituted to the above is the bromaniloid of Fritzsche, which is anilene, having three equivalents of hydrogen replaced by a corresponding number of equivalents of bromine; *e.g.* :—

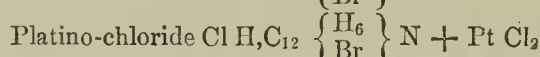
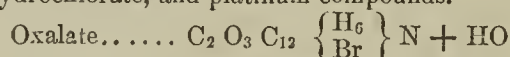


The next body in succession is the bromanilene, which Dr. Hoffmann procured in a similar manner to the prior-described chloro-base. Formula:

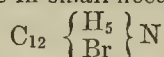


This body possesses a remarkable analogy with the chloranilene, so much so that it is impossible

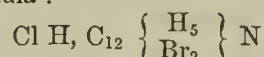
to distinguish one from the other in outward properties. This base, like anilene and chloranilene, gives a violet tint with a solution of hypochlorite of lime; much lighter, however, than the former, but deeper than the latter. The solution of its salts gives a reddish brown colour with the above-mentioned reagent, and by this means it is distinguished from anilene. The subjoined equations represent the constitution of its oxalate, hydrochlorate, and platinum compounds.



The dibromanilene is obtained in a crystalline mass by distilling the dibromisatine with hydrate of potash. When these crystals are affused repeatedly with water, dissolved in boiling alcohol, and the liquid allowed to cool, they are re-obtained perfectly pure. This base is soluble in spirits of wine, and crystallizes very readily from the menstruum. It is slightly dissolved by boiling water, and the liquid, upon cooling, becomes cloudy, depositing the base in small needles. Formula:



A solution of this compound in hydrochloric acid gives a salt which is remarkable on account of undergoing decomposition when mixed with hot water. It is constituted according to the annexed formula :



The tribromanilene has been previously given after trichloranilene (under the name of bromaniloid) for the purpose of showing the reader at a glance, the relation subsisting between the two.

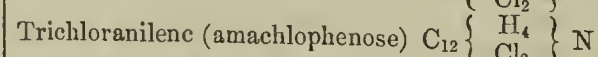
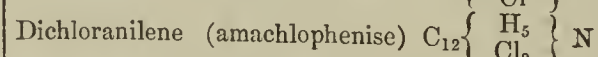
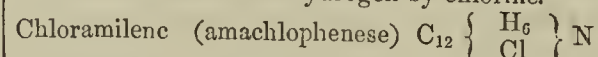
It is not a base but an indifferent body, combining neither with acids nor alkalies.

I have now scanned over the interesting results of Dr. Hoffmann upon anilene, and the remarkable bodies which it furnishes either directly or indirectly through the agency of chlorine and bromine, and I trust that it may draw the attention of some of your chemical readers to a sense of the benefit they might confer upon the scientific world, if they would only undertake similar investigations in other branches of organic chemistry. And I am convinced that if they did so their labours would be amply rewarded: and let them always keep in mind that nothing is impossible to labour, aided by ingenuity. "If the man who makes two blades of grass grow where only one grew before," is a national, a world's benefactor, how must he be ranked who makes ideas spring up where none before took root, and who makes the mental wilderness blossom like the rose? In order to make Dr. Hoffman's compounds easy of reference, I shall specify each with its respective formula, commencing with anilene.

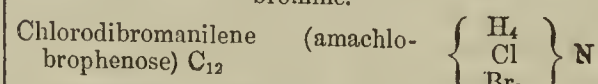
Anilene (cyanol, crystalline, benzidam, phenamide, amaphenase.)



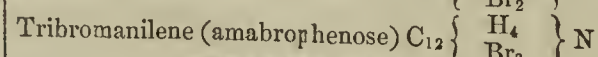
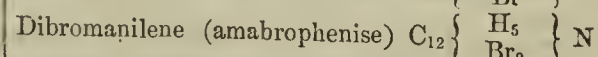
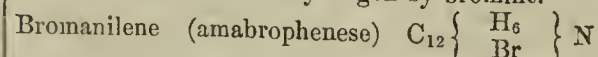
Substitution of the hydrogen by chlorine.



Substitution of the hydrogen by chlorine and bromine.



Substitution of the hydrogen by bromine.



An old soldier, practising as a quack, has been recently tried at Carlisle for manslaughter, caused by over doses of corrosive sublimate. He was convicted, and sentenced to a lengthened term of imprisonment.

PROGRESS OF ENGLISH, AMERICAN, AND ITALIAN MEDICAL SCIENCE.

[The following are the principal articles of interest to our readers in two recent numbers of the *Lancet*.]

INFLAMMATION, ULCERATION, AND INDURATION OF THE CERVIX UTERI.—Dr. J. H. Bennet states in a paper published by him under this title, that he has ascertained, to his complete satisfaction,—setting aside cancerous disease:—firstly, that in the very great majority of adult females, who have been exposed to sexual intercourse, a confirmed leucorrhœal discharge, whatever may be its nature, is accompanied by inflammation of the neck of the uterus; secondly, that this inflammation seldom exists long without producing ulceration; and thirdly, that ulceration is always accompanied by more or less engorgement (swelling with or without induration) of the substance of the uterine neck. The causes, frequency, extent, and nature of the disease, which complicates or occasions the leucorrhœal discharge, vary very considerably, according to the functional state of the uterus. In carrying out these views, Dr. Bennet makes four divisions of inflammation and ulceration of the neck of the uterus, namely, as affecting the uterine cervix in women, who have never conceived; as affecting the same part in those who have conceived; syphilitic ulceration; and lastly, malignant or cancerous ulceration. The inflammation which attacks this organ in women who have not conceived, is nearly always confined to the mucous membrane, the deeper structures seldom becoming implicated, except in cases of general metritis. The inflammation may co-exist with general vaginitis, as is generally the case in gonorrhœa, or it may be confined to the uterine neck, and to that part of the vaginal cavity which is in contact with it, *viz.*: the superior fourth or fifth; or it may be limited to the orifice of the os uteri. It may be attended with profuse leucorrhœa, or, as when the inflammation is very limited, the discharge may be very slight. Other symptoms are pain in the loins, sometimes deeply seated pain in the hypogastric region, behind the pubis, and pain experienced during sexual intercourse. There is also felt a vivid sensation of heat at the upper part of the vagina, but there is no complaint of weight, heaviness, or bearing down, except in extreme cases, in which the disease has been long neglected. The neck of the uterus is found on examination by the toucher, to be increased in heat and volume, and also in elasticity, but there is not any general or deep-seated induration of its tissue. Ulceration generally begins at the orifice of the uterine cavity. When it exists, it almost invariably gives rise to a slight, but perceptible induration of the tissue underneath. It is, however, very superficial, consisting merely of a thickening of the ulcerated mucous membrane and of the sub-cellular tissue. It is generally felt most distinctly at the edge of the uterine lips, where the mucous membrane passes into the cavity of the neck, and where, consequently, two mucous thicknesses are approximated by the folding of the membrane. With the aid of the speculum, the tumefied cervix when inflamed, presents a more or less intense red, glistening hue, instead of the pale, dull, whitish colour, which is natural to it. On its surface may frequently be seen small white or red vesicular or papular elevations, the result of distention or hypertrophy of the mucous follicles. When the mucous membrane is ulcerated, the glossy appearance of the membranous surface is lost, and a number of small vascular granulations of a vivid red hue, are seen covering the ulcerated region, after the mucus has been wiped away with a pledget of lint. Sometimes the ulcerated surface appears raised above the adjacent level, whilst occasionally on the contrary it appears depressed. When the ulceration is at the entrance of the os uteri, it is often difficult to discover, unless the uterine lips be slightly separated. There is generally a mass of semi-transparent mucus occupying the cavity of the os uteri. The ulceration may be so superficial and slight as to be scarcely perceptible, or it may extend over a considerable portion of the cervix. A slight oozing of blood is sometimes caused by the use of

the speculum, or by intercourse. Menstruation is generally more painful than in the healthy state, and occasionally slight irritation about the urinary organs is present, giving rise to frequent desire to urinate. There is seldom much general reaction, unless it be such as is occasioned by the annoyance and distress of mind which the local lesion causes in many instances. In the female who has never been impregnated, the inflammation, ulceration, and induration, are nearly always superficial, limited to the mucous membrane, because the uterus, although duly performing its menstrual function, is still, as it were, in a dormant state, its mucous membrane being a mere film, and its proper tissue in an elementary fibro-muscular state, very sparingly supplied with blood, and possessing a very subdued vitality. The paper is illustrated by the detailed account of two cases.

UTERINE HÆMORRHAGE.—Mr. Hassall recommends in cases of uterine hæmorrhage, *post-partum*, and also as a preventive thereof, the use of an apparatus constructed as follows:—it should consist of a circular plate or disc, of about six inches in diameter, and half an inch in thickness, slightly hollowed out, and made of some firm and unyielding material. To this disc should be attached a leather band of about four inches in breadth, one end terminating in a large buckle, and the other in a close series of holes for the reception of the teeth of the buckle. By the use of this instrument, with, if necessary, one or more discs beneath it, he conceives that firm and efficient pressure might be exerted over the uterus, but he would still have recourse to other measures, such as the application of cold, and plugging the vagina. A still more important measure to which Mr. Hassall does not allude, consists in the manual exploration of the uterus for the removal of clots, and the portion of placenta which probably remains behind, adhering to the uterine parietes. Mr. Hassall, however, has committed a grievous error in recommending plugging the vagina. That operation might be very carefully and effectually performed, and yet the patient might, and probably would, sink from internal hæmorrhage, by the dilatation of the womb itself. We had thought that plugging the vagina was never practised in such cases, but it seems that, contrary to obstetric practice, it is sometimes advised. Mr. Hassall's apparatus we fear would prove inapplicable in the great majority of cases of uterine hæmorrhage.

ABDOMINAL TUMOUR.—Dr. Snow has described a case where an abdominal tumour was formed from an impaction of fæces in the colon, together with a number of pieces of a tough, yellowish substance, supposed to be portions of the ligamentum nuchæ of a sheep.

AMPUTATION AT THE HIP JOINT.—A female 23 years of age, became a patient of Mr. Sands Cox, in Queen's Hospital, she having a diseased condition of the stump of the left thigh, the leg having been amputated fourteen years previously for disease of the knee joint, and the stump had never entirely cicatrized. When re-admitted into the hospital last July, it presented the following appearances:—The integuments extending upwards anteriorly for about three inches, and posteriorly for about four inches and a half, were of a dull white colour, and of a cartilaginous hardness. Patches of fungous growth of a livid colour protruded at intervals from a half to one third of an inch from the general surface, and blood exuded from them at one time, sanious fluid at another. The integuments of the upper part of the stump were healthy, and there was not any enlargement of the cutaneous veins, nor of the inguinal nor femoral glands. The stump generally was tender to the touch, and the pain nearly constant, sometimes of a dull aching character, and at others throbbing. The general health was good. As the disease continued to advance, and was apparently unchecked by any application or remedy, amputation at the hip joint was performed November 1st, by Mr. Cox, by the flap operation, the flaps being produced anteriorly and posteriorly, the existence of a patch of fungous growth on the inner side of the stump precluding the formation of lateral flaps. The circulation was controlled by Dr. Segnoroni's horse-shoe com-

pressor. The operation was completed under thirty-five seconds, and the vessels were secured under five minutes. The patient bore the amputation well, but became faint while the wound was being dressed, and considerable collapse afterwards followed. The after-symptoms principally marked nervous irritation, and were generally treated by sedatives, and anti-spasmodics. The daily progress of the case is carefully detailed, but does not need abstracting. The patient was dismissed cured, early in February. On making a section of the diseased mass, the whole of the integuments inferiorly to the extent of above four inches, was found converted into an indurated mass of cartilaginous hardness, of a pearly whiteness, above $\frac{3}{4}$ ths to $\frac{5}{8}$ ths of an inch in thickness. Under the microscope, this structure appeared cellular and vascular, together with myriads of minute globules, interspersed with spindle-shaped bodies. The cellular and adipose tissues were in considerable quantity, the latter remarkably dense, and intersected with fibrous bands. The muscles presented a peculiar granular appearance, were softened in texture, and appeared to have undergone fatty degeneration, with the exception of the muscles which were inserted into the trochanters. The profunda and superficial femoral arteries were not enlarged; the muscular and perforating branches were found to terminate in a vascular network, distributed to the integuments and fungoid growth. The nerves terminated in bulbous enlargements; that of the sciatic was as large as a walnut, greenish, solid, and vascular, and fibrous bands proceeded from it, which were lost in the adipose tissue.

LIQUOR PLUMBI DIACETATIS IN DISEASES OF THE EYE.—Mr. Jeaffreson in defending the application of this solution in the treatment of diseases of the eye, recommends that it should be filtered through blotting paper, if at all turbid, and that a clean quill, perfectly free from all incrustation of the salt, should always be used. With these precautions, he does not think that any injury can accrue from its use.

UTERINE HÆMORRHAGE.—Mr. Hind narrates a case of uterine hæmorrhage, which terminated fatally by the production of anæmia and asthenia, a month after delivery had been effected. The cause of the hæmorrhage was the adhesion, and consequent retention *in utero* of a small portion of the placenta.

FISTULA IN ANO.—Several cases of fistula in ano are reported from the London Hospital, which were successfully treated by Mr. Luke, by a ligature kept moderately tight, by means of a small screw tourniquet, thus gradually dividing by ulceration the part usually incised by the knife. The principle of the proceeding is the same as that which has been for many years adopted by Van Butchell.

LONGITUDINAL SPLIT OF THE HUMERUS.—In the *Provincial Medical Journal*, Mr. Hancock gives the following as the diagnostic signs of this accident:—the great increase of breadth in the joint; the glenoid cavity being partly occupied, the two bodies superiorly, the one under the coracoid process, the other in the glenoid cavity; the prominence of the acromion not being so great as in luxation, and the facility with which the displacement recurs after the parts have been restored to their natural position. These cases are exceedingly difficult of cure, and most probably ligamentous union is the utmost that can be expected, as in this respect they somewhat resemble fracture of the neck of the femur within the capsule, in the difficulty of keeping the joint motionless. There are also other circumstances which militate against the process of union by bone, depending upon the difficulty of keeping the parts in contact. The shaft of the bone is drawn inwards by the axillary muscles, while the portion remaining in the glenoid cavity is rotated in the contrary direction, obeying the action of the muscles attached thereto; added to which, the shaft of the bone is liable to be drawn upwards by the coraco-brachialis and biceps muscles, as in the cases dissected by Mr. Smith, where the smaller tubercle was carried above the greater, the very reverse of the natural relation of the parts. Shortening of the limb, ligamentous union, and consequent interference with

the motions of the parts, are the results to be apprehended from this accident. With regard to the treatment, the principal difficulties to be contended against are, the antagonizing, or rather the directly opposite, actions of the muscles, and the shortening of the limb. Mr. Guthrie employed a modification of Brasdor's apparatus, and supported the elbow, which he carried forwards and fastened to the patient's side; but this plan does not appear to Mr. Hancock to fulfil the objects which are required in such cases. Brasdor's apparatus merely supplies a pad for the axilla, and the power of extending or drawing back the shoulders, whereas we have to prevent the pectoralis major and latissimus dorsi and teres minor drawing the shaft inwards, the biceps, coraco-brachialis, subscapularis, and anterior fibres of the deltoid, drawing it upwards and forwards; and as much as possible to counteract the muscles attached to the greater tubercle, in their efforts to rotate the outer fragment outwards. The most efficient method in his opinion to effect these objects is to pad the axilla, and apply an angular splint, as for fracture of the anatomical or surgical neck of the humerus. A splint should also be applied on the front and back of the arm, and one on the outside, but previously to doing so, a pad or thick compress should be placed between the upper end of the splint and the head and neck of the humerus, fixing the whole firmly with a bandage, carried from the fingers to the axilla. The hand must be supported in a sling, but great care should be taken that the elbow is not at any time pushed up. The accident is very rare.

STETHOSCOPIC SIGNS INDICATIVE OF PULMONARY DISEASE.—Dr. Durrant, in a communication published in the *Provincial Medical Journal*, containing a resumé of physical diagnosis, thus describes some of the signs indicative of disease in the chest, as discovered by the stethoscope, with reference to the intensity of the respiratory murmur. The intensity of the murmur may be altered by being unnaturally loud, constituting the puerile, exaggerated or supplementary respiration. The presence of this sign is chiefly valuable in directing attention to the existence of disease in another part of the chest; it does not in itself determine either its seat or nature. Its locality must of course be extremely variable; it not unfrequently occupies the entire of one side of the chest. The physical cause of exaggerated respiration depends almost solely upon the admission into, and more rapid circulation, of an increased quantity of air, in the vesicles, compensating for the inaction of some part of the same or opposite lung. A pleuritic effusion, consolidation from pneumonia or tubercle, or any pathological cause, obstructing the proper function of one lung, the other to a certain extent will take on this supplementary action. A far more decided index, and of greater import, is the existence of feeble or diminished respiration. It may obtain over a limited point only of one lung, or may extend over a considerable portion of one or both sides of the chest. Unlike the former sign, this is characteristic of the existence of disease in its own locality. It is sometimes of temporary duration only, as in pleurodynia, spasmodic asthma, &c., but more frequently its character is that of permanency. The physical cause of diminished respiration depends upon an obstruction to the admission of air into that part of the lung in which it obtains. The affections in which this condition of the respiration is perceived, are so numerous, the value of its seat, its extent, and its duration, so important, that a careful attention to differential analysis, will alone enable us to substantiate a correct diagnosis. The last condition by which the intensity of the murmur is affected, is in the suppressed or absent respiration. Its seat like the former, is variable; its physical cause depends clearly upon a greater degree of that state by which feeble respiration has been shown to be produced, viz., a complete obstruction to the entry of air in a part or the whole of one lung.

MODIFICATION OF RESPIRATION.—Under the influence of different physical lesions, the sounds of respiration are subjected to a more or less distant departure, from their normal characters. Under this head are included the varieties of res-

piration termed harsh, bronchial, tubular, cavernous, and amphoric. Respiration is said to be harsh or grating when it has lost its naturally soft, breezy character of health; becoming often dry and rough. It is in the first instance more marked in the sound of expiration, but both murmurs become, sooner or later, similarly affected. The physical cause of harsh respiration is an induration or condensation of the pulmonary parenchyma. Dryness of the mucous membrane of the bronchi is occasionally also productive of this sound. Its position in the chest is dependent upon the lesion of the lung in which it obtains. A higher grade of this form, in which the intensity and duration of both sounds are considerably increased, constitutes the bronchial respiration. In this, the impression of roughness, hardness, and dryness, is more fully marked than in the harsh type. The physical cause of bronchial respiration is, like the former, a condensation of the pulmonary substance, which has become in consequence, a better conductor of sound. Its seat is variable, and may extend over the greater part of the chest. In studying bronchial respiration, the student must bear in mind that in the parts corresponding to the upper portion of the sternum, and in the interscapular region, a bronchial character of the sound is, in many individuals, perfectly normal. The sounds pertaining to tubular respiration, are clearly distinct, and give the impression of originating in a space, bearing a tubular form, to which a distinctly metallic character is often attached. This phenomenon can be readily imitated by blowing somewhat forcibly through a brass tube. The transmission of the sound of the air directly from the larger bronchi, through the medium of condensed pulmonary tissue, is the physical cause on which this sign depends, and arising, as it usually does, from pneumonia or pulmonary abscess, the middle regions of the chest are its most frequent seat. Cavernous respiration is well expressed by its name, and imparts the impression of air rushing into a circumscribed cavity of moderate dimensions. Its character is hollow and frequently metallic. The physical cause of this sound is the entrance of air into an abnormal cavity in the substance of the lung. Influenced by the disease, the nature of which it demonstrates, it may occur in any part of the chest; its favourite seat however, is the infra-clavicular regions corresponding to the apices of the lung. Allied to the cavernous, is the amphoric variety of respiration; indeed, in some cases, if the characters be not well defined, the two signs are not easily distinguishable. The latter (the amphoric) imparts to the ear the sensation of air entering a large empty cavity with firm walls. It may be imitated by blowing into a glass bottle with a narrow neck. This sound accompanies both acts of respiration, is highly metallic, and is not unfrequently associated with metallic tinkling. The physical cause is the existence of a large cavity in the chest, communicating with the bronchi, by an aperture of moderate size, the air traversing which gives origin to the sound in question. Unlike the cavernous variety, the amphoric phenomena are rarely detected at the summit or base of the lung, but most commonly at the lateral or central parts of the chest.

EXTIRPATION OF THE SUPERIOR MAXILLARY BONE.

This very formidable operation was performed at the Royal Westminster Ophthalmic Hospital, Wednesday fortnight, by Mr. Charles Guthrie, in a very skilful and dextrous manner on a woman who had been admitted a patient about six weeks previously, with protrusion of the left eyeball, which was afterwards traced to depend upon the pressure of a tumour in the antrum of Highmore, to which it was supposed in consultation to be confined, and to be attached by a pedicle to its parietes. The operator was assisted by Mr. Keate, Mr. Hancock and Mr. Canton; and Messrs. Guthrie, sen., Stanley, Vincent, Avery, and Bury Dament were also present, and fully concurred in the propriety of the proceeding. For a notice of the different steps of the operation, and the microscopic appearances presented by the heterogeneous growth, we must refer to a clinical lecture

which Mr. Charles Guthrie purposes delivering, and which we shall have the pleasure of publishing in an early number.

The patient bore this painful operation exceedingly well, but became the subject of collapse soon afterwards, from which she was recovered by the adoption of the ordinary measures. She had a full dose of Battley's solution soon afterwards, and on enquiring at the hospital the next day, we learned that, she was apparently going on well, not being in any pain, nor at all feverish. An interesting feature of the case was the absence of the symptom mentioned by Gensoul as constantly occurring upon extirpation of the upper jaw-bone, namely, one side of the tongue being clean and the other furred; such was not the case in this woman. We regret to say that this very interesting case terminated, fatally on Monday last.

A patient was operated on the same day by Mr. Charles Guthrie for pterygium, four for soft cataract, and one for artificial pupil, prior to the more formidable operation to which we have alluded.

REMARKS ON THE BETEL NUT.

(To the Editor of the Medical Times.)

SIR.—Among the extracts in your excellent periodical of last week, there is one containing a report by Mr. Hagger from the Veterinary Record on the use of the Betel Nut as a remedy for worms; in which he states that the betel nut is obtained from a climbing plant, belonging to the same tribe of plants as the peppers. This is an extraordinary mistake for a man to make, who it is to be presumed has resided in India, where the article in question is in universal use among the natives. The betel nut on the contrary is the fruit of a very elegant palm-tree, commonly called the "Areca Palm," growing perfectly straight to the height usually of from 20 to 40 feet: it is chiefly cultivated in the Malayan Peninsula and the adjacent islands. The natives of the East are in the habit of chewing these nuts, together with lime made up into a paste, and a leaf, commonly called the betel leaf, which latter is taken from a climbing plant, and is a species of pepper: it is not however, (as he says) of the shape and appearance of ivy, but is broad-lance-shaped, and about 4 or 6 inches long. The natives of India are constantly chewing these ingredients during the day and often-times take fresh supplies during the night: this is termed by the Europeans, "Betel-chewing;" hence probably the mistake by which the leaf of this pepper-vine, and the nut of the Areca Palm have been supposed by Mr. Hagger the product of the same plant. The fact of this nut being so largely used in this way by the East Indians, and their being at the same time remarkably subject to verminal complaints, argues strongly against the probability of its being the acting agent in Mr. H's recipe. Query, is it not the aloes and ginger? These nuts are simply powerful astringents, and have been used for the purpose of tanning.

I am Sir,

Your obedient Servant,

J. W. B. PACKMAN, F. L. S.

Member of the Royal College of Physicians,
Madras Army.

Paris, March 3, 1844.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Anniversary Meeting, March 1, 1845. Mr. Stanley, President, in the chair.

The president delivered the following address.

GENTLEMEN,—It appears to be an expected duty of your president, now almost sanctioned by time, that he should at this meeting briefly set forth a history of the society's progress during the preceding year, and there is an obvious good in this; it becomes the means of informing the fellows at stated periods of the condition of the society, whether it is generally prosperous or otherwise; whether in all its arrangements the society is working fully and effectively for its objects of advancing and diffusing medical science,

and of promoting, as far as it can, the amicable relations of its associates; and if there be departments of the society admitting of improvement, this annual retrospect affords to the fellows the opportunity of considering in what direction it can best be made.

Our new associates in the preceding year amount to 32, among whom I notice with peculiar pleasure Professor Thomas D. Mütter, the distinguished surgeon of Philadelphia, who, in offering himself to our ballot, and contributing his money to our funds, has afforded substantial proof of the estimation in which the Royal Medical and Chirurgical Society is held by our transatlantic brethren. We have to regret that during the preceding year the following names have been removed from our list:—Dr. Sutherland, Mr. Anandale, Dr. Billing, and Mr. Copeland. Our total number of fellows, exclusive of honorary associates, is at this time above five hundred, and of these we are to remember that many reside in the provinces, and consequently derive no other advantage from the society, than a participation in the good name it bears. Our library report corresponds with the general prosperity of the society. We have added to our collection during the preceding year 203 works, of which 77 were by presentation, and the remainder by purchase. Our reading room, now stored with all the British and Foreign scientific Journals of value, is proved by its usefulness to the fellows, to be an important feature in our arrangements. Our ordinary meetings, it affords me much pleasure to state, have, during the preceding year been well attended, bringing together from 70 to 100 of our fellows, with numerous visitors, many of whom have come from the provinces and from foreign countries. Our 27th volume of papers equalling its predecessors in bulk, is, I confidently believe, regarded by the profession as not inferior to them in value.

Here I conclude the enumeration of the principal incidents furnishing criteria of the condition of the society, and pass to another portion of my report, which will be regarded with feelings of a different kind. We have had the misfortune to lose by death during the preceding year the following associates:—Dr. Dalton, Sir Henry Hallford, Dr. Barlow of Bath, Dr. Hope of Edinburgh, Dr. Home of Edinburgh, Sir Isaac Wilson of Bath, and Mr. Tupper of London.

It is well known to be a custom which has been long observed in the scientific societies of the continent, that at stated periods, the merits and the virtues of deceased associates should be duly commemorated. And of late years an expectation seems to have arisen in the minds of the fellows of this society to receive something of the same kind from their president at these annual meetings. But in assigning such a task to your president, you will, I venture to say, sometimes place him in a difficult and delicate position, for in the course of events it will happen that many of our departed fellows have been most estimable individuals, both in professional and in private life, and yet they may not have left behind them such durable monuments of professional skill and knowledge, as would constitute a befitting *éloge* to be pronounced before the members of a learned society. With due consideration, therefore, I beg you will receive the few matters of information I have been able to collect respecting the character and conduct of our departed associates in the preceding year.

To inform you what the chemical philosopher has done for the advance of his science, requires for justice to be done to the subject, that it should be treated by a chemist. I have learned just enough of the subject to know that in every country where science is cultivated, the title of philosopher in its highest and largest sense is awarded to our departed honorary associate Dalton, in acknowledgment of his labours and discoveries in chemical and physical science, among which stands out foremost his development of the theory of definite proportions, the foundation of modern chemical philosophy. An instance is here presented to us of the difficulty with which new truths are often appreciated even by minds well prepared to receive them. Dr. Thomson tells us that shortly after the promulgation of Dalton's

views, happening to dine at the Royal Society's Club, every member having left the room except Sir Humphrey Davy, Dr. Woollaston, and himself, they occupied an hour and a half in conversation about the atomic theory, in order to convince Davy of the inaccuracy of the opinion he had formed of it, but so far from changing his opinion, he went away if possible more prejudiced against it than ever, and that soon afterwards Davy meeting Mr. Davies Gilbert, amused him with a caricature description of the atomic theory, which he exhibited in so ridiculous a light, that Mr. Gilbert declared he was astonished how any man of sense or science could be taken in with such a tissue of absurdities. But Davy at no distant period became so complete a convert to the new views, that we find him the warm eulogist of Dalton, in delivering to him at the Royal Society the first of the Royal medals awarded for discoveries or useful labours in any department of science.

Originality and clearness of thought, ingenuity of explanation, capacity for labour, and power of generalization were in a remarkable degree united in Dalton, as his works abundantly prove. But the beauty of his mind was most conspicuous in the sincerity and earnestness of his devotion to science, independent of worldly considerations, and in the early part of his career, with a very small share of worldly prosperity, for it is known that he resorted to the lowly occupation of teaching others to write, as the means of providing his own subsistence, and at a later period gave lessons in mathematics and natural philosophy at the charge of eighteen-pence an hour. And it was at the time of fulfilling these humble duties that Dalton commenced those investigations which led to the discovery of the laws upon which the whole system of modern chemistry is based. Following him through a later period of his career, we find him displaying the same greatness of character in the little anxiety he manifested lest others should outstrip him in the race of discovery. It appears that the simple and happy idea from which the atomic theory originated, first occurred to the mind of Dalton in the course of his researches on the solubility of different gases in water, which were published in the Transactions of the Manchester Society for 1803. But not until 1808 did he publish his new views in the first volume of his chemical philosophy, and not until twenty more years had elapsed, did he publish the completion of his views in the third volume of the same work, a great part of which had been printed more than ten years.

Dr. Dalton occasionally directed his mind to physiological subjects, and displayed in them the same turn for experimental inquiry and originality of thought as in the subjects of chemical and physical science. His papers on physiological subjects were published in the memoirs of the Literary and Philosophical Society of Manchester. They are, an account of a peculiarity of vision in his own person, under the title of Extraordinary Facts relating to the Vision of Colour; also papers on respiration and animal heat, on the mechanical effects of atmospheric pressure on the animal frame, and on the quantity and chemical elements of food compared with the secretions in a healthy person, founded on a series of experiments which were chiefly made upon himself. And it especially deserves to be noticed that in the last mentioned paper, he commenced the line of investigation which has been recently pursued by Professor Liebig, and, I am authorised to add, without his being aware of the previous observations of Dalton on the same subject.

The account of the discovery of the peculiarity of vision in his own person is thus given by Dalton. "I have often seriously asked a person whether a flower was blue or pink, but was generally considered to be in jest. Notwithstanding this, I was never convinced of a peculiarity in my vision, until I accidentally observed the colour of the flower of the geranium by candle-light. The flower was pink, but it appeared to me almost an exact sky-blue by day; in candlelight, however, it was astonishingly changed, not having then any blue in it, but being what I called red. Not then doubting but that the change of colour would be equal

to all, I requested some of my friends to observe the phenomenon, when I was surprised to find that they all agreed that the colour was not materially different from what it was by day-light, except my brother, who saw it in the same light as myself. This observation clearly proved that my vision was not like that of other persons. Reflecting on these facts," continues Dr. Dalton, "it appears almost beyond a doubt that one of the humours of my eye is a coloured medium, probably some modification of blue; I suppose," he adds, "it must be the vitreous humour, otherwise, I apprehend it might be discovered by inspection of the eye, which has not been done." After his decease, these interesting observations, and the point which had been left for enquiry, were not forgotten. In obedience to Dalton's directions, an examination of his eyes was made by Mr. Ransome, and his colleague, Mr. Wilson, of the Manchester Infirmary, and with the following account of which Mr. Ransome has very obligingly furnished me. "On the cornea appeared the usual arcus senilis, but its centre was perfectly transparent, and free from any tinge of color. The aqueous humour received from a puncture of the cornea into a watch-glass, was viewed by reflected and transmitted light, and found to be perfectly pellucid, and free from color. The vitreous humor, with its hyaloid membrane, was also perfectly colourless. The crystalline lens was amber coloured, as is usual in old persons." A vertical section at right angles to the axis was made in the other eye without disturbing the position of the crystalline, &c., and through this portion of the eye laid horizontally, some of the colours were examined which Dalton had been unable to distinguish, particularly red and green, with, Mr. Ransome states, no appreciable difference to his vision. These results were transmitted to Sir David Brewster, who visited Mr. Ransome for the purpose of examining the eyes, and they agreed that the imperfection arose from some deficient sensorial power, rather than from any peculiarity in the eye itself.

I read, and I am sure the Fellows of the Society will hear, with pleasure, the conclusion of the communication with which Mr. Ransome has been so kind as to favour me. "As a man, a member of society, apart from his position as a philosopher, the character of Dalton was almost perfect. Simple, warm-hearted, unassuming, temperate, and truthful, he could unbend from his scientific contemplations, and accommodate himself to the circumstances of the moment, particularly in the social circles of his intimate friends, when it would be discovered that the grave philosopher had a fund of sly humour, and an aptitude for enjoyment quite unexpected. Though he never sought distinction, and passed two-thirds of his life without due appreciation of the value of his labours, he was not indifferent to the honours which, in his latter years, were heaped upon him. His face beamed with modest pleasure when, at the Manchester Meeting of the British Association, he received the homage of the assembled philosophers." Mr. Ransome further informs us that "Manchester never presented such a scene as on the day of his interment; there was a general suspension of business, and the assembled thousands behaved with the utmost decorum, as the long cavalcade passed through them to accompany his remains to their last resting-place. Many, probably a large majority, could not understand the meaning of the ceremony, but they knew it was in honour of a great and a good man, and one of humble birth."

So completely have the public journals anticipated me in the details of the professional career of Sir Henry Halford, that the repetition of these would be a needless occupation of your time. Sufficient, therefore, it will be for me to touch on those constituents of his character which so wonderfully won for him the patronage and confidence of the aristocracy, not of birth alone, but of the higher order, the aristocracy of intellect, for be it remembered that Halford, the confidential medical adviser of three English sovereigns, was also the physician and the literary correspondent of a large proportion of the most distinguished men of his time. It is well known that he established the evening meetings at the

College of Physicians, and mainly supported them for several years by the productions of his pen, afterwards published as Essays and Orations; it is also known that he twice delivered the Harveian Oration, and that in the year preceding his death, he presided in this room at a meeting of the profession convened for the object of establishing the Sydenham Society. These are so many proofs of Halford's professional zeal that, when viewed in conjunction with the ability he displayed in everything he undertook, they afford some help to an explanation of the reputation he enjoyed. It has been stated that Halford as much surpassed his eminent cotemporary Baillie, in the power of promptly ministering to the relief of symptoms, as did Baillie surpass him in anatomical and pathological knowledge, the only sure ground of diagnosis in disease; and yet if Halford was thus remarkably apt in the suggestion of remedies, this must have been no unimportant element in his success. Halford at the commencement of his career in London was appointed physician to the Middlesex Hospital, but within the short period of seven years he rose so rapidly into practice, that to remain in this office was no longer an object of his desire; he resigned it, and from this time was so thoroughly engrossed by the engagements of private practice and of general society in which he largely mixed, that he indeed "had no unwelcome leisure to employ in writing books on physick." The fullness and the overflowings of his mind were almost wholly upon his favourite classical and literary subjects; we may not, therefore, be surprised to find that as a trustee of Rugby School, and greatly to his credit, he actively promoted the election of Arnold to the Head Mastership, as we are told in the Life and Correspondence of that eminent individual. If Halford had, as Heberden and other experienced physicians have done, recorded more of observation and commentary on the treatment of disease, his claims upon our gratitude would have been greater, but still he was a benefactor to his profession, contributing largely as he did by his association with the great and the learned of his time, to maintain for the medical profession that station in general society, which does not in the same degree belong to it in any other country that it does in our own.

Dr. Barlow was a distinguished physician at Bath for nearly forty years. One who states, and I believe with truth, that he was long and intimately acquainted with Dr. Barlow, has recorded of him "that he cultivated medical science with zeal and assiduity, that his exertions were not limited to objects connected with his profession, that he was the zealous and eloquent advocate of every project that was calculated to extend knowledge, promote humanity, or in any way be useful to his fellow-creatures, that his benevolent feelings led him to support with his pen, his purse, and his personal exertions every object of public charity and utility." Such an amount of worth in a departed associate deserves honourable mention from the chair of this society.

Dr. Thomas Hope commenced his public career as the professor of chemistry in the university of Glasgow; then he became professor of medicine in the same university, and was afterwards transferred to the chair of chemistry in the university of Edinburgh, which he occupied nearly half a century. He enjoyed the highest reputation as a lecturer; his theatre was for many years crowded with pupils, attracted by the eloquence of his discourses, by the completeness with which he taught the science of chemistry, but especially by the remarkable neatness and success of his experimental illustrations, but it does not appear that he made any discoveries in his favourite science. His only publication I believe to have been "an Account of a Mineral from Strontian, and of a peculiar species of Earth which it contains," read before the Royal Society of Edinburgh in the year 1793, and recorded in their Transactions.

Dr. James Home occupied a professorship in the university of Edinburgh upwards of forty years, first in the chair of materia medica, then from the decease of Dr. Gregory in 1821, in the chair of the practice of medicine. I have not discovered the record of any observations by Dr. Home on the sciences which he was for so long a

period engaged in teaching, yet the notice of him by his cotemporaries is in the highest degree respectful, for it is said of him that he was a most zealous teacher, that no professor in the university took more pains in the preparation of his lectures, and it is added that in private life he was held in much esteem.

With Mr. Tupper I had not the pleasure of a personal acquaintance, but I know that he was much respected for the soundness of his practical knowledge, that the uprightness of his conduct, simplicity of his manners, and amiability of his feelings, gained for him the warm attachment of a large circle of friends.

Before I quit this chair, one more pleasant duty remains for me—to acknowledge with unfeigned sincerity, the unvarying courteousness and indulgent consideration, which I have received from the Fellows of the Society, through the period of my presidency, and to acknowledge besides, the kind and willing assistance rendered to me in the discharge of its duties, by the members of the council, and especially by my friends, the secretaries. In perfect truth I can state that the recollection of the occupancy of the President's chair of the Royal Medical and Chirurgical Society, will ever be associated in my mind with the feeling, that whilst it has been the most dignified period, it has been at the same time, one of the happiest portions of my professional life. My gratitude for the honour and the kindness which I have here received, will, I trust, be manifested by cordially uniting with you, gentlemen, in the support of our society, which I firmly believe to be inseparably associated with the respectability and the scientific character of our profession.

NOTICES TO CORRESPONDENTS.

We have had presented to us a copy of a Report of the Carlow Fever Hospital for the year ending 21st November, 1844. It appears that the form of typhus prevalent during 1843-44, extended its ravages more widely, than did fever of any infectious type since the epidemic of 1836; the numbers attacked by it, and admitted to hospital, being: males 281, females 360; total 641. Of the former, 18 died, while among the latter, the mortality was confined to 19. The average mortality was 1 in 17. The fever of the past year exhibited a number of distinctive traits from ordinary typhus. These were, hæmorrhages from various internal organs; petechiæ of very large size, interspersed with vibices, or ecchymoses, swelling of the feet, accompanied by pain, and affections of the stomach and alimentary canal, indicated by bilious and bloody vomiting, diarrhoea, &c. Profuse perspirations were common in a great many cases, without producing however, any critical change. The highly contagious nature of the disease was evident, from the matron, porter, and physician, having been attacked by it, notwithstanding all due attention being paid to cleanliness and ventilation. The treatment invariably adopted was stimulating, recourse not being had in any instance to the lancet; and to leeching, but in very few cases. The report concludes with some statistics as to the sanatory condition of various portions of the town of Carlow, and ascribes the prevalence of such a malignant type of fever to the great number of extremely narrow, ill-ventilated lanes, with which the town abounds, to the dearth of water in these situations, and to the crowded state of the population in these districts, where cleanliness and ventilation are unknown, or disregarded.

To numerous enquirers as to where the "black soap," mentioned in our journal some time since as a cure for paralysis, may be had, we must answer in the negative, not being aware of any one who prepares or sells it.

A Sufferer cannot be prescribed for in our columns. He should apply to some honest professional man.

F.D., a Subscriber.—Query 1st., Burgess, Coventry Street; 2nd., Berkeley Street, Berkeley Square; 3rd., the case, in our opinion, does not entitle you to remuneration. This might be allowed by the Board of Guardians, interpreting Article XIII. in its widest sense.

A Fellow.—Any person holding a license to practise as a physician, from any British College, or from any Foreign University recognised by British Colleges,

will possess under the new Bill the same power to register.

An Old Subscriber.—With a qualification which has procured him the honour he mentions, will, of course, enjoy his present privilege under Sir James Graham's Act.

S.W.—All letters on business should be directed to Mr. Carfrae.

Mr. Bartley's communication will appear in our Pharmaceutical number.

Mr. Thomas.—Hoblyn's dictionary may be had at Messrs. Sherwood and Co., Paternoster Row. The price is ten shillings.

The writer of the letter signed "Lucius," which appeared last week, has favoured us with his name. We can bear honourable testimony to the extent and importance of the services rendered by the writer during years of official employment to the cause of Medical Reform.

Justus has been received, and must give his name.

The paper on Vesico-Vaginal Fistula, which appeared in the last number but one of the Medical Times, and said to have been drawn up by Professor Breard, should have been ascribed to its proper Author, Dr. de Beaumont.

Alpha.—It would appear that he can either register as a licentiate in medicine and surgery, or as a physician, without passing a further examination. He would, however, have to pay the fees marked in the new Bill, (clauses 19, and 20) to connect him with the colleges of the country in which he practised.

One of our Readers.—There are three distinctions under which a medical man may be registered. 1st. surgeons, 2d. physicians, 3d. licentiates in medicine and surgery. The surgeons will be composed exclusively of Fellows. This is what is meant by the words "as the case may be."

A Constant Reader.—Under the new Bill, any person may call himself a hygeist.

A Student.—A person receiving the diploma of the College of Surgeons, Glasgow, before the passing of the new Bill, can register as a licentiate in medicine and surgery.

N. M., Esq., York.—The "Medical Times Almanack," was first published on the last month of 1842. The "Cyclopædia," named, is published, we believe by Churchill, a Bookseller, Princes Street Soho.

Iota.—Can register, but must pay fresh fees.

H. W.—The diploma of members of the College of Surgeons of England alone, gives the title by the new Bill to register as a licentiate of medicine and surgery. Almost any diploma in fact, is made to suffice for the new grade.

The letter on "Medical diplomas," cannot be inserted.

We have received several letters on the coup de grace, quietly given to the Apothecaries Society of Ireland by the new Bill. The licentiates of that body who now undergo a most respectable course of study and examination will not, under the new Bill be allowed to register.

A Licentiate of Glasgow, will be able to register as Licentiate of Medicine and Surgery.

X. Y. Z.—Sir James Graham announced last year as he has done this, that two rural practitioners would be recommended by him to be placed on the Council of Health: of course he would select them himself.

Amator Justitiæ writes us a long letter against the enlarged permission of quackery still granted by the present Bill. He inveighs particularly against Coroners for their non-performing their duties in such cases, and affirms that either quackery is not rise in London or not mischievous, or else that a certain Medical Coroner has shamefully shirked his duty. Our correspondent professes a quack license.

A Medical Reformer.—Querist.—Cuibono? Mercator conscientiæ.—A Pig in a Poke, &c.—Our correspondents who are either very facetious or very indignant at a recent odd gyration of a mountebank Medical Reformer, have overstretched the importance of the party. A thing may be vendible and not purchaseable. The fraternal appointment of £1,500 per annum must content for at least some time to come. Success is, however, so much a matter of life or death to Sir James Graham that he may go to some extreme to secure help. As the Bill's chances of success grow more feeble, the interested support will grow weaker; and Graham will be deserted in his utmost need.

Mr. Robins is right in his opinions on the Registration. It is most desirable; but its importance dwindles to nothing in the wrong sought to be inflicted so systematically by the new Bill on General Practitioners. By the former scheme, it was supposed by Dr. Davies, of Hereford, and by us after him, that Sir James intended to register the body of members of the College of Surgeons as Surgeons and Fellows. The altered Bill has a directly opposite effect.

The surgeons of East Kent to a considerable number, have protested against the new Charter. The paper shall be duly considered.

A surgeon of Norwich charged with manslaughter by a coroner's jury, escaped from prison the other day. Five pounds reward have been offered for his capture. The charge was grounded on the death of a patient during her accouchement; but our correspondent will find his whole case elsewhere.

V. tells us, "The veterinary surgeons of the French army are in future to take rank and pay as officers and gentlemen."

H.—Five hundred students of University College have resolved to wear Collegiate caps and gowns. A very foolish resolution.

X. Y. tells us that Mr. Skyman, Surgeon, has been elected corncorner for the northern district, Montgomeryshire.

K.—The New Medical Bill will be read a second time on April 7.

P. S.—Dr. Jordan Lynch delivers a Hunterian Oration at Exeter Hall on March 19.

A HANDSOME PORTFOLIO for holding the "MEDICAL TIMES,"—very desirable to those who would keep the numbers clean for binding, and easy of reference—may be had, by order of any Bookseller, or at the Office, price 5s.—An allowance is made to the trade.

NOTICE.

A second Edition of the Medical Times will be ready to morrow Morning (Saturday), at 9 o'Clock, and will contain a Full Report of the Meeting, to be held this Evening at the Hanover Square Rooms.

THE MEDICAL TIMES.

SATURDAY, MARCH 15, 1845.

Se aper Fideles.

The genius of misrule seems to have had supreme influence in the incubation of the altered Bill. So much of legislation, leaving with equal adroitness its professed objects untouched, was never before paralleled. It is a Medical Reform Bill that reforms little and deforms much. Pass it, and the day after, Medical Reform will offer an importance and urgency fifty fold greater than anything that ever the last half century has witnessed. Amid our multiform grievances, the Bill will be our greatest; one enormous evil superadded to the rest, and under the sense of which—as when cholera or the plague visit the hypochondriac—all others may be very sensibly forgotten. The horse, aggrieved by the stag—says the fable—took man's help for deliverance. The petty annoyance was removed, and the delivered became mastered for life. The Profession invoked the Minister to their rescue from irresponsible Councils. Worse than the fabled horseman, Graham concedes not the prayer, yet demands its price:—fixed and permanent degradation. He will scarcely better us in trifles, yet demands to ruin us in essentials! He will reform us into a settled, social degradation!

What, beyond dispute, is the scope, tendency, and direct result—we will not say aim, for Graham sins in ignorance, we believe,—what we say is the bill's direct end, but the immediate prostration into a low, subordinate, and ignominious social grade, of the great mass of British doctors? Here we have concentrated the whole principle of

the bill. It is the key which explains its every difficulty, and makes clear every deformity. Now, what, generally speaking, at this moment are the General Practitioners of this empire? Is it not a fact, that they form substantially the British Profession?—That they number, especially in the provinces, some of the most scientific men that the most learned of professions ever boasted of, even in the most fortunate of its epochs?—That in numerous cases they boast of Members with Physicians' licences on one side, and Surgeons' diplomas on the other, and almost in all cases, of those who possess, for well tried medical and surgical skill, attestations from at least two legal institutions of the country? They are the men who dispense to our fellow subjects nineteen-twentieths of the blessings possessed by the enriched medical science of our age: The poorest Englishman has their aid: the Queen disdains not their services for her children: each intermediate grade of persons looks to them for help in peril of sickness. Thus, a large body: thus an *important* social order: thus a highly educated, and largely respected community, they offer, in addition, this striking characteristic forcefully prominent, that every day sees them upheaving as a class in scientific repute and gentlemanly standing. The profession, we say it unhesitatingly, are proud to a man of this large and noble division of their brethren, and there is not a liberal minded "pure," or clever and successful Physician, who has not marked with gratulation the immense development in attainments and worth each day manifested in them. Now what does the bill, we ask again, with these men? It despoils them wholly and utterly of their present position in society: it distinctly, and in as many words, reduces them to the place held years ago by the Apothecaries, and provides that for the future that place shall not rise as of aforetime—but be everlastingly stationary. Various means concur to one end, and there is hardly a clause in the bill whose tendency is not in this direction. The Bill, as a first effect, forces the General Practitioner who is more than ordinarily distinguished, to desert his order in self-defence;—obliges him no matter at what loss to his business or expectations, or at what cost by examinations and fees, to become a "pure," or Physician, that he may escape being branded for life as a low, half-educated Practitioner; and thus the scheme of offering our whole body to the public as a mass of inert mediocrity—British types of the spurned *Officier de Sante* of France—is expected to be successfully carried out. This is not enough. The bill gives the Council of Health, composed almost exclusively of "pures" and Physicians, the power of fixing what qualifications and medical titles shall be necessary for holding any medical office of repute throughout the empire and its dependencies; or, in other words, it will be enacted that none but Fellows of Surgery and Associates of Medicine (the enrolled classes of Physicians) shall occupy public situations which would reflect *éclat* on the possessor or his order. The machinery of abasement does not end here. The body of General Practitioners are distinctly deprived by the Bill of the legal title, which, of all others secured the confidence of patients, and socially elevated the whole class. The BILL DISTINCTLY ROBS THE GENERAL PRACTITIONER OF HIS TITLE OF SURGEON. The only *Surgeon* the Bill recognises is a *Fellow*. *Fellow and Surgeon* are made by the Bill synonymous terms, and the present Apothecary or Physician in general practice, who happens to be also a Member but not a Fellow of a

College of Surgeons, will yield his designation of Surgeon to luckier rivals, to put up with that of "Licentiate." If the Bill pass, there is not on a stringent enforcement of its intentions, one of the 12,000 members of the College, who might not be prosecuted as for a misdemeanor if holding himself out to the public as a "Surgeon." The only Surgeons that the registration list will know are the "Fellows." For a member to call himself a Surgeon would be to pretend a registered title which in law he would not possess.

Hence, then, three facts are clearly before us: first, that the General Practitioner will cease to be a "Surgeon;" secondly, that he will be allowed to fill no public position of repute without further Collegiate examinations and titles; thirdly, that the most distinguished men of their body will be, by a necessary action of the bill, drawn from them to the higher grade of "Surgeon," or Physician. These are strong and startling facts; and when we add to them that the General Practitioner will be a *five shilling* man on the register, while the "Surgeon" will pay gold, that the Apothecary of one diploma is specifically made the type of the whole class; that the period of initiation shall be so early as twenty-one for the General Practitioner, but not earlier than twenty-five for the "Surgeon;" and that in no Council of Health, no College, no Society, will the General Practitioner be entitled to give a vote or utter a word on any proceeding, however vitally it may affect his interests; that though he will pay to the Council of Health, there is no provision for his presence or participation in its proceedings, as there is for every other grade; that though he will contribute to the College of Physicians, he cannot enter within its precincts; that though he largely supports the College of Surgeons and the Apothecaries Society, he is kept a powerless, condemned negation by the bill in all that concerns their management and honours; when all this, we say, is said, what need of one further word to shew the enormous, the irremediable degradation that the altered scheme proposes for the body of British Practitioners—that body for whose usefulness and scientific increase Sir James Graham expresses, in speeches, such eulogiums; in *bills*, such impairments? Pass the new measure and they are worse than maltreated and degraded,—they are ruined. The Bill will do for them on a large scale, and still more efficiently, what the recent Charter has partially done on one somewhat smaller. The *Medical Gazette*, which some time since—speaking as the mouthpiece of Brodie, insisted on the necessity of educating *medically* to a small amount, the druggists—to form a body of doctors for the poor—exactly indicated the sort of men the General Practitioners are now to be made. Brodie, who after being raised by them to a wealth and importance—proved now to be very ill-bestowed—would give them to any body, "and welcome;" so that he could detach them from the College, which he seeks to limit to "the pures," and the new bill is a monumental proof of the extremity of social debasement to which he would lower his benefactors, if blessed with the opportunity. After all, it may not be Mordecai but Haman that shall be hung. Brodie may be known but as a very foolish and very mischievous busy-body, when the Profession, he would degrade, shall be flourishing in more than usual strength and prosperity. The men that made, can do something to unmake; and we mistake vastly if the whole result will not be a final lesson to Home Secretaries to beware how they trust their characters as statesmen, to the protection of so inexperienced,

so prejudiced, so utterly small-minded, a man as the Queen's Serjeant-Surgeon. Earnestly do we warn Graham against the intriguing little baronet. It would seem odd that the parasitism of such a person should lose a great minister his place. But more unlikely things have occurred.

Let us say, in conclusion, that though we admit there are two or three points proposed which have a good tendency in reference to society, we yet defy any man, fairly examining the rest of the Bill, to characterise it, save as a most dishonest and unjust arrangement of each question in dispute between the different parties in the profession. It is a Bill of reward and premiums to the governing, of pains and penalties to the governed part of the profession. The "pures" are protected in every invidious, in every revolting privilege: they receive a surprising enlargement of their domain of patronage. The physicians, similarly, have a new Council, and its appointments opened to them; and in addition are given pickings from the old carcass—so well preyed on—of General Practitioners. The latter class alone are unpromoted, unenriched; they get nothing, but lose much. In the words of one of the clauses they pay for the working of the whole Bill! Taxed, degraded, turned out of their Colleges, stripped of their titles, made social foils for the more fortunate "pures," they will stand, before the public, monumental effigies of the great blessings of Medical Reform as understood by the Home Secretary through the mediation of Brodie!

THE SURGICAL CHARTER.

In the House of Commons on Friday, Colonel Wood asked to know whether the Right Honourable Baronet the Secretary of State for the Home Department, intended by any supplemental charter to remedy the grievances and exclusion to which a great portion of the medical profession were subject under the charter recently granted to the College of Surgeons?

Sir. J. Graham was at a loss to understand what were the grievances or exclusions to which his Honourable friend's question referred. The recent charter granted to the College of Surgeons by Her Majesty, under the advice of Government, appeared to him to rectify many of the evils and abuses which partook of the character of exclusion in the antecedent charter, and he was certainly not prepared to advise the grant of another charter.

THE COLLEGE FELLOWSHIPS.

To the Editor of the Medical Times.

[We love not intimidation: and therefore only say that every member wishing the Fellowship, and declining from principle, and out of respect to the feelings of his brethren to sanction injustice by the gratification of his desire, is worthy of all honour. Were we standing in the position of an excluded member, we would lose life rather than support so disgraceful an iniquity.—ED.]

SIR,—I passed my examinations at the College and Hall, with credit. The questions put to me were answered satisfactorily, and without exception. At the latter place, my classical knowledge was such, as to admit me the first to the President's table. Having an inherent love for the profession, I have, since then, pursued its studies with pleasure, and, so far as the engagements of practice would permit, no day has passed of which some portion, has not been devoted to the reading and study of surgical or medical lore. I trust I possess no more than that just confidence which would lead me to present myself to any examination which may be instituted as a test of the possession of scientific knowledge. I am ready, at once, to meet the examination for the College Fellowship, and

so far as my own feelings are concerned, I should prefer the Diploma with, rather than without, examination. But what am I to do? I respect the feelings of my brethren! The universal cry is, "We are wantonly, recklessly, shamefully, degraded. If you submit to an examination, you become a willing party to our degradation." I think I should. What is your view of the case? If no surgeon present himself for examination in April next, according to the College announcement, will it not be one means of bringing the Junta to their senses? What madness affects them!! Why don't they listen to the admonitions of their friends?—To your voice, which has been most faithful to their interests?

If they would but, at the present crisis, come out, as we some short time ago, hoped they would, the unanimity, and well-being of our profession would be restored, and all might yet be well.

In this town the ire of the profession rages against the College. Of its members I stand almost alone, in having refused to join the "Incorporation of General Practitioners." One respectable brother said to me the other day "Oh! had I but my twenty-two guineas, gladly would I give up the College diploma!" I don't say so. I say to the Council, "Act honestly. Do unto others as you would they should do unto you," and I shall ever esteem it an honour to be,

A MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

NEW CHARTER OF THE COLLEGE OF PHYSICIANS.

(From the British and Foreign Review for April, 1845.)

A Bill for enabling Her Majesty to grant New Charters to certain Colleges of Physicians and Surgeons. Ordered to be printed 25th Feb. 1845.

This Bill enables Her Majesty to grant new charters to the College of Physicians of London, Edinburgh, and Dublin, and to the College of Surgeons of Edinburgh. It gives no information as to the character of the charters to be granted; and as none of these have been as yet laid before parliament, the profession generally must, for a time, remain ignorant of their respective provisions. The only one of the intended charters, of the contents of which we possess any knowledge, is that of the College of Physicians London; and it is with great concern—we may indeed say, as a member of that body—it is with no slight feeling of shame, that we announce to our brethren beyond the pale of the college, that it contains one most important clause which, in our humble opinion, not only vitiates all that is good in it, (and it contains much that is good,) but stamps it, as a charter, in the highest degree as illiberal and unjust, alike unsuited to the spirit of the present time, and unworthy of the institution whence it emanates. The provision to which we refer is the limitation of the fellowship to a small number of the members of the corporation. At the moment we are writing, it is not finally decided whether the number of Fellows shall be definitively limited to two hundred, or shall bear a fixed proportion to the varying number of Licentiates or Associates. But, in either case, the result will be the same, viz., that only a small proportion of the Members (one fourth, one fifth, or one sixth) can by possibility become Fellows, that is to say, can obtain any corporate privileges or attain any of the offices or honours of the College! When it is considered that by the new charter, the College is reconstituted as a corporation; that its title is changed to that of the Royal College of Physicians in England; that by the new Bill every future English physician is compelled to join the corporation as a member, and to pay a fee on joining it; and yet that the obtaining of any corporate privileges or attaining any corporate honours, can only, by possibility, fall to the lot of a small minority;—it can hardly be imagined that such a constitution could have been framed at the present day by the members of a scientific body, or, if framed, that it could obtain the sanction of the government. That it has been framed, however, is certain; but we are far from believing that it will obtain the sanction of government without modification.

The charter recently granted to the College of Surgeons, and which has excited so much discontent in that branch of the profession, is greatly more liberal and just than the one under consideration; inasmuch, as by the surgeons' charter, *every member may become a fellow*, and thus attain all corporate rights and privileges, on submitting to certain conditions therein laid down. It remains to be seen in what light the Physicians will regard the charter about to be granted to their College; but if, on being made aware of its character, they sit down in quiet and silent content, we shall—to say no more—be surprised. The college, however, in such a case, may be justified in considering its proceedings as sanctioned by those most affected by them; and though we will not the less maintain the justness of our own views, we will at once admit that we have been mistaken as to the opinions and feelings of the physicians of England.

Instead of stating, as we have done, that the future Members or Associates of the College of Physicians possess by the charter *no* corporate rights or privileges, we ought to have stated that one privilege is conceded, which the College may possibly regard as of some value: as, however, we consider it the reverse of valuable, we have rejected it from our category of corporate rights. The privilege is this: the members are permitted, on one day in the year, to meet the Fellows in the College, and to vote, *in conjunction with them*, in the election of Fellows (four or five, perhaps,) to fill up the few vacancies occasioned by death! For ourselves, we confess that we hope never to see a spectacle so melancholy—to use no harsher term—as that of a body of gentlemen thus consenting to compromise at once their dignity and their rights, by sanctioning an act of injustice towards the whole body of which they are members, and thus assisting in their own degradation.

In making these observations, we consider ourselves as discharging an imperative duty towards the College of Physicians. Considering the provision of the charter here animadverted on, as calculated to be still more injurious to the College than to the profession, we feel that we should not be fulfilling the solemn obligation we came under on becoming one of its members, if we failed to advocate any measures which we deem calculated to promote its best interests. The voice of the profession, if it chooses to speak, may be listened to, though our words may have been unheeded; while its silence, if it remains silent, will at least save the College from the annoyance of any more fruitless discussions within its own walls.

DR. CLAY, OF MANCHESTER, TO MR LISTON.

Sir,—In the *Medical Times* for March 1st., I observed, with much regret, a violent, and prejudiced opinion of yours recorded against the operation of ovariectomy.

Of all men in the world, you are the last from whom I should have expected such an exhibition of unfairness and prejudice, knowing, in your earlier career, how much you, yourself, suffered from the illiberality of others. Your principal objection to the operation seems to be the uncertainty of diagnosis; surely, Sir, you, of all others, cannot be serious in applying this rule,—that because the diagnosis is difficult, the operation is unjustifiable. Have not cases been placed on the operating table for stone, where no stone existed? But who ever thought of advancing that as an argument against lithotomy? Have we not heard of malignant tumours being mistaken for aneurism? Still, that is no argument against the operation for aneurism; nay, the very treatment of a well-known disease is undecided, if we may believe the opinions given by yourself, and others, on a late trial; still, these are prejudiced, one-sided, narrow-minded arguments, which you ought to soar beyond. Are we in the 19th century to have no improvements in Surgery, but be stand-still, do-nothings? Or, to be content with the grand panacea, which Paracelsus carried in his cap and beard? If so, why, in the name of common sense, did you publish your works on surgery, suggesting improvements on various

points? If your arguments against ovariectomy are to be received, your works are superfluous, your improvements mischievous. You condemn an operation without having had any experience, of it, because you had a rival in Modern Athens who practised it; and I take up the question with you, because I have been, and am, more extensively engaged on this subject than any other person, and I venture to prophecy that when ovariectomy has been as long before the profession as lithotomy, and operations for aneurism, fewer mistakes will arise respecting the former operation, than at present characterize the two latter. I will not repeat what a correspondent in the same No. of the *Medical Times*, suggests, but I do hope you will adhere a little more to the golden rule, "Do unto others as you would they should do unto you." That you may in future learn a lesson of forbearance, and liberality and endeavour to earn the title of infallibility in cases, of your own daily experience, is the sincere wish of one who is as ready to defend your good qualities as to expose your illiberality.

I am, Sir,
Yours respectfully,
CHARLES CLAY.

THE LATE CASE AT ST. BARTHOLOMEW'S

To the Editor of the Medical Times.

Trin. Col. Cambridge, 12th March, 1845.

Sir,—I am surprised that the new officers of Bartholomew's, should be so dilatory in publishing a statement of their case, of supposed aneurism; more than three weeks have elapsed since the subject was alluded to in your journal, yet beyond the paragraph in your subsequent number, not the slightest notice has been taken of it. The case has occasioned no little sensation both in town and country, amongst the profession, and further delay cannot fail to be injurious to the hospital and its medical staff. But they are not the only parties interested. There were, I understand, some surgeons, humble ones it is true, only ordinary members of the college, who ventured to form a different, and as it proved, a correct opinion in opposition to a whole body of Fellows. Rumour, as you observe, has been doing its work with the case, and an immediate and authentic statement is demanded, as well for the credit of the hospital and its officers, as in justice to those humble members of the profession, who ventured to differ from them in opinion, and protest against the operation.

I am, Sir,
Your Obedient and Obligated,
A FRIEND TO JUSTICE.

FORCIBLE REMOVAL OF THE UTERUS AND A PORTION OF THE LARGE INTESTINES IN A PARTURIENT WOMAN: INQUEST.

Considerable excitement has prevailed in the parish of Costessey for the last five weeks, in consequence of the death, after child-birth, of a married woman, named Mary Jane Lovett; the melancholy event being attributed to grossly ignorant treatment on the part of the medical man who attended her. The poor woman was the wife of a carpenter in the village, and the mother of nine children. She was buried soon after her death; but as the excitement continued, and, in fact, appeared to increase, it was deemed proper, by the authorities, that an enquiry should take place. The proper steps were, therefore, taken for an inquest being held before Mr. Pilgrim, one of the county coroners; and on Friday morning the body was exhumed, for the purpose of undergoing a *post mortem* examination. The enquiry was held at the White Hart Inn, Costessey, and was attended by many medical gentlemen, among whom were, Mr. Crosse, Mr. Scott, Mr. A. Master, Mr. Gowing, Mr. Spencer, Mr. Chater, Mr. W. B. Francis, Mr. Wiles, Mr. Phillippo, Mr. Cooper, and others, who kindly rendered every assistance during the inquiry in suggesting questions. Mr. Gaches, the practitioner who attended the deceased, was also present; and he was asked, the

could produce the substance he had taken from the deceased? He said that he could not, for he had made away with it, but he could show where it was put. The coroner told him, that he was not bound to criminate himself by any statement, but what he did say would be taken down and might be used against him. The Coroner also said, he was happy to see so many medical gentlemen present, and would be obliged by their assistance in the inquiry.

The following evidence was given before the jury:—

Ann Cannell, the wife of Jacob Caunell, of Costessey, farmer, deposed:—I was well acquainted with the deceased, Mary Jane Lovett; I have known her many years. I have been a midwife four or five years. I was sent for by Mrs. Lovett, on a Sunday, five weeks ago. She was unwell, and supposed to be in labour. I went to the house immediately; the nurse and deceased's mother were there. Mr. Gaches, who resides at Costessey, was sent for; he came soon after. The deceased got worse, and Mr. Gaches came up stairs to her; she was then going on very well. There was, I think, some little difficulty from what Mr. Gaches told me, but she was delivered safely of a female child. I did not think she was going on well after the birth of the child; I thought so from what I had seen before in her previous confinements. She is the mother of nine children; I think five are now living. She had gone her full time. There was nothing more difficult than I have seen on former occasions up to the birth of the child. The after-birth did not come; Mr. Gaches tried to get it, Mrs. Lovett said to him, "I cannot stand it." I made answer, and said, "It must be got." I then asked Mr. Gaches if he did not want some further help? He said, he did not think that any other doctor could do more than he was doing for her. I said to him, "Let her rest a little time." Mrs. Lovett then said, she wished very much to see her husband. I sent for him; he came instantly to her room: she said to her husband she thought she was dying. I have heard her say the same when she has been in her labour on former occasions. I did not hear Mr. Gaches say at this time there was any danger or difficulty. Mr. Gaches was with the deceased some little time before the birth of the child. She said to her husband, "Let me lay and die; don't let me be meddled with any more." I said, "There must be something further done." I did consider the means used were similar to those used by other surgeons. [The witness here deposed to the removal, by Mr. Gaches, of a round substance, unlike anything she had seen before; and continued.]—I did not consider there was more violence used than I have seen on former occasions. I think, from the birth of the child to the removal of the substance, was about two hours. When the deceased was delivered of a child, the one previous to this confinement, it was about 20 minutes from Mr. W. Cooper's arrival to the removal of the after birth. I cannot say how long the child had been born when Mr. Wm. Cooper arrived; it might be three-quarters of an hour. Mr. Gaches did not, to my recollection, express any danger or difficulty. The substance removed by Mr. Gaches was taken away by him, I never saw it afterwards. Mrs. Mortar, the nurse was present nearly all the time. Mr. Gaches appeared kind and attentive to the deceased. After Mr. Gaches had left the woman, I said to her husband, "For God's sake go for Mr. Gaches, I think your wife is dying." The husband went for him; he came directly, but the woman died before he arrived: it was, I think, half an hour from the time the substance was removed to the time the poor woman died. I never heard Mr. Gaches say or express any fear that the woman was in danger. There was but little noise when the substance was removed, and she appeared to suffer but little. Mr. Gaches never said to me what he thought the substance was. I did state to Mrs. Lovett, when I went to her, on her being first taken ill, that I thought she did wrong in having a fresh doctor, for I thought it straight-forward work to Mr. Cooper or Mr. Phillippo, because I knew there was great diffi-

culty in removing the after-birth in previous labours.

Mr. Gaches said, this witness gave her evidence fairly. He had no questions to put.

Honour Mortar, of Costessey, widow, the next witness, deposed.—I knew the deceased well; I have nursed her in her confinements four times. I was sent for on Sunday morning, I think it was the middle of January; I got to her house a little after nine in the morning; she was then very ill. I sent for Mrs. Cannell; she came very soon. Mr. Gaches came about ten o'clock. She apparently was going on very well; she was delivered of a child about two o'clock; I was present when the child was delivered; I did not consider it a very difficult birth; I did consider she was going on well after the delivery of the child. I saw part of the after-birth removed; it was about two hours after the delivery of the child; there was great difficulty in removing it; I consider there was no more violence used than was necessary in removing this part of the after-birth. I saw the other part of the after-birth removed; it was very soon after the removal of the first. There was something attached to this latter part of the after-birth which I did not understand; I made no observation, but I thought it something very singular; it was put into a chamber-mug; I think it would fill a quart basin; I never saw anything of the kind similar to this substance; it was round, brown, firm, and looked to me to be heavy; Mr. Gaches took it away with him, and he left quickly after its removal; I never saw it afterwards; there was a string attached to the substance; I do not mean the after-birth. I think Mrs. Lovett lived about half an hour after its removal. Mr. Gaches was asked whether he thought it proper to have another doctor? He said, he thought if there was a room full they could not do more than he was able to do. I could not see there was any fault in Mr. Gaches; I saw no unnecessary violence used; I did not see there was anything improperly done. I did not hear Mr. Gaches, at any time, express any fear or difficulty. I saw no fear until after the substance was removed, and my suspicions then arose from what I saw attached to the substance; what was attached was long, it was of a flesh colour. I talked about this to Mrs. Cannell, and said, "I never saw an instance of this kind before;" this was in the presence of Mr. Gaches, but whether he made any reply I cannot say. I saw the part which was attached to the substance cut off by Mr. Gaches with a pair of seissors. The string attached to the substance was not like the navel string. There was a solid substance lying a few inches from the mother, attached by a string differing in appearance to the navel string, which was divided from the mother by Mr. Gaches with a pair of seissors. There was a part remaining attached to the woman after the removal of the substance. There was not much bleeding at the time of the cutting. This appearance altogether was very different to what I ever saw before. I cannot say whether the string which I saw attached to the substance was part of the bowel. The mother of the deceased was in the room nearly all the time, but occasionally went down stairs.

Mary Ann, the wife of Money Elden, of Costessey, deposed:—The deceased is my daughter, she was taken ill on Sunday morning, the 19th of January last, I went to her first about 10 o'clock; I knew she was in her labour; Mr. Gaches was sent for; he came instantly; my daughter was upstairs, and Mrs. Mortar and Mrs. Cannell were with her. Mr. Gaches was below stairs for about a quarter of an hour, he then went upstairs, and I went with him; my daughter was delivered of a child a little after two o'clock; I was in the room when the child was born; I did not consider she had a bad time; I thought she was not so faint and so exhausted as I have seen her many times on a former occasion. I was on the bed by the side of my daughter I think about two hours after the birth of the child. I saw Mr. Gaches use great exertion with my daughter, I supposed, endeavouring to remove the after-birth; he removed a large substance, it was more long than round. It was different to what I had ever seen before; there was a long string attached to it,

which was as thick as my little finger, and was several yards long; it appeared to me, and I have thought so several times, to be part of the bowel. I made no observation at that time to Mr. Gaches, but have mentioned it to him since; Mr. Gaches told me it was attached to the substance and would come away with it. I asked him what it was, and I told him it looked very much like the bowel; he said it was attached, he could not help it, and it would come away with the substance. It was very different to what I had ever seen before, and this I have told Mr. Gaches since. Mr. Gaches never intimated to me that my daughter was in any danger. Immediately after the removal of the substance I saw a change in my daughter, and then I suspected she was not going on so well. Mr. Gaches took the substance away in a chamber-mug, where he had placed it when it was removed from my daughter. Mr. Gaches told me on the Sunday, about half an hour after the death of my daughter, that it was a false conception; this I did not understand. Almost immediately after the substance was removed, Mr. Gaches took it away. On the Monday morning, the day after my daughter died, Mr. Gaches called on me, and said, he had found it out, that it was a tumour, weighing 3lbs. 3oz. I asked him then, what he was going to do with it? He told me he had put it into spirits, and intended to take it to Mr. Crosse, of Norwich, directly; which I thought he had done until last Sunday, and then there began to be a stir in the parish respecting this tumour or substance; till then I considered Mr. Crosse had it. I thought Mr. Gaches left in a hurry when he took the substance away. I saw Mr. Gaches cut the string attached to the substance; the moment this was cut, I saw my daughter's countenance change. The string attached to the substance appeared to come away at one time.

Mr. Gaches had no questions to put to this witness, who was much affected while giving her evidence.

Letitia, the wife of John King, of Costessey, labourer, deposed:—I knew the deceased. I was sent for to her house on the Monday morning after her death; I went, and Mrs. Mortar, who was there, gave me the bed-linen to wash. I had the linen which was on the bed where she died; when I saw them, I thought I never saw such a scene before. When I pulled them about, I thought it was the after-birth which the doctor had pulled in pieces; when I came to examine further, I thought it appeared more like flesh. I did not examine it particularly, and cannot say what it was.

During the examination of the foregoing witnesses, several medical gentlemen were proceeding with the *post-mortem* examination of the body; after which the following evidence was given;—

William Bransby Francis, of Norwich, Surgeon, deposed:—I have examined the body shown to me, as the body of Jane Mary Lovett. On opening the cavity of the body, I observed the stomach, small intestines, bladder, and some blood effused into the parts about the pelvis. I then tied the swallow, and the parts leading from the stomach, and divided them; I took out the small intestines, which had no attachment below. The stomach was then removed, but there was no large intestines; the bladder contained about three ounces of urine. The small intestines were then measured, and found to be fifteen feet and eight inches, and another seven inches of the small intestines, was attached to the stomach. The lower end of the intestines was torn. On removing the kidneys, I found them healthy, as well as the liver. On removing the parts from the pelvis, I found thirteen inches of the large intestines, and the vagina, which was lacerated, but there was no womb. In my opinion, death was caused by the injuries inflicted in removing so large a portion of the large intestines and the womb. In the most difficult case of child-birth there ought not to be any of those parts removed. I never met with a case in which they were removed. In removing these parts I consider there was a great want of skill and judgment. I should think no practitioner at all acquainted with midwifery would remove them; their removal was almost instant death. I see no

reason why, after the birth of the child, if proper skill had been used, the life of the deceased might not have been saved. The length of the intestines in an ordinary case, is about twenty-seven feet, or about five or six times the length of the body.—By Mr. Gaches.—What might have caused these appearances independent of what you have stated? Answer:—Nothing could have caused those appearances but violence used from without.—Mr. Gaches put no further questions.

John Green Crosse, of Norwich, deposed:—I have also examined the body shown to me as the body of Jane Mary Lovett, in company with Mr. Francis. I have heard the whole of the evidence of the last witness, and confirm what he has stated in reference to the parts found in the abdomen. The parts entirely absent were the womb, with all its appendages, and all the great bowel, except thirteen inches. A small portion also of the small intestines had been removed with the large one, so that altogether many feet of bowel had actually been removed. At the two places where the separation of this removed bowel had occurred, there was every appearance of the removal having been made by laceration. The removal of the womb, and such a quantity of the intestines must necessarily prove quickly fatal. There are no circumstances that would admit of, or require, the removal of either one or the other. Such an injury could only have been inflicted in error; no circumstances could have required or justified such a practice. I have heard all the evidence, and from that, I cannot see any reason why, after the birth of the child, if the deceased had been properly treated, her life might not have been spared.

Mr. Gaches was then asked, if he wished to make any statement? After some private conversation with Mr. Crosse, he declined to give any explanations as to his mode of treatment, or the circumstances of the case; merely observing that he was a practitioner duly licensed. He produced his diploma from the Apothecaries' Company, but he was not a member of the College of Surgeons.

The Coroner, addressing the jury, said, it was clear that, if a person of sufficient skill and knowledge made an accidental mistake, in such a case, he could not be chargeable with murder or man-slaughter; but he considered there was sufficient evidence of gross ignorance and inattention on the part of the practitioner in this case to warrant a verdict for the latter offence. It would be for the jury to say whether the poor woman came by her death from gross ignorance, or merely accidentally. If they were satisfied that the practitioner was incompetent, or that he was grossly ignorant, or negligent, they were bound to return a verdict of manslaughter; on the contrary, if they thought it was only a professional mistake they would say so.

The jury, having consulted a short time, returned a verdict of "Manslaughter" against Mr. Gaches.—Mr. Gaches said, it was completely an error of judgment.

The coroner then told him, that he must consider himself a prisoner, and must be committed for trial. He was given into custody of two policemen, and at his request, not sent immediately to the Castle, in order that he might have some time to find bail, which he said he could find to any amount. He was allowed till the following day, and during the night effected his escape, and up to the present time has not been retaken into custody.

MEDICAL PROTECTION ASSEMBLY.

Monday, March 10th.

Mr. Hunter, upon being voted to the chair, desired to express his strong objection to the vote of thanks to Sir James Graham agreed to at the last meeting of the committee, remarking that had he been present he should have deemed it his duty to have opposed the resolution, as he did now, on the ground that whatever might have been conciliatory or liberal in the speech of Sir James Graham, the Bill, itself, with the much-talked of modifications, deserved anything but the thanks of the profession. He called the attention of the committee to the important points affecting the interests of the profession, remarking upon the fallacy of the degree of protection proposed and the absurdity of retaining the nominal power of the Apothecaries Company to prosecute, and yet deprive them of their means to do so. Their present funds were acknowledged to be inadequate, and yet they were to lose that little—besides what had they ever done? They never prosecuted empirics or illegal

practitioners, but chiefly members of the College of Surgeons. Then as to the clause, "No one unregistered to be allowed to write surgeon, &c., over the door"—was another absurdity; for no man could be prevented practising as an empiric, and no action could be sustained against him, unless it could be proved that he had injured his patients; and in this respect, the members of the College of Surgeons were placed in the same position. Witness Mr. Stanley. In many other respects Mr. H. strongly objected to the Bill—referring to the Council of Health and the Government nominees.

Dr. Lynch, as the mover of the resolution of thanks, explained that it had been couched in terms which did not compromise principle.

Mr. Hunter still objected to the resolution. It was not the mere speech the profession needed—but the Bill. He called upon the Committee, and Mr. Wakley especially, to point out a single improved clause that warranted the expression of thankfulness so readily offered by Mr. W. in the House of Commons.

Mr. Ross entered his "protest" against the vote of thanks, passing some strong remarks on Mr. Wakley's inconsistencies.

Mr. Wakley commented upon the conciliatory spirit of Sir J. Graham's speech, in a strain of insinuated laudation, and directed the attention of the committee to various portions thereof and of the Bill, dwelling especially on the new mode of charging for advice legalized in the new Bill. He gave the members reason to understand that he was under some singular engagement that the Bill should pass. He concluded by expressing his approval of the vote of thanks adopted by the committee.

Mr. Simpson proposed that a deputation wait upon Sir J. Graham to discuss his new Bill, (carried.)

In the course of the remarks, allusion was made to the conduct of the Hanover Square Association in deciding upon the Heads of a Charter, without submitting them to a public meeting of the profession.

The meeting was very thinly attended.

UTERINE HÆMORRHAGE.—It appears from the *Provincial Medical Journal* that a controversy is proceeding between Dr. Radford, of Manchester, and Dr. Simpson, of Edinburgh, with respect to the priority of recommending the complete separation of the placenta, and the application of galvanism to the treatment of uterine hæmorrhage from placenta prævia, which plan has been found to be eminently successful in practice. Dr. Simpson claims to have first suggested the plan, but his right to the priority is denied by Dr. Radford, who brings forward much written testimony to shew that the practice of completely separating the placenta in such cases, leaving its expulsion afterwards with the child to the natural action of the uterus, originated with Mr. Kinder Wood, who died in 1830, and also to our mind establishes his claims to the discovery of the effects of galvanism in exciting the uterine action subsequent to the separation of the after-birth.

GOSSIP AND NEWS OF THE WEEK.

On Friday last, a fine boy, five years old, was brought to Guy's Hospital, after having drunk boiling water from the spout of a tea-kettle. The rapid swelling and inflammation which ensued, had so completely obstructed the air passage that death from suffocation seemed inevitable. Mr. Edward Cock determined at once to open the windpipe below the seat of mischief, as the only chance of saving life. Before this could be accomplished, the child had quite ceased to breathe, and life appeared wholly extinct. By means of artificial respiration, carried on through the opening of the wind-pipe, animation was soon restored, and the child is now rapidly recovering from the effects of the injury, and the subsequent operation.

A hatter at Burnley has been killed by taking arsenic. Two ounces of the poison were sold to a Mr. Markey, by Mr. Heaton, sen., the father of a chymist, in his son's absence, instead of arrow-root, which was wanted. A verdict of "manslaughter" has been returned against him.

It is reported that the family of the late Dr. Abercrombie, have presented his valuable professional library, amounting to nearly 1000 volumes, to the Royal College of Surgeons, of Edinburgh, of which he had been a member since 1804.

It is said that much dissension has been recently shewing itself in the Association of General Practitioners. The surgical and apothecary portion of the committee, adopt different views, and Mr. Ancell, one of the secretaries, who is charged with making private communications to journals without authority, and who is not a member of the Apothecaries' Society, is rumoured not to be in the colour of the most perfect popularity.

The *Provincial Medical and Surgical Journal*, of the 12th inst., contains an account of the death of Dr. Warner Wright, of Norwich, Physician to the Norfolk and Norwich Hospital, and Visiting Physician to the Norfolk Lunatic Asylum. The fatal event was brought about by a fall from his horse, on the 22d ultimo, by which the humerus was dislocated, and the chest was severely injured. He was in his seventieth year.

A very important meeting of General Practitioners is to be held this evening (Friday), at 6 o'clock, at the Hanover Square Rooms, to consider Sir James Graham's Bill. We understand that resolutions generally condemnatory of the Bill, will be submitted to the meeting. We earnestly urge the attendance of our readers. A resolution directly condemnatory of Mr. Wakley's vacillations, and expressing the well-known fact that the general Practitioners are in no way compromised by them, is expected to be proposed.

We have had submitted to our opinion, a "newly improved domestic syringe," the invention and manufacture of Mr. Salt and Son, surgical instrument makers, of Birmingham. The instrument is somewhat after the fashion of the old telescope one, excepting that, instead of the slides, (which were always objectionable from being awkward to manage, and liable to get out of repair,) it has a joint in the middle of the tube, which not only serves the purpose of portability, but renders the instrument especially useful and easy for the self-administration of enemata. The manufacture is of a superior order, and the price moderate. In our opinion it is the simplest and safest form of enema apparatus in use.

THE CHARTER OF THE COLLEGE OF SURGEONS.—At a highly respectable meeting of Surgeons, held at the Craven Hotel, on Thursday, 14th March, 1845, Malcolm W. Hilles Esq. formerly lecturer on Anatomy and Surgery, to Westminster Hospital, in the chair, W. B. Costello Esq., Editor of the *Cyclopædia of Surgery*, acting as Honorary Secretary. It was carried unanimously, on the motion of Mr. Hunter, seconded by Mr. Obré, that an association of Surgeons be formed, to aid in introducing such changes in the Constitution and Government of the Royal College of Surgeons of England, as may be necessary to relieve that body from the load of unpopularity, that now presses upon it, and to conciliate the estranged feelings of its members. A second meeting, for the purpose of proposing measures for carrying into effect this resolution, will be held at the British Coffee House, Cockspur Street, on Monday next, at 7 for 8 p.m. Gentlemen wishing to co-operate in the proceedings are requested to communicate with Dr. Costello, Golden Square, before the evening of meeting.

Metropolitan Mortality for the Week ending Saturday, March 8th.

Causes of Death.	Total.	Average of	
		5 Springs.	5 Years.
ALL CAUSES	1141	1039	963
Zymotic, or Epidemic, Endemic, and Contagious Diseases	178	172	184
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	120	114	106
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	179	167	159
Diseases of the Lungs, and of the other Organs of Respiration	406	347	292
Diseases of the Heart, and Blood-vessels	36	25	24
Diseases of the Stomach, Liver, and other Organs of Digestion	32	64	71
Diseases of the Kidneys, &c.	13	6	6
Childbirth, Diseases of the Uterus, &c.	24	11	10
Rheumatism, Diseases of the Bones, Joints, &c.	9	6	6
Diseases of the Skin, Cellular Tissues, &c.	1	2	1
Old Age	72	89	70
Violence, Privation, Cold, and Intemperance	41	27	26

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

I have, at our last lecture, described the sthenic form of gout. This may be regular, as where it occurs in a joint; or retrocedent, as where it appears in a joint, and afterwards affects some other part. I have now to describe the asthenic form of regular, or, as it has been termed, atonic gout. This form of gout affects the limbs, but it is not fixed in any one limb, but affects all, particularly the small joints. The inflammation here, is not so active, nor is the fever so well marked as in the sthenic form. The disease may go on longer, and is not brought to a crisis so soon; the urial deposits are by no means as copious, and the urine is not so highly charged, as in the sthenic form. The inflammation often appears for a few hours, then it stops, and some internal part is attacked. There is slight feverishness, often accompanied by great weakness; the pulse is more frequent than strong, and the skin, although sometimes partially hot, is often cold, the circulation is very irregular, and the extremities are cold. This form of gout is accompanied by visceral disorders, chiefly of the functional kind, as gastritis, dyspepsia, colic, and diarrhœa. There are pains in the limbs, palpitation, and fainting, and the respiratory apparatus is affected, producing spasmodic asthma. The brain is sometimes involved in the disorder, and paralytic attacks may occur in connection with this low form of gout. But all these local symptoms may cease, if once the gout becomes thoroughly fixed, and runs its course in the joints: but there is less tendency of it to do so.

The asthenic gout occurs chiefly in persons of spare, emaciated habit, who have been debilitated by various excesses, whose digestive and excreting organs, are much injured by the abuse of fermented liquors, particularly wines. Venereal excesses, too, have a remarkable effect in predisposing to this form of gout: in fact, anything producing vital changes in the system, may convert a sthenic gouty disposition into one of the asthenic kind. One of the worst characters about this gout is, that it does not tend to a crisis; it lingers for a time in the system, wandering from joint to joint, sometimes producing serious functional derangement. It is in this form of gout that the peculiar product called gout stone is to be seen. The continuance of the gouty action, in the joints for a long time, has the effect of producing concretions, or deposits, of a peculiar chalky matter in and around the joints. This matter consists chiefly of the lithate of soda, and in some instances, of the phosphate of lime. It is called *chalk stones*, being mistaken for chalk from the white appearance presented. These concretions are the product of chronic gout, and may cause secondary inflammation, suppuration, and ulceration, in the adjoining textures. The irregular form of gout may be assumed by the two varieties I have mentioned. The irregular form is acute, or sthenic, or it is asthenic, or chronic

The asthenic becomes chronic, by not coming to a crisis. Both these forms of gout sometimes become retrocedent, or *podagra retrograda*, as it is called by Cullen. Thus, after it appears in the sthenic or asthenic form in an extremity, it disappears thence, and then is followed by some internal disorder; the term retrocedent, in this case, being applied when the disorder is merely functional. Another form called *erratic* gout, is where some internal part is affected with gouty inflammation; the gout appearing at first in the extremities, and becoming retrocedent from thence. When sthenic acute gout becomes erratic, the symptoms are suddenly followed by great nervous disturbance of the interior, palpitation of the heart, cramp in the stomach, giddiness, and various disorders of the head. These symptoms are afterwards followed by regular gout of the sthenic kind. There are other irregularities, as where there is a complication of disease alternating with gout, such as gastritis, enteritis, nephritis, or meningitis, or occurring on the sudden disappearance of sthenic gout: atonic gout is, however, more apt to present these irregularities. Sometimes it is regular, and sometimes it is irregular, and then it may be accompanied either by nervous disorders in the interior, as palpitation, gastralgia, colic, nephralgia, vertigo, and so forth, or it may be accompanied by inflammatory affections of the interior; these appearing as it goes from the limbs, or else preceding the occurrence of actual gout in the limbs. These disturbances are more generally nervous, or functional, whereas those accompanying the sthenic form are more commonly inflammatory or fatal.

The causes of gout are, in the first instance, hereditary predisposition; but it may be produced in persons not hereditarily predisposed, by full living, and particularly by sexual excesses. There are two classes of pathological causes that may be said to induce gout; where the living is too full or too stimulating for the excretory organs to keep pace with it, or else where the excretory organs are too weak for their office. Some persons have gout who live very temperately; these are persons only who are hereditarily predisposed. We can in such cases trace the predisposing cause to some defect in the organization, function, or structure. In all cases where persons are hereditarily predisposed to gout, their excreting functions are imperfect, and the blood abounds in lithates. On the other hand, it may be excited in persons by various circumstances which injure the excretory organs and produce lithic acid in excess in the system. Thus, gout may be either produced by plethora, from full living, or it may be induced by an imperfect action of the excreting organs, more particularly of the kidneys and those organs by which lithic acid is separated. The great recognized exciting cause of gout is excesses in the use of wine or fermented liquors generally, and excesses of the venereal kind. Both these excesses, whether they induce plethora or not, tend to stimulate and debilitate the urinary organs, and you find many gouty persons who are not plethoric. Plethora is an additional cause for the production of lithic acid in the system, but the chief cause is an impaired state of the assimilative and the excretory func-

tions. Spirits do not excite gout so much as wine and malt liquors; they affect the liver and produce functional and structural disease of the stomach and liver, and sometimes of the kidneys. Acid and ascescent wines—such as champagne and new Port,—are the liquors which, when taken in excess, are most likely to produce gout. Sedentary habits promote the production of lithic acid in the system. Intellectual excitement, where it is disproportioned to bodily exercise, is considered to be a powerfully exciting cause of gout. Persons, too, of high intellectual endowment, have gout more frequently than persons of ordinary capacity—more rich than poor—more wise than foolish.

If the gout is regular, the fit may soon subside naturally. In favourable cases it is found useful to make use of remedies. The local inflammation, if severe, may be subdued by keeping the part warm and still, by covering it up in cotton, wool, or oiled silk, or by applying lotions to soothe the irritated part, and to prevent cold which may not only aggravate the inflammation, but cause the part to swell, and also drive the gout to the internal parts. Mild antiphlogistic measures are desirable; if there is a very plethoric state of the system, and the fever is high, then it may be useful to draw blood; but the evil of reducing the sthenic character of the inflammation too much is, that it has the effect of perpetuating the gout and preventing a crisis. Local blood-letting is equally inexpedient with general blood-letting. In general the inflammation passes off in a few days, and is attended with no bad consequences. The antiphlogistic treatment should be of the mild kind; as purgatives: calomel, or blue pill, combined with antimony and saline medicines; but no permanent relief takes place until the urinary deposits commence. Various remedies may assist in promoting the excretion of the offending matter from the system, but colchicum is the great specific for gout, and it has been in use from ancient times to the present. Its efficacy depends more on its purgative than its diuretic effect. It increases the quantity of lithic acid and urea in the urine, and it has been found by experience that it increases the solid contents of the urine in a very remarkable manner. This is the great object to promote in gout, and the colchicum is to be given in such quantities as the stomach will bear, taking care not to cause nausea or diarrhœa. It should be given with alkalies, or carbonated alkalies to help to carry off the lithic acid. Where there is much fever it may be combined with various medicines, such as antimonials, salines, tartrate and nitrate of soda or potash, and if there is acidity and flatulence, with magnesia. If the bowels are very torpid and purgatives are required, it may be combined with sulphate of magnesia. Where the pain is considerable and there is a good deal of nervous irritation, Dover's powder or morphia may be given. The form in which colchicum answers best is that of the wine of the root, or of the seeds; always combining it with a little alkaline matter. The fit may be wonderfully shortened by this treatment. It is proper to combine colchicum with columbia, or aconita, to improve the tone of the stomach. If the habits of the patient

have been pretty full he should not be kept too low, for fear the gout should assume the chronic form: it is better to have it remain acute a little longer than otherwise, than have it converted into the chronic form.

Asthenic gout is to be treated by colchicum. The disposition to the excessive production of the irritating matter is to be overcome. Stimulants are wanting to enable the system to throw off the matter, and to correct the functional disorders which arise. Under these circumstances, ammonia is the best remedy, alone or with nitric ether in combination with colchicum. The tinctures of rhubarb and cantharides are also useful in persons debilitated by excesses. Horse-radish is also useful, and iodide of potassium has a very salutary influence. Sometimes wine is a good stimulant. This form of disease requires a long use of medicines, varied from time to time. The diet should be low, but not too low: tonics are useful, particularly chalybeate waters. The Bath waters have a salutary influence in some cases. Irregular sthenic gout, when it attacks the organs is an inflammation, and is to be treated antiphlogistically, by combining colchicum with the usual antiphlogistic remedies, and by stimulating applications, such as sinapisms, to the limbs. Where there is cramp in the stomach, a mustard poultice should be applied to the epigastrium, and opium exhibited. In the sthenic form there is always a tendency in the gouty disease to pass into inflammation. The treatment of the gouty habit is to be guided with a view to prevent the pathological conditions we have considered as causing gout. Where there is plethora, a too full state of the blood vessels, and an undue temporary excitement of the urinary and genital organs; to prevent this plethora on the one hand, and to prevent this undue excitement of the urino-genital organs on the other hand, are the great objects in the treatment. The disease sometimes occurs hereditarily: and the effect of an extreme reduction of diet in persons who are thus affected, is that it does not cure the gout, but converts the tonic and sthenic form into the asthenic; therefore the treatment is to be guided very much by a reference to the previous habits and actual condition of the patient. Plethoric persons should strictly observe regular and active exercise; not occasional, but regular. The excretions should be kept free, and care should be taken that the diet be moderate. In atonic gout it is necessary to avoid all risk from acescent articles of food, and nothing but nourishing food should be allowed. All acescent liquors should be avoided, keeping to plain sherry or white wines, and spirits and water, for the sake of promoting digestion. Regular exercise, proportioned to the strength of the patient, should be used. When the patient is too weak for exercise, friction should be applied. The meals should be taken at stated times, and the stomach should not be overloaded; and liquid meals are not to be neglected, taking tea in the after part of the day.

LECTURES ON SELECT POINTS IN THE THEORY AND PRACTICE OF MEDICINE.

By D. J. CORRIGAN, M.D., Physician to the Whitworth, Hardwicke, and Richmond Hospital, Lecturer in the Dublin School of Medicine, &c.

(Continued from page 479.)

The disease of the liver which next claims our attention is one improperly termed the "scrofulous liver;" for this I would substitute the more appropriate one of "hard hypertrophied liver." This is an affection most commonly met with in young children—particularly in young females, and also in males of a weakly delicate constitution. This affection of the liver, in which the organ acquires a bulk three or four times greater than in health, appears to depend upon an interstitial deposit of lymph, within the substance of the organ, by which it acquires an increase of size, perfectly analogous to that hypertrophied state which we so frequently witness in the lower extremities. I have seen this enlargement take place to such a degree, that the

liver has extended considerably below the umbilicus, as low as the crest of the ilium: and not infrequently have I seen it in the pubic region. In this state, the liver—which in health is of a dark red colour—becomes of a yellowish hue, which gives it a mottled appearance; by degrees the yellow colour spreads over the entire of the organ. Here is a cast taken from the liver of a young lad in early life; it gives you an idea of the enormous magnitude which the organ in question may acquire in this disease: while on the cast, the artist has given you a *fac simile*—faithfully done to nature—of the yellowness of colour which the liver presents in this affection. Sometimes this enlargement produces very peculiar symptoms, which were formerly treated as heart disease. I am sure, however, that at present, with our more correct methods of diagnosis, drawn from pathological investigation, we could not for a moment make such a mistake. I mention the fact, merely to tell you that such things have been. In the case from which this cast has been taken, one lobe of the liver pushed up the diaphragm before it, and ascended into the chest as high as the third rib, while the other lay directly under the left ventricle. There were in this case symptoms which you would not readily imagine to belong to disease of the liver. These were—severe and most distressing palpitation extending from the heart to the epigastrium, general anasarca, œdema of the lungs, attacks of orthopnoea arising from this latter cause, and a weak, irregular, intermitting pulse. The palpitations in the epigastrium were occasioned by the irregular action into which the ventricle was thrown, from the pressure upon it of the enlarged left lobe: and the latter solid medium acted as a more perfect conductor of sound than the natural tissue surrounding the ventricle, in consequence of which, and of the very close position which the enlarged lobe occupied with regard to the heart, the sound of the latter was audible over a much greater extent of tissue than natural. In this disease the circulation through the liver is never obstructed—it remains free; it will be necessary for you to hear this in mind. In persons so affected, you will often be called upon to treat slight attacks of general dropsy; be careful, in your efforts to remove this, not to break up the constitution. My advice to you would be this: *remove the dropsy, but after that never mind the liver.* For removing the dropsy, you may have recourse to diuretics, both saline and vegetable; it is a form of hydropic effusion which will readily yield to the means you employ. After this, in place of being solicitous about removing the size of the organ, have recourse to mineral tonics, and from the whole of the class you cannot select any preparations superior to chalybeates. This disease is one which is not of necessity fatal; nay, so far is it from being so, that although I cannot explain the fact, yet I have seen females with livers enlarged, extending below the umbilicus, attaining the good old age of sixty, seventy, or eighty.

Abscess of the Liver.

I shall not trespass upon your time by detailing to you the symptoms and treatment of hepatitis, or acute inflammation of the liver; neither shall I delay you by giving you an account of the *post mortem* appearances—such as congestion, &c., which fatal cases of the disease present. All these you will find correctly laid down in systematic works, and to their information I have nothing more to add. Of one of the terminations of acute hepatitis—namely, hepatic abscess, I shall have to make a few observations. You perceive from these plates the appearance which the liver presents when the seat of abscess. The writers on diseases of tropical climates, where hepatic diseases are much more common than with us, have added considerably to our amount of information upon this subject. I shall merely premise, that abscesses of the liver are attended with rigors better and more plainly marked during their continuance, than those which sympathetically attend any other disease that we meet with in this country, not even excepting affections of the kidney, and parts about the bladder. Accordingly whenever after a lapse of a week, or three weeks

(just as the intensity of the primary inflammation may have been,) you find well marked rigors supervening in a case, where the symptoms of hepatitis were present at the commencement, you may set down such, as one of hepatic abscess. Along with the foregoing symptoms, you have many instances a military eruption over the exact site of the abscess. Abscess of the liver may be got rid of, either by its opening externally—the matter making its way to the surface and pointing where it may be detected by fluctuation—or by bursting into the pleura, having first formed adhesion between itself and the concave surface of the diaphragm, or by bursting into the stomach, duodenum, colon, cæcum, or even into the ureter or bladder. In some cases, where fluctuation is not so evident, you will have need of all your delicacy of tact: at the same time in bringing this to bear, you will be obliged to have recourse to some manoeuvre. Here is a specimen of circumscribed abscess of the liver, situated at the junction of the right with the left lobe, taken from a female, and in which the fluctuation was rather indistinct. In such cases you cannot detect the fluctuation of matter if you place the patient supine, the liver recedes from the abdominal parietes, and the sense of fluid accordingly is lost: it will be necessary here to have recourse to the method which is elsewhere used to distinguish *bruit de soufflet* from the *fremissement* of pericarditis or pleuritis. In such cases we direct the patient to lean forward, when, if the sound you have heard be *fremissement* caused by pericarditic effusion, then—a layer of fluid being placed between the surfaces of the heart and pericardium—the sound will be heard, whereas if it be "bruit" it is persistent. When we place a patient with hepatic abscess difficult of detection as to its fluctuation in such a position, the matter advances to the surface, and becomes palpable to the sense of touch. Here, I must refer to a paper of Dr. Bright, published in Guy's Hospital Reports, where he says that in numerous instances of hepatic abscesses, abdominal tumours, &c., which he had met with, he had found the "creaking," or "leather" sound as he calls it, present, and that after death, in such cases, adhesion was found to have taken place. Dr. Bright infers from this, that in such cases where we hear leather or creaking sound, adhesion must have taken place. In doing this, he has fallen into a curious error.

We should be exceedingly cautious, how we receive this opinion as a guide to practice, comprehending as it does a great principle, which if it be true, ought to be acted upon in every case of abdominal tumour, and hepatic abscess, and also another highly interesting class of diseases—ovarian dropsy. But the inference which Doctor Bright, has so indirectly attempted to draw from the facts which he has adduced, is not tenable, nor is it based upon scientific accuracy. In a paper, mine, published in the Dublin Journal, I adduced some cases of my own, to those already detailed by Dr. Bright, and in a critique upon his paper (if I dare call my observations on his cases by such a high name) I endeavoured to prove the fallacy of his assumption. Now, in his cases, the "leather," or creaking sound, plain *fremissement* was, in no instance, audible three weeks before death, and in all these cases, adhesion between the peritoneum and muscular walls of the abdomen had taken place, while in a case of mine, where *fremissement* was heard up to the hour of death, no adhesion had taken place. Here, then, is a single case upsetting the inference which he drew from the facts, which came under his observation; let us see if a reference to what takes place in other organs where *fremissement* is heard, will clear up the difficulties which surround our inquiries on this subject. We know that *fremissement* is produced in pericarditis by the attrition of the roughened surfaces of the heart, and pericardium; this the ear conveys to us by means of the stethoscope, and is a sign that lymph has been effused upon the surface of one or the other. But what is it that takes place when this sound becomes audible? It is, that the effused lymph has become organised, connected the heart with the pericardium, or that a quantity of fluid has been effused into the pericardium, quite enough to partly fill its cavity.

of tooth-ache. In obstinate cases, besides the local application of cold water, it may be necessary to use the foot-bath, and administer purgatives. Where caries of the tooth exists along with this form of congestion, timely plugging must be had recourse to. All stimulants, such as the tinctures in common use for curing tooth-ache, must be avoided here, as they only increase the mischief.

Inflammation.—This process when occurring in the teeth of a healthy individual, will produce the phenomena of healthy inflammation in any other part of the body; in individuals affected with gout, rheumatism, or scrophula, it will present the specific character of these diseases. Inflammation of the internal lining membrane of the tooth-fang (peri-odontitis,) occurs much oftener in carious, than in healthy teeth; it is characterised by a dull aching, rather than actual pain, from which the patient fancies he obtains relief by pressing his teeth strongly together. This dull aching after some time is changed into an acute, boring pain, which extends to the neighbouring teeth; at this stage, the affected tooth seems more elevated than its fellows: and this sensation prevents perfect closure of the mouth, and to a great degree interferes with mastication. In some cases this local inflammation causes severe constitutional disturbance, heat and redness of the cheeks, severe headache, and general febrile irritation. In this state, if nothing be done to check the local inflammation, this acquires greater intensity. The acute boring pain is now changed into a dull aching attended with throbbing, if the gum about the affected tooth be examined, it will be found intensely inflamed, the tooth itself is now visibly longer than the surrounding ones, and loose; pressure makes the patient feel as if it were about to start from its socket. All these are evidences of suppuration at the root of the tooth, and if it be now extracted, a drop of matter will be seen attached to its root. In cases of intense inflammation of the tooth-fang, the process of inflammation may not be terminated by the formation of matter: inflammation proceeds outwardly to the gum, the alveolus is absorbed and a portion of the matter formed at the base of the tooth is thus evacuated, when the opening in the gum closes for a short time, until the matter again accumulates. Thus a sort of fistula is formed which can only be healed by the extraction of the tooth. The mischief may not be confined to the root of the tooth alone—which becomes absorbed at its extreme point and roughened,—but may also extend to the jaw-bone and render it carious. It sometimes happens that the cyst containing the pus at the root of the tooth, becomes changed into a mass of pappy consistence, which, comes away with the tooth on the latter being extracted. The treatment of this variety of odontalgia must be strictly antiphlogistic. Should the local application of cold fail in completely removing all the symptoms, leeches must be at once, and freely, applied to the gums. Where suppuration seems inevitable, a gently diaphoretic treatment with fomentations of warm water, or warm decoction of poppies, or marsh-mallow, or a solution of extract of henbane, in the proportion of five or ten grains to four ounces of warm water, will be found to assist materially the maturation of the abscess; as soon as the pus has been evacuated, the diseased tooth must be extracted. It very often happens that a great number of the teeth are loosened, without any mechanical cause; this may depend either upon a sub-inflammatory affection of the lining membrane of the alveolar process, or upon that form of cynanche, denominated "Parotidæa." In the latter instance, time alone will effect a cure; the former requires for its cure repeated application of leeches over the affected portions of the alveolar process. (Dr. Heiden of Vienna, in Wiener's Zeitschrift.)

On the Treatment of Inflammation by Antiphlogistics.—In this paper, the writer expatiates against the lengths to which calomel and venesection are employed in the treatment of inflammation. Comparing the frequency with which functional derangements, rather than actual inflammations, occur, the writer, in the majority of instances, would be inclined to prefer specific antiphlogistics, to those generally used. But the want of such remedies as specific antiphlogistics, compels us to have recourse to the old routine.

Among these, none is so extensively employed as bleeding: very often, not only unnecessarily, but with actual injury to the person on whom it is practised. For instance, a person comes to consult you for ophthalmia, caused by the irritation of a foreign body in the eye, bleeding is had recourse to again, and again, the ophthalmia is not at all subdued, and all this while, the cause of mischief remains undiscovered and consequently unremoved. In some instances, it may be necessary to combine specifics with general antiphlogistics. This is exemplified by the employment of iodide of potassium in syphilitic, and rheumatic periostitis, by the use of colchicum in acute rheumatism, by the administration of yeast in scorbutus, &c., &c. The writer of this paper after cursorily reviewing the usual treatment of inflammatory diseases, devotes particular attention to the consideration of rheumatic inflammation. The conclusions at which he arrives, are, 1^o That in acute rheumatism, local and general bleeding exert an injurious rather than a salutary influence over those persons who may have been subjected to them. As an argument in favour of this opinion, he adduces the fact, that of all those affected with rheumatic carditis, or pericarditis, none fall victims to it so quickly as those who have had venesection or local bleeding performed upon them. 2^o That cooling neutral salts scarcely possess any antiplastic power; that the little they do possess is made evident only after their long-continued use. Their principal efforts are to increase the urinary and cutaneous excretions. Among this class of remedies, none possesses such just claims to the name of an antiphlogistic as nitre; yet even this requires to be given, in rheumatism, in doses of ℥ij. or ℥iiss. before its beneficial effects are evident. 3^o That mucilaginous, demulcent antiphlogistics, as they are called, are but mere placebos which can never benefit the patient. 4^o That large doses of calomel act beneficially by setting up a derivation from the lining membrane of the alimentary canal; in small doses it diminishes the plasticity of the blood; that it appears to act more beneficially in inflammations of the parenchyma of organs than in those of serous membranes, and more beneficially in chronic than acute inflammation. The writer of this paper asks—would it not be better to use corrosive sublimate than calomel, in every instance, as there are such well grounded reasons for believing that the latter, when taken into the human stomach, is converted into the former salt? 5^o That the powers of calomel are increased by combination with opium, and that this remedy should not be pushed too far, owing to the deleterious influence it often exercises over the constitution. 6^o That antimonii tartras, and antimonii crocus, both possess the power of curing rheumatism. 7^o That the pure narcotics also exert very beneficial effects in this disease. 8^o That stimulants, such as camphor, musk, ammonia, arnica montana, and serpentaria, have never in the hands of the writer proved of any service in mitigating or cutting short this disease. 9^o That stimulating liniments were never of any use in his treatment of rheumatism. 10^o That the unguent. Neapolitan* though useful in acute rheumatism, must yet be sparingly used, on account of its tendency to excite salivation. The writer contradicts the assertion as to the true period of employing blisters in acute rheumatism; namely, after the employment of topical bleeding. Without going into an explanation of the *modus operandi* of blisters in procuring beneficial results in rheumatism, whether it is by removing the *materia peccans* which excites the disease, or by inducing some alteration in the electrical condition of the part, the writer contents himself with mentioning their curative powers. Mustard poultices he considers of equal efficacy with blisters. In cases that require speedy counter-irritation, the plan he adopts is, first, to redden the part affected by a sinapism, and then apply a blister. The writer of this paper states that, contrary to the declarations of Eisenmann, he had never derived benefit from the employment of colchicum in acute articular rheumatism. He states, however, that he

did not use it after his manner—namely, after venesection. But he has found this remedy of incalculable benefit in chronic rheumatism. The formula he adopts for its administration is the following:—

R. Vini sem. colchici ʒiij.
Liquoris kali subcarb. ʒiij.
Tinct. opii ʒiss. M. capiantur
guttæ xxx. pro dose alternis horis.

He adds his additional evidence to that of Eisenmann, as to the benefit derivable from the use of warm-water enemata, followed up by the administration of colchicum, in rheumatic colic, hepatitis, peritonitis, pleuritis, &c. In conjunction with these measures, blisters must also be applied over the surfaces covering the affected organs. The paper concludes with several cases recited by the author in confirmation of the views which he entertains.—(Dr. Von Gutzeit, in Medic. Zeitung Russlands.)

Intermittent Convulsions produced by the Impaction of a Steel Needle in the Body.—In March, 1827, a young artillery officer was suddenly seized with asphyxia, accompanied with convulsive agitation of the extremities. This fit lasted about a quarter of an hour, and left a violent pain in the splenic region. Having been recovered by a large venesection, he told his comrades, that four years previously he had had an attack precisely similar to the present. The fit recurred again the next night, and continued for five weeks to make its appearance at the same time, despite all the remedies which could be suggested. Sea bathing having been recommended, he determined to try its efficacy, and, after some time spent at the seaside, returned perfectly restored to health, with the exception of the pain in his side, which, though much mitigated, still continued. He afterwards joined the Turkish expedition, and while campaigning, lost all trace of the pain in his side. However, one day in the year 1835, on leaping out of a sledge, he suddenly felt an acutely lancinating pain directly above the anterior-superior spinous process of the ilium. On examining the part, he found something projecting above the skin, which on extraction, proved to be a needle of about two inches in length, and of the thickness of a horse-hair, somewhat curved in the middle, and tarnished. Since its extraction he has enjoyed the most perfect health.—(Psheswitzky in Medic. Zeitung Russlands.)

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY;
March 11, 1845. Dr. W. F. Chambers, President, in the chair.

This being the first night of the newly elected president performing the duties of his office, there was an exceedingly full attendance of fellows and visitors, there being nearly two hundred gentlemen present when he entered, and he was most warmly greeted on taking the chair.

Dr. Chambers, in a few brief remarks, expressed the high sense he entertained of the honor which had been conferred on him by the Society in electing him to preside over it,—an honor which he owed, not to any merit of his own, nor to any service which he had been able to render the Society, but solely to their exceeding kindness. He regretted that hitherto he had been very remiss in his attendance at their meetings, which, however, was solely owing to the pressure of his professional occupations which had fully engaged his time, and which of course, no one who had undertaken them could neglect. These had weighed on a constitution already enfeebled by repeated attacks of serious disease, and had caused him to withdraw in a great measure from those literary and professional Societies, the attendance upon which would otherwise have been the source of great pleasure and advantage. He then craved the indulgence of the society if he should fail to perform the duties which had devolved upon him as well as they had been executed by his distinguished predecessors. Whatever deficiencies he might have, however, they would not be such as to prevent his exerting himself for the interests of the Society, of which he was one of the earliest members, nor

* An old form of the unguent, hydrargyri.

for the advantage of the Fellows, among [whom were many of his earliest friends.

On the Pulsating Tumours of Bone, with the Account of a Case in which a Ligature was placed around the Common Iliac Artery, by E. Stanley, Esq. F.R.S., surgeon to St. Bartholomew's Hospital.

The author remarks that there are three distinct sources of pulsation in the tumours of bone; first, the proximity of a tumour to a large artery; secondly, the development of blood-vessels and blood-cells, constituting a sort of erectile tissue within the tumour; thirdly, the enlargement of the arteries of the bone in which the tumour has arisen. Proximity to a large artery is the most frequent source of pulsation in these tumours, of which six examples are brought forward; three occurred at St. Bartholomew's Hospital. In one of them, an encephaloid tumour originating in the humerus, the ligature of the subclavian was recommended, but not assented to by the patient. In another, it was agreed in consultation that sufficient ground existed for believing the tumour to be a popliteal aneurism, and accordingly the femoral artery was tied in the middle of the thigh. The tumour consisted of a compound of soft, fibrous and dense osseous tissue, the latter situated deeply and extending above the femur, in which it appeared to have originated. Of the other three cases two were communicated by Mr. Hodgson, of Birmingham, and the third by Mr. Lawrence: the latter is already recorded in the 17th volume of the Transactions of the Society.—Here are six examples of pulsating tumours differing in their nature, and originating in different bones, but agreeing in the circumstance that no other source of pulsation was discoverable in them than the contiguity of large arteries. To the same class of cases the author considers that the important one recorded by Mr. Guthrie belongs, in which a medullary tumour, about as large as an adult's head, situated upon the right nates of a female, presented so decidedly the characters of aneurism, that it was believed to be so by Sir Astley Cooper and other experienced surgeons who were consulted upon the case, and accordingly a ligature was placed around the common iliac artery.

On the subject of pulsation of tumours of bone dependent on the development of blood-vessels and blood cells forming a sort of erectile tissue within the tumour, Mr. Stanley remarks that in the case of recent occurrence in St. Bartholomew's Hospital, there certainly was a structure capable of enlargement by the distension of its vessels and cells, and assuming these to have been continuous with the surrounding arteries, the rush of blood into this structure might give to the whole mass a pulsation resembling that of aneurism. Two cases are related in which the pulsation of the tumour was ascribed to a similar cause. In one, communicated to the author by Mr. John Lawrence, jun., the tumour originating in the upper part of the femur was more of a gelatinous than encephaloid character, and its vascular tissue formed more than half its bulk. The other, which was furnished by Mr. Luke, of the London Hospital, was a tumour of the lower part of the femur, and in consequence of suspicion of aneurism, the femoral artery was tied. The limb was subsequently amputated, when the tumor was found to consist of cells of varying size, some of the largest being about an inch in diameter, and they were filled with blood.

Of pulsation in the tumour of bone dependent on the enlargement of the arteries of the osseous tissue, several cases are referred to—one related by Dupuytren; the others by Pelletan.

One circumstance in the history of these different forms of pulsating tumour is especially noticed by the author as it appears to have a material influence on the production of pulsation in them—this is the density and resistance of the immediate investments of the tumour. He adds that it may be doubted whether any of these tumours could pulsate, without the resistance derived in one or other direction from the bone or its coverings. A tumour originating in soft parts, and unconnected with any bone, but situated close to a large artery, and confined within resisting structures, and thus approximating in its conditions

to the pulsating tumour of bone may, like it, pulsate in a manner to be mistaken for aneurism. An example is given of a man admitted into St. Bartholomew's Hospital, under the care of Mr. Earle, with a pulsating tumour below the left clavicle, which presented all the characters of aneurism, and accordingly a ligature was placed around the subclavian artery. The tumour subsided sufficiently to confirm the opinion entertained of its nature, and the patient was discharged. Six years afterwards he was again admitted with general derangement of the health from which he sunk. On dissection, the axillary artery presented no indication of having been the seat of aneurism. Immediately behind the artery was a solid tumor, which had originated within the sheath of a large nerve.

After some observations tending to show the little value to be attached to the presence of bellows' sound in the diagnosis between aneurism and the pulsating tumour of bone, the author proceeds to relate the case of pulsating tumour of the ilium, which has recently occurred in St. Bartholomew's Hospital, in which a ligature was placed around the common iliac artery. The patient, a man aged 42, had on the inner side of the right upper arm, a tumour about the size of a small orange, very loosely connected with the surrounding structures, free from pain, and without pulsation. This tumour was first observed about ten years ago, and during the last three years it had ceased to grow. The pulsating tumour of the pelvis had its chief attachment to the left ilium, and projected from both surfaces of the bone. It reached downwards to Poupart's ligament, and to the extent of about three inches into the abdomen. It felt moderately firm, and a little below the crista, near the anterior superior spine, a small moveable piece of bone was discovered, apparently involved in the tumour. Everywhere within reach of the fingers, the tumour pulsated, not with a thrill or vibration, but with the deep heavy beat of aneurism. By the ear resting against the abdominal parietes, a bellows' sound was plainly recognised. After a minute description of the local features and constitutional phenomena of the disease, the author observes that in deciding on the nature and treatment of the case, the following points were involved,—was this pulsating tumour an aneurism, and if so, from what artery had it arisen, or was it one of the pulsating tumours of bone? He then states the arguments which, in consultation, led to a preponderance of opinion in favour of this tumour being an aneurism. In the uncertainty respecting the origin of the supposed aneurism from the external or internal iliac artery, the decision would obviously be that the common iliac should be tied, and the man having decidedly expressed his feeling in favour of submitting to the operation, the author considered it his duty to undertake it. The operation was performed on Monday the 27th of January. The case proceeded favourably to the middle of the second day, when symptoms of peritonitis ensued, and he sunk on the morning of the third day from the operation. On examining the body, the effects of peritonitis were observed in the deeper parts and left side of the abdomen. In the wall of the left ventricle of the heart there was a medullary tumour about the size of a filbert. Medullary matter was found in the bronchial glands, and a few deposits of the same kind in the lungs. A minute description is given of the tumour in the pelvis which was connected with the ilium, and composed of a spongy tissue with cells, and convoluted vessels distributed through it. The tumour in the arm which had all the marks of an innocent structure, was found, to the surprise of the author, identical in structure with the tumour in the pelvis.

The paper is concluded by some remarks on the operation of tying the common iliac, or internal iliac artery, or the external iliac near its origin, tending to shew that without the least risk of injury to the peritoneum, the readiest mode of reaching these vessels must be by an incision through the posterior parts of the abdominal parietes.

Mr. Toynbee gave a few brief details of the dissection of a pulsating tumour of bone which he had recently made, and which he thought was, in some respects, similar to one of the cases which had

been narrated in Mr. Stanley's paper. The patient was a young man, nineteen years of age, who died of consumption. The disease was situated at the edge of the parietal bone, and consisted wholly of vascular tissue, composed of the vessels of the bone; in fact, it seemed to be a case of aneurism by anastomosis affecting the parietal bone. The vessels in the neighbourhood of the diseased growth were somewhat enlarged. There were not any appearances of encephaloid disease. The preparation was in his possession, and would have the pleasure of exhibiting it at future meeting of the society.

Mr. Fergusson stated, that he had listened with great interest to the paper which had just been read, and he was of opinion, that it seemed to prove the great difficulty which men of experience had in deciding upon the true nature of certain tumours connected with the pelvis. He had himself become acquainted with several examples analogous to that which had been brought under the notice of the society by Mr. Stanley. Two of them served to show, how parties of great experience might err in their opinions. They had occurred in the practice of Mr. Syme, the distinguished Professor of Clinical Surgery in the University of Edinburgh, and as both cases had been in the Royal Infirmary of that city, where he was attached to that Institution, he had the opportunity of seeing them. The cases had been published by Mr. Syme, in some of his Clinical Reports, but as they might not be familiar to all the members present, he would refer briefly to some of the particulars. In one of them there was a tumour in the site of the external iliac artery, which was supposed to be an aneurism, although there was a difference of opinion on this subject. Ultimately, Mr. Syme, acting chiefly on his own responsibility, resolved to put a ligature on the upper part of the external iliac artery, or on the common iliac, as might seem advisable. As soon as the incisions through the abdominal parietes were completed, it became apparent that the tumour was not of the aneurismal kind. It was, however, dissected out. The patient died within a few days of the operation, and it was found afterwards, that various tumours of a kind similar to that which had been removed, but much smaller in size, extended along the course of the main arteries, and the pulsations which had been felt in the tumour had doubtlessly been communicated from the external iliac artery. In the other case, also a tumour in the site of the external iliac artery, the symptoms had been equally questionable, and though surgeons of the first experience in Edinburgh had seen it, there was a difference of opinion as to the true nature of the swelling. Ultimately, in this instance too, an operation was performed. A ligature was placed on the common iliac artery. The patient died some time after, and here it was found that the tumour was truly an aneurism.

An instance had come under his own notice, where the tumour in many respects resembled that which had been described by Mr. Stanley. In particular, the pulsations and the sounds which are generally deemed characteristic of aneurism were tolerably distinct, yet he had declined to perform an operation in this instance—having about the time become acquainted with the case treated by Mr. Guthrie, to which allusion had been made by the author of the paper just read. Ultimately, it was found, on dissecting this tumour after death, that it bore a strong resemblance to Mr. Stanley's case. The growth was prominent both on the inside and the outside of the pelvis, and the os innominatum was completely broken up, the bulk of the mass being composed chiefly of medullary matter, spiculae of bone, and clots of blood.

About the time that these cases occurred, Mr. Nicol, of Inverness, had treated a tumour connected with the upper end of the humerus, under the supposition that it was an aneurism. The case resembled some of those which had been alluded to by Mr. Stanley, especially that of which Mr. Luke had given him an account, as it resulted from an injury. Mr. Nicol placed a ligature round the subclavian artery, in this case, and with seeming advantage; but the patient died ultimately

consequently to deaden the former sound. The hearing then of the "leather" sound under circumstances stated by Dr. Bright tells us very much, that lymph has been thrown out, and that lymph has not yet undergone organization: it tells us nothing more: but even so the information is valuable, and has been found extremely serviceable in enabling us to form a clear diagnosis of such matters. No doubt is entertained, as to the propriety of opening such abscesses as soon as they can be detected, but in doing so very great caution is requisite, as if done rashly, or incautiously, much and fatal mischief may be caused. A paper lately published by Doctors Stokes and Graves on the best method of opening hepatic abscesses, they recommend in the first place an incision to be made through the integument and fat overlying the abscess. The bottom of the wound is then cauterised with potassa fusa, which excites a severe inflammation in the surrounding muscular structure, lymph is thrown out, which agglutinates the abdominal muscles: thus, when the cyst is destroyed by the caustic, the matter of the abscess cannot insinuate itself into the abdomen. By this means all risk of peritonitis is obviated, which would inevitably set in, were a different operation practised for the evacuation of the matter. We next have to consider another way in which an abscess of the liver is got rid of. And how this takes place, perhaps I cannot inform you in a better way, than by sketching for you a case which occurred some time since at the Hardwicke Hospital, which I am sure many of the gentlemen whom I see around me, cannot fail to recollect.

Case.—A man was admitted into the Hardwicke Hospital. He had been ailing for three weeks with symptoms of hepatitis from the commencement; when admitted he was labouring under the following symptoms. At irregular periods, chills sometimes intervening—he was seized with rigors. These continued for some time, and always ended in a fit of suffocation, although since his admission he had expectorated an enormous quantity of purulent matter, of a greenish colour, and of an odour intolerably offensive; so much so indeed, as to have almost forced me to quit his bedside on more occasions than one. This continued for the time he was in the Hardwicke, when, at length, in one of these suffocative fits he died. The case naturally excited a good deal of interest at the time it occurred. It is, I think, valuable as it affords us a means of accurate diagnosis on future occasions. The diagnosis came to in this case was, that the disease in question was hepatic abscess. So far I was right in my opinion, which is recorded in the house book, but I was wrong in stating as I did, that this abscess had formed an adhesion with the diaphragm, and thus had burst into the pleura. Perhaps it may not be wholly uninteresting to you to know the grounds on which this opinion was based. It was based more on negative inference drawn from diseases which might be confounded with hepatic abscess—which, however, were not present—than on any positive signs of hepatic abscess. The only affections with which it could be confounded, were two, gangrene of the lung and gangrenous phthisis. Gangrene of the lung, you know, is accompanied by expectoration of purulent matter of horribly offensive odour: so was this. But the physical signs which accompany gangrene of the lung were wanting here: neither had we the amount of constitutional sinking and loss of strength which necessarily should have attended upon the gangrene and consequent sloughing of a portion of lung sufficiently ample to furnish the material of this abundant purulent discharge. In a variety of phthisis, the gangrenous, the expectoration also partakes of the same fetid odour as the discharge from the lungs in the disease under review: but neither had we here the invariably accompanying signs of phthisis; we had not the emaciation present which would characterize a phthisical affection, furnishing such an amount of secretion; most decisive of all we had the lungs perfectly sound. Along with these negative signs, we had the positive one drawn from the previous history of the case, during the time it had run on; all these taken together led us to form a diagnosis, that the disease in question was

neither gangrene of the lung, nor phthisis gangrenosa, but hepatic abscess. On examining the body after death, we found an abscess of the liver, but this had not burst into the pleura, nor had it even formed any adhesion with the concave surface of the diaphragm; neither had it opened into any of the abdominal viscera. On cutting into the bronchi, these were found filled with a fluid perfectly identical in colour and odour with that of the abscess of the liver. Now, how had this purulent matter found its way into the bronchi, perfectly analogous as it was with that expectorated during life, and with what was found occupying the cyst of the abscess after death? We have seen that the cyst containing the purulent matter was entire, and that no communication existed between it and the chest, though such was carefully sought for. The only way in which the presence of this matter in the bronchial tubes could be accounted for, is, that it was taken up into the circulation and there deposited. In this case we have an instance, proving that the mere presence of purulent matter in the circulation, is not of itself sufficient to produce the disease called "diffuse inflammation." If this were the case, we should have had in this instance (what we had not) *depôts* of purulent matter in different parts of the body. It seems to me that we should ascribe the exciting cause of diffuse inflammation, not to the absorption of pus into the circulation, but rather to some peculiar change which the blood itself undergoes. This case I reckon valuable for many reasons: firstly, that it was followed up from the beginning through all its stages, until the *post-mortem* investigation revealed what the disease actually was: this being an advantage which you very seldom can enjoy in private practice; 2, I reckon it of interest, because taught by this case, after-experience had informed me, that this termination of hepatitis is not by any means the rare issue of the disease in this country, which writers on tropical diseases would have us believe; and also because I have reason to think—from the favourable result which attends this effort of nature to get rid of the disease—that many cases which have been cured of so-called gangrene of the lung and gangrenous phthisis, were in reality nothing more than so many examples of this termination of hepatic abscess. It is also of service in pointing out to us the necessity of our giving a guarded prognosis, in cases where, from the existence of fetid gangrenous purulent expectoration, we might be led to pronounce them gangrene of the lung or gangrenous phthisis, and reckon them incurable. I need not remind you that the appropriate plan of treatment in the foregoing case should be a tonic one, embracing a well regulated diet of nourishing animal food and a moderate proportion of wine; and paramount to all—a removal to as pure air as possible. Under these means of cure, I have not the slightest doubt but that your treatment in the majority of such cases will prove highly successful.

PATHOLOGY OF EXPECTORATION.

By S. WRIGHT, M.D., Edin., F.S.A.

Physician to the Birmingham General Dispensary; formerly Senior President of the Royal Medical and Royal Physical Societies of Edinburgh, &c., &c.

(Continued from page 477)

A few words upon the absorption of tubercular matter.

That this substance is capable of being absorbed, is sufficiently apparent from the quantity of it which we often observe to be deposited in the lymphatic glands, and the *post-mortem* evidence which is subsequently afforded us of its having been partially or entirely removed thence, by the process of absorption.

This division of our subject has some important bearings, both upon the pathology of tubercle, and upon the treatment of phthisis. Sir Charles Scudamore, is of opinion, that "the formation of tubercular matter may be referred to a specific virus or poison in the blood, which he calls the tubercular." He says of it analogically, "every distinct animal poison produces morbid phenomena in the constitution peculiar to itself. It is not more

difficult to believe that a tubercular poison in the blood should give rise to the formation of tubercles in different parts, than that small-pox virus should produce pustules on the skin."

It is not necessary for me to show that these notions are utterly at variance with, and are completely refuted by, the established views of the best modern pathologists. Without referring to the microscopical anatomy of the different morbid formations, it is sufficient to observe that, if the analogy attempted to be established by Sir Charles Scudamore, between the etiology of tubercular, and that of contagious diseases, be correct, the product of the morbid actions ought to be able, in a healthy subject, to generate a similar morbid matter. That is, tubercle ought by inoculation, to produce tubercle, just as vaccine virus, the poison of small-pox, of syphilis, &c., will produce its like. In this case there would be much more danger to be apprehended from the absorption, than from the deposition of tubercular matter. But we know that such is not the fact. Tubercular matter in small quantity, in the blood, is productive of no inconvenience or mischief so long as it circulates freely; and if its discharge by any mucous membrane, not likely to give it lodgement, were certain, I think it probable that tubercle might be constantly passing through the circulation without occasioning injury. Tubercle before having commenced to decompose, is as harmless as laudable pus, or as any other substance of like composition. The only manner in which it could prove detrimental in the blood-vessels, would be by accumulating in some situation, where, by not being subsequently thrown off, it would decompose, and so lead to the destruction of the contiguous tissue, or to the contamination of the whole system. I have already shown that tubercle, both primitive and matured, may be inserted under the skin, and in the intermuscular cellular tissue with impunity. The following experiments show that its direct introduction into the blood is not more productive of injury.

Two drachms of matured (crude) tubercle, were carefully rubbed down and diluted with two ounces of distilled water, and the mixture at a temperature of 90° Fah., was slowly injected into the right external jugular of a bull-terrier dog weighing 18 lbs. Each injection caused a little hurry and labour of respiration, recurring at irregular intervals for more than an hour after the completion of the experiment. Beyond this there was no manifestation of uneasiness; and at the end of two months, the animal having no cough, and his respiration being natural, it was not considered necessary to keep him longer under observation.

An experiment similar to the above one was made upon a strong mongrel dog weighing 21 lbs. The left jugular was chosen for the injection. The results, immediately and remotely were the same as before, and at the end of ten weeks the investigation was discontinued.

Other experiments of a like nature were performed with 3, 4, and 5 drachms of matured tubercle, and the same number of ounces of water. In not one instance did any mischief follow. Two of the animals were carefully examined after death, but no trace of tubercular, or of other disease, was found in any of their organs.

These experiments are recorded with the object of showing that tubercular matter may pass through the lungs, or through the circulation, without producing injury or giving any proof of its presence. In other experiments of a different kind, with tubercle, I have met with opposite results. These, however, do not bear upon the question before us, and at present I shall refrain from publishing them.

As regards the absorption of tubercle, spontaneously or by the agency of remedial means, I am of opinion that it is possible for it to take place at any period after the deposition of the tubercular matter. I entertain no doubt, that in many subjects of tubercular diathesis, who do not early become the victims of disease, the formation, deposit, and subsequent removal of tubercle, are processes of common or perhaps constant occurrence. Pathology fully warrants the supposition and I dare say the experience of every observant

practitioner can testify to the fact. But at least, we know what influence, medicinal and hygienic treatment often exercise in cases of local tubercular accumulations. The literature of our profession is rich in curious and instructive examples of this nature. I have met with several instances, in my own practice, affording every indication, I am satisfied, of the deposit of tubercles in the superior portions of one or both lungs, in which after the use of tonics with iodine, and the local application of tartar-emetie and hydriodate of potash ointment, the general health has been permanently improved, and the signs of pulmonary mischief completely obliterated. In Mr. Gilbert's work on consumption¹ many interesting cases of this kind are narrated.

Tubercle has repeatedly been subjected to chemical analysis. In six grammes of solid tubercular matter, M. Hecht² found

	Gramme.	Decigrammes.
Albumen	1	4
Gelatine	1	2
Fibrine	1	8
Water (or loss)	1	6
	6	0

In one hundred parts of crude pulmonary tubercle, Thenard³ found

Animal matter	98.15
Muriate of Soda	1.85
Phosphate of lime	
Carbonate of Lime	
Oxide of iron, a trace	

A tubercle, seemingly cretaceous, consisted of⁴

Animal matter	3
Saline matter	96

Preuss⁵ has very elaborately investigated the composition of tubercle. He finds it to consist of the following ingredients.

Materia non, nisi fervido spiritu vini, solubiles	{ Cholestearine }	4.94
Materia spiritu vini frigido, neque aqua solubiles	{ Oleas natrius }	13.50
Materia et spiritu vini frigido, et aqua solubiles	{ Substantia propria indolis Chloruretum natrii Lactas natrius Sulphas natrius }	8.46
Materia aqua, neque vero spiritu solubiles	{ Caseus Chloruretum natrii Sulphas natrius Phosphas natrius }	7.99
Materia, neque spiritu, neque aqua solubiles	{ Caseus (calore mutatus) Oxydum Ferricum Phosphas Calcicus Carbonas calcicus Magnesium Sulphur }	65.11
		100.00

Dr. Abercrombie analysed some tuberculous deposits from the mesenteric glands, and arrived at the following conclusions. "By boiling for a short time, it loses a great part of its weight: but a residuum is left, which has increased much in firmness during the boiling, has lost entirely the flesh colour, and exhibits the appearance, consistence, and properties of coagulated albumen. The part that is lost seems to consist partly of water; but chiefly of the muco-extractive matter; sometimes, but not always, there is a mixture of gelatine; and, in some specimens, the coagulated part gave traces of fibrine, but in small quantity." Good's study of medicine, vol. 2, p. 498 quoted from Edwards, Med. Chir. Trans, vol. 1, p. 682.

Sir Charles Scudamore says of the composition of tubercular matter, "I have made very numerous

chemical examinations of tubercle, and have found that all the varieties present one general result, of showing them to be composed always of albumen, occasionally with slight evidence of fibrine, always of lime in abundant proportion, and in varying degrees of combination with carbonic and phosphoric acids, more rarely with muriatic; and in some specimens, I have detected the slight presence of magnesia."⁶

According to M. Boudet, "*Tubercles in the incipient stage*," are composed of albumen, caseine, a substance analogous to fibrine; substance soluble in boiling alcohol (cerebric acid); oleic, and margaric acids, saponified fat, lactate of soda, cholesterine 0.045, or 1-20th of the weight of the dry tubercle. The ashes contain, soluble salts (muriate and sulphate of soda); insoluble salts (phosphate and carbonate of lime), silica, oxide of iron. In the stage of *cheesy ramollissement*, they are alkaline; mixed with water, the solution is partly coagulated by heat; the albumen being removed, a liquid remains, which, like milk, is precipitated by acetic acid, and when evaporated by a gentle heat, forms a pellicle. In order to ascertain whether the liquid obtained from the tubercles presented any analogy with cow's milk, they were mixed with carbonate of barytes and water; the result in both was identical. When passed into the state of a *calcareous concretion*, they contain but a small proportion of insoluble salts (phosphate and carbonate of lime); on the contrary, they have considerable proportions, 70 per cent. of the soluble salts of soda." (Bulletin de l'Acad. de Med. quoted in the Medical Times for Nov. 2, 1844. p. 99.)

The chemical composition of tubercle is scarcely less variable than are its physical appearances and properties. Like these, it differs according to the age, the degree of maturation, and the locality of tubercular matter. Chemists, as well as microscopists, have fallen into the error of taking a single specimen of tubercle in a particular state, ("crude") and from its analysis, of inferring the composition of tubercle in its entire acceptation. No error of inquiry or of induction can be greater than this.

Primitive tubercular matter in its fluid transparent state, is purely albuminous, and affords neither re-actions nor analytical results at variance with those of any simply albuminous solution. It appears to be neutral to test-paper, but galvanism or incineration, furnishes evidence of the presence of a minute quantity of soda. Sulphur is also a constituent, but in still smaller proportion.

Solid primitive tubercle, transparent or opaque, usually answers to analysis like coagulated albumen. Often, however, owing to the length of time it may have been deposited, or the situation in which it may have been placed, it will be found to have acquired a greater or less proportion of earthy or saline matter, or both. The change appears to be effected by a process of endosmose and exosmose. In some specimens it is observed that every particle of animal matter has been removed, and its place supplied by phosphate of lime alone, or intermixed with carbonate of lime, and occasionally with muriate, sulphate, and phosphate of soda.⁷ These concretions present no external contrast with the unchanged miliary tubercles around and about them, and can only be pronounced upon after having been closely examined.

Matured ("crude") tubercle, also, according to the extent of its maturation, will vary in chemical composition. In proportion as it has advanced to maturity, will its fatty matter, or gelatine, or fibrine, or all of these, be abundant. The ratio of its earthy and saline constituents is also liable to much variation.

In the progress of decomposition, (softening) the constituents of tubercle are changed both in number and kind. The gelatine is usually the

first to disappear; then the traces of fibrinous structure become indistinct, or are lost; the cells are obliterated; the fatty matter is discoloured and fetid: ammonia, or its hydro-sulphuret, or free acid, is disengaged, and the mass sinks into liquidity, and utter rottenness.

According to the locality of tubercle, also, its constituents vary. It is seldom that situation has any effect upon primitive tubercle, but I have occasionally seen it stained with bile, and more rarely, tinged by blood. It is chiefly in its mature state that tubercle derives any peculiarity of composition from contact with particular tissues.

In the brain, and liver, and mesentery, tubercular matter generally contains more fat than in other parts. In the liver, again, it often contains biliary resin and cholesterine. Tubercular substance deposited near the rectum has usually fecal odour; and in the kidney it has been found impregnated with urea, and with a superabundance of phosphatic salts.

Matured tubercle, even in its most natural state is liable to so much variety of composition, that no specific number or ratio of constituents can be assigned to it. I have made many analyses of it, but have never found two of them to correspond. Gelatine is sometimes wanting; fat, though never absent, is variable in its proportion; and fibrine may be distinct enough in one specimen, whilst in another, there will be no appreciable trace of its presence. For reasons already expressed, the number and kind of earthy and saline ingredients are also very diversified.

It generally happens, that when fatty matter is abundant, gelatine is deficient in tubercle; and the converse. There is, therefore, no balance of chemical relation in the formative processes of these two constituents.

When tubercle is rich in gelatine, it is usually poor in salts, especially the earthy, and in fibrine.

(To be Continued.)

EGYPTIAN MAGIC AND MESMERISM.

To the Editor of the Medical Times.

SIR,—Through the accidental omission of seeing your influential journal regularly, caused by absence from home, my attention has been only recently called to the polite notice in the No. for Dec. 28th last, of my papers on "Egyptian Medicine," made by James Braid, Esq., of Manchester, whose ingenious articles on "Magic, Mesmerism and Hypnotism," have deeply interested me. By some sympathy,—but rather of an *anti-mesmeric*, than *mesmeric* character—we appear at the same time to have fallen into the same train of argument and inference on the subject of those magical performances, which would seem to have descended to Sheik Abdul Kader of Cairo, from those Memphian or Theban physicians of the "olden time," to whom all magical juggleries, or remedial charms in medical practice or science may be traced.

Dr. Edward Binns, in a work of great research, takes a similar view of hypnotic agency as Mr. Braid. He professes at any given time, to impart artificial sleep by a natural process, of which he makes no secret. Of its competency to produce sleep in many or most cases, I have little doubt, and as little that it throws great light on the artificial sleep into which the invalid devotees of the ancient idolatrous temples were thrown, previous to the miraculous gift (or clairvoyance) bestowed on them in dreams for the discovery of adequate remedies.

I well remember a similar natural and effectual process employed by my schoolfellows (especially on the exciting night previous to the holidays), of fixing their eyes steadfastly on some object, on the tester of their beds, concentrating their thoughts on it, and counting one two, or three hundred till they fell asleep.

During a tour which I made several years ago to Milan, Lombardy, and the north of Italy, sketches of which appeared in a daily paper, a pupil of the celebrated Egyptian magician, Abdul Kader of Cairo, who called himself Abdul Ebn Hakm, was introduced for the purpose of exhibiting similar feats, to a party at the hotel where I was residing with my *compagnon de voyage* at

¹ Pulmonary Consumption; its Prevention and Cure established on new Views of the Pathology of the Disease, 1842.

² Lobstein, Traité d'Anatomie Pathologique, tom. 1.

³ Andral, Précis d'Anatomie Pathologique, tom. 1.

⁴ Hodgkin's Lectures, vol. 2, p. 134.

⁵ Tuberculorum Pulmonis Crudorum Analysis Chemica, Berol, 1835, p. 38.

⁶ The Lancet. 1841-2, vol. 2, p. 646.

⁷ According to M. Boudet, the principal constituents of "hard tubercle" ('*etat cretace*') are chloride of sodium and sulphate of soda, with salts of lime in only small proportion, (Müller's Archives, Nos. 2 and 3. 1844.) These observations are exactly the reverse of my own.

riest. He was a Mahometan, but had been, as heard, a renegade Coptic monk. My taste for Egyptian researches, and the mystical and masonic interpretation I had affixed to the exterior and interior structure of the Great Pyramid, in a lecture I gave on the subject in 1809,* (an imaginative and cabalistical view which Caviglia has recently taken up, just when I am bound to admit, that recent architectural discoveries (e. g. Perring's) have nearly subverted it,) attracted, I presume, his sympathy. He became acquainted with me and my friend, who, to my deep regret, subsequently died at Alexandria, and revealed to us his secret. Of that art or secret I have never availed myself, somewhat dubious of its "questionable shape," and whether it—

"Bring with it airs from heaven or blasts from hell,
Be its intent wicked or charitable,"

but placing not the slightest reliance on its magical or miraculous powers. On referring to my notes and reminiscences of the adventure and adventurer, I have little doubt, that the agency on which he relied was mesmeric.

His secret consisted first, in learning fourteen names of fourteen symbols; the adept was then to make a fire, seven times a day for seven days; to throw incense upon it, and walk round the fire seven times, pronouncing seven times the fourteen names. After that (I presume because it must be through weariness, a decidedly somnolent process) the adept is to go to sleep, and when he wakes he will find himself possessed of the desiderated faculty. Q. E. D. Abdul Ebn Hakm, as I learnt, afterwards practised in Egypt, and extraordinary things have been told of his success, as well as that of his master, the Sheik Abdul Kader, by Mr. Lane, Major Felix, Baroness M——, Miss X——, Mrs. L——, and others.

In my instance, the first person I called was described accurately, but, in most other instances, the description of the personages called was inaccurate, which failure the magician generally ascribed to some defect in the recipient or *mesmerizée*, but, occasionally, he laid the fault on the atmosphere, which, as far as I could make out from his *lingua franca* and cabalistical jargon, was required for the perfection of the process, to be in an electrical condition. A storm of thunder and lightning—*par exemple*—such as that during which Macbeth's witches performed their faneiful operations, "with Turks' beards and Jews' livers, &c.," I presume would be unfailing.

The process which I witnessed was as follows:—The magician wrote seven distiches in Hebrew (I observed specially that they were in Hebrew, not in Arabic, like his confraternal juggler) on a piece of paper, which he separated into seven parts. An Italian boy (a child about ten or eleven years old, and a stranger to the company,) was called in; Abdul objected to him, and a girl of about the same age, daughter of a German residing in the hotel, was substituted. Either a male or female child, as I understood the magician, will do, but they must not have reached the age of puberty. It was indispensable, he said, that the recipient's thoughts should have the innocent purity of "little children."

Abdul began his operations by drawing on the palm of the child's hands, a double lined square, with certain bizarre characters of animals, zodiacal signs and crosses in the four corners; there was one symbol in the middle, supported by two figures on each side, I think a square and cone; but, looking upon the whole as a juggler's charlatanic, I did not take any especial note of them and now forget them.

After drawing the above figures, he poured ink into the girl's hand, and bidding her look steadfastly into the inky mirror, desired her to describe to the company what she saw. Then having lighted a chafing dish, he took up his *tebbis* (rosary), and running over the beads with his fingers, walked round the chafing dish seven times, repeating seven times the seven Hebrew verses on the seven slips of paper. He refused to

tell me whence they came and what they meant. He recited them like a chaunt, with gesticulations in the form of an invocation, waving his hands in continual circles before the forehead of the girl, in a hollow murmuring voice, his accents sinking like a top falling asleep, till at length he appeared to be himself asleep or in a trance, with his eyes closed, though his lips moved. A little time after, he seemed to wake from this comatose stupor, then, very tottering, walked seven times round the chafing dish, and threw lumps of incense, and the seven Hebrew charms into the fire. While the incense-smoke curling in white and fragrant wreaths, filled the room—which I ought to have said (the window-shutter being closed) only received light from the brazier—he asked the girl what she saw? She made no reply for about three minutes, but trembled, and seemed much excited. At last, with a sudden exclamation, she said, "I see figures passing by very swiftly." "Now I see a tall woman sweeping" (a man usually appears). "What next?" said Abdul. "I see," responded the child, all in agitation, "a man beautifully dressed in white and jewels, with a white beard and turban, and red sash, seated on a step."

"That is the Sultan on the *musnud*," exclaimed the magician, and now (turning to the company) the charm is complete, and you may call whom you please.

I have already stated, what was the result of the call, which was partly successful and partly not.

It may be remarked, that Mr. Salt, Lord Prndhoe, Lord Belmore, Major Felix, and other travellers, to whom reference has been made, who subjected Sheik Abdul Kader, the Egyptian "*Magnus Apollo*" of the Trieste magician, to long and repeated examinations, were fully impressed with the belief of his supernatural powers.

A lady of my acquaintance, Miss G——, but whose name and high Scotch connections I do not feel myself at liberty to mention, was present on the occasion above described, and assured me that when a child, she had gone through the same process as little "Minnie," the German girl; that she saw a man sweeping, the seven flags, and the sultan distinctly; and that then she was so frightened that she would not look any more into the inky mirror.

Mrs. L——y, an enterprising Egyptian traveller, bears the same testimony: she says that she had the ink put into her hand, and that she saw clearly the man with the besom, the soldiers and the camp, but nothing more. The "sultan" did not condescend to grant her the "*grande entree*."

One thing is unquestionably proved by the evidence of all trustworthy travellers, that the children (who cannot be confederates) see a crowd of objects following each other, and at the commencement of the incantation, the self same objects, viz., the figure with the besom, the seven flags of different colours, and the sultan. The late Mr. Ramsay, a most strictly honourable man, and trustworthy authority, related, that in the incantations of the kind performed at Cairo, these appearances are "seen as vividly and distinctly as at noon day." In what manner is this well attested mystery to be explained? There is no explanation probably for it but the natural, or sympathetic effects produced by imagination and nervous excitability. Hypnotism, or artificial sleep, may also account for some of these effects. The well

† So the magician Balak begins his incantation with seven altars, seven bullocks, and seven rams, and describes himself (Numbers xxiv. v. 6.) as "falling into a trance, but having his eyes (mind's eyes) open;" when his prophetic *clairvoyance* perceives (not "now" nor "nigh" but *in futuro*) the "ships that shall come from Chittim; the star out of Jacob," and the "septré out of Israel," which shall "destroy the children of Sheth." (The Egyptian Typhon.)

‡ The arm sweeping with a besom, is a common Egyptian symbol of the genius of destruction. It is a common symbol on the magical gems of the Gnostic or Basilidian heretic. The "tall woman sweeping with a besom" was (see Plutarch to Dion) the prophetic emblem of death.

known effect of "Laughing Gas" on the nervous system, produces a not dissimilar result of imaginative exaltation.

On the other hand, the schoolboy charm for courting sleep (to which I have referred), may be regarded as a negative effect, as opposed to the positive effect of gas, of the same pervading principle. Shall we call it electro-nervous? That the united agents of electricity, galvanism, and magnetism, act through the nervous system, is, I believe, professionally admitted; nor can we be certain that vitality itself—the mystery of mysteries—may not be some mysterious combination of these three allied agencies—this mighty Trinity—like the flame of Moses in the bush,* invading, without destroying, the universal frame of nature.

I am Sir,

Your's &c.

E. CLARKSON.

(To be concluded in our next.)

PROGRESS OF FRENCH SCIENCE

FROM OUR OWN CORRESPONDENT.

Paris, March 13th., 1845.

On Coxalgia.—The three last numbers of the *Annales de Chirurgie*, contain a memoir on this subject by Dr. Maisonneuve. The author, after studying at length the pathology, the remote and exciting causes, symptoms, such as pain, lesions of the motility, or deformity of the limb, augmentation or diminution of its size, change of its direction, elongation, or shortening, the duration of the disease, its mode of development, the termination, in the first stage, either by resolution, luxation, ankylosis, hypertrophy of the head of the femur, or enlargement of the acetabulum; its mode of termination at second stage, by resolution, (which, however, at this stage is never perfect the movements of the articulation being more or less diminished,) ankylosis or luxation, followed by formation of a false joint, and death: its diagnosis—treatment, local and general of the disease itself, and its consecutive accidents and complications concludes by stating:—1°. That coxalgia may be considered as a white swelling of the coxo-femoral articulation, in the widest sense of the word.—2°. That it was observed by ancient authors, but was really described by modern writers, and that J. L. Petit was the first who gave an accurate description of it.—3°. That all the internal or external causes which produce white swellings in the other articulations, are capable of giving rise to coxalgia, but that traumatic lesions, combined with the scrophulous, or rheumatic diatheses, develop it far more frequently than any other causes.—4°. That it may be seen in persons of all ages, but principally in children and adults. It is probable that certain congenital luxations are but a species of coxalgia peculiar to the fetus, just as the morbus coxæ senilis is a form of the disease peculiar to old men.—5. That coxalgia may present almost all the forms described as peculiar to white swellings, but appears most frequently as hyarthrosis, or superficial and deep seated osteitis.—6°. That in its mode of development there are two stages, each of which is characterised by peculiar symptoms.—7°. That the phenomena of elongation and shortening may be either *apparent* from the position of the limb, relatively to the pelvis, or *real*—produced by the partial or complete expulsion of the head of the femur from the acetabulum, by the atrophy of the bones, the destruction of the articular surfaces, or by certain lesions of the neck of the femur, or the eotylod cavity.—8°. That the expulsion of the head of the femur may be caused by an accumulation of serum in the joint, by the swelling of the soft parts situated in the bottom of the acetabulum, by the destruction of the edges of this cavity, and by the softening or destruction of the whole or a portion of the capsule, combined with an effort made by

§ Beautiful symbol! and common in Egypt (as well as the Druid-adored "Branch") as representing the genealogical single root, and infinite ramification ("root and rush, branch and twig," Isaiah) of the human family.

* Reported in the *Examiner*, and afterwards afterwards published in seven parts, in Dr. Valpy's *Classical Journal*, for 1824-5.

the patient, or by a blow on the part, &c.—9°. That by following certain rules, these phenomena may be accurately ascertained.—10°. That the sympathetic pain of the knee, leg, and foot, may be explained in various ways, without admitting one explication to the exclusion of the others, since all these explanations are worthy of some consideration.—11°. That to a skilful and attentive practitioner, the diagnosis of coxalgia presents no serious difficulties.—12°. That the prognosis of this affection is always serious.—13°. That a radical cure can be hoped for only in the first stage; in the second it is always incomplete, as the disease always leaves some consecutive accidents, such as loss of mobility in the articulation, true or spurious ankylosis, entire or partial luxation.—14°. That in both stages, to obtain a cure, immobility of the articulation is *absolutely* necessary, it alone for a week, sometimes suffices: without it all other means are useless.—15°. That among the means of cure, antiphlogistics and revulsives are the most efficacious; general treatment is also highly useful.—16°. That symptomatic abscesses are a very serious, though not a constantly fatal complication; they yield much easier than those caused by an affection of the rachis, and ought to be opened as soon as possible.—17. That true or spurious ankylosis is not beyond the reach of art; it ought not to be attacked by any violent measures, except when the limb is in a false direction.—18°. That spontaneous luxation is seldom met with, that it may be prevented by a proper treatment and when it exists may be often reduced.

On a New Method of Obtaining the Obliteration of the Cavity of an Abscess lined with a Pyogenic Membrane.—Dr. Moreau Bontard, of Versailles, in a case of chronic abscess of the buttocks, complicated with a very minute fistulous opening, employed the following sub-cutaneous method, which may be considered as a modification of the mode of scarification of the tunica vaginalis employed by Professor Velpeau in hydrocele. The patient was placed on the right side, the left lower extremity was bent so as to make the abscess as prominent as possible: it was then opened with a sharp bistoury near one of its borders. In the opening, a probe pointed bistoury was introduced, the blade near the handle being previously covered with a bit of linen to avoid jagging the aperture, and six scarifications were made, all converging towards the same spot, three on the pseudo-membrane corresponding to the deep-seated parts, and three on that lining the integuments. The bistoury was now removed, and by gentle pressure the cavity was completely emptied of the pus, mucus, and blood it contained, and the admission of air carefully guarded against. A bandage was then applied, cold fomentations were prescribed, and the patient was ordered to remain quiet. This plan was persevered in for three days, when the cure was completed, without fever, or any other unpleasant symptom having made its appearance. An effusion of plastic lymph had taken place into the cavity of the abscess, which, by causing adhesion of its sides, had obliterated the sac. Absorption of the surrounding textures had also taken place, for, on pressure being made over the former site of the abscess—which pressure was not productive of pain—no engorgement nor induration could be discovered on the eighth day after the operation.—(*Bulletin de Therapeutique.*)

On the Use of Strong Solutions of Nitras argenti as injections in Gonorrhœa: by F. Jacquot, M.D., of Saint Dié, Surgeon to the Military Hospital of the Gros Caillou.—The author in this memoir gave: 1° A resume of the cases treated by Dr. Leriche, at the Lyons Dispensary, from the 1st of April to the 1st of October, 1842. The number of patients was 58: of these 28 were cured in 12 days, 12 in 15 days, 10 in 20 days, 6 in 30 days, and 2 in 60 days; 46 were cured, 8 were still under treatment, and 4 left the dispensary and did not return, so that the result could not be ascertained. The injection consisted of eighteen grains of lunar caustic to an ounce of distilled water. No bad effects resulted from its use. In chronic cases, this injection hardly caused any pain, and but very trifling pain in acute cases; the

uneasiness in these instances seldom continuing longer than from fifteen to thirty minutes: in a few instances for two hours. The doctor confesses, that he was in some cases obliged, along with the caustic injection, to administer copaiba; and in other cases to discontinue the nitrate of silver for an acetate of lead injection. Of thirteen cases of orchitis, treated by the caustic injection, five were cured, five remain under treatment, one entered the hospital, and two have not mentioned the result of the treatment. The results of Dr. Leriche's practice though not as favourable as Dr. Debeney's, are on the whole, for the adoption of this plan of treating gonorrhœa. The principal facts observed by him with regard to its employment at various periods of the disease are as follow: of eleven cases of gonorrhœa, treated from the first to the third day of its appearance, nine were cured; in another, the disease, however, re-appeared, while in the last, the employment of the remedy was followed by an inflammation, so violent as to require the application to the perineum of twenty leeches. The disease required for its complete cure, a month or six weeks, and yielded to the employment of an injection of decoct. nuc. gallar. Of seventeen cases, where the disease had lasted from four to seven days, nine were cured immediately or after relapses, and eight were failures. In three of the latter cases, accidental complications, rather serious, made their appearance; these however the writer of the memoir is not inclined to attribute to the use of the injection. Of six cases which had lasted from six to thirty or forty days, one was cured, and five were failures, in two of which buboes—evidently caused by the injection—appeared. Of ten cases of chronic gonorrhœa, six were cured, and four were failures: in one of these, accidental hæmaturia set in. He next states the results obtained by other practitioners. Dr. Armand employed it, with scarcely any benefit, in six cases, in none of which, however, did it occasion any complication. M. Puyo, as the result of the observation of several cases in which he ordered this remedy, agrees with Dr. Armand. Mons. Quenol employed it, in the ratio of ten or twelve grains of the salt to an ounce of fluid, in several cases with advantage. In his hands, it was never productive of any injurious consequences. M. Vanderbach employed it in thirty cases with great success. His injection, consisted of from sixteen to twenty-four grains to the ounce, and had in every instance to be frequently repeated ere the cure was complete. In three of M. Vanderbach's cases, orchitis appeared, which he attributed to the use of the injection. To this view, other medical men who were watching the cases did not agree, as they thought that the inflammation was a sequel of the disease, rather than an accidental complication caused by the injection. Dr. Lafond states in his opinion, that this remedy is highly successful in the acute stage of gonorrhœa—when the disease has but begun to show itself—and that its efficacy diminishes with the duration of the disease. He adds, however, that even in chronic gonorrhœa, this remedy will be found a valuable adjunct to copaiba and cubebs. The memoir concludes by stating that the employment of this remedy is not by any means dangerous as M. Venol has represented. It explains why the remedy was productive of such different results in the hands of different prescribers, by showing, that they had, each used it at a different stage of the disease. The pain caused by this injection generally disappears after a lapse of ten or fifteen minutes. Sometimes it continues for two or more hours as a dull, heavy, sensation of uneasiness, alternating with acute, lancinating, pains along the penis and perineum. The hæmaturia caused by it is never copious as stated by M. Venol; in some rare cases it may, however, be profuse. The penis, and especially the glans penis, generally remains swollen, painful, and red for several hours, and a hypersecretion usually follows the injection,—urodynia exists almost always at first, and the urine contains generally, pellicles of a blackish or greyish white colour. This injection when used in the primary stages of gonorrhœa, easily effects a cure by setting up a new action in

the mucous membrane with which it comes in contact. That when the disease has existed for length of time sufficient to produce structural changes in the seat of disease, its curative effect must be much more slowly obtained, and that in place of acting beneficially, it may now act injuriously. The injection which the writer of the memoir recommends to begin with, is composed of three grains of nitrate of silver to a ounce of distilled water. When the disease has lasted some time before you have been consulted, he recommends at first the use of a ten grain injection, to be followed up morning and evening for six days by a three grain one. This mode of treatment, the writer of the memoir states to be effectual in every instance, in preventing relapses and obtaining a cure.—(*Journal de Chirurgie.*)

Parisian Medical Society.—Sitting of the 6th of March.—The Chair was taken at 7 p. m. by Dr. Clanev, V. P., and the minutes of the last meeting having been read, Dr. Oliffe presented to the society a male child, born on the 22nd January, 1842, whose case was peculiarly interesting. This child was taken to Dr. Amussat 54 hours after its birth, and on examination it was found that though the inferior extremity of the rectum existed, with a well formed anus, there was a septum about two inches above the orifice of the gut. This was perforated with a trocar, but no meconium was voided; the aperture was then enlarged with the bistoury, and the operator's finger introduced, but without his being able to discover the inferior extremity of the upper portion of the rectum. A consultation was then held, at which Dr. Oliffe assisted, and after the minutest examination, it was unanimously decided that the only chance of life afforded to the child, was by opening the lumbar colon, according to the method recommended by Dr. Amussat. The operation was successfully performed by that skilful surgeon, the peritoneum was not opened, and the artificial anus was established in the left lumbar region. Some time after Mr. John Parrot, now practising at Clapham, Surrey, and who assisted at the operation, gave an account of it, together with a history of the child's health in the London Medical Gazette. Up to that period, and indeed until within the last twelve months, the child was delicate, his digestion slow, and he suffered very much from habitual constipation; his physical and moral development imperfect; his life in fact, seemed likely to be of short duration; within the last twelve months, however, he has vastly improved, and is now as advanced as children of his age usually are; his digestive functions are regular, if we except an habitual tendency to constipation, which renders the frequent exhibition of laxatives necessary; his appetite excellent and his intellectual faculties are acute. The child was then examined by the members of the Parisian Medical Society, all of whom expressed their surprise and satisfaction at this great result of modern medical science, though a few of those present were of opinion that the infirmity was such as to render life a burden. The child walked to and fro in the room, and submitted without a murmur, to the examination of his artificial anus. This consists of an orifice situated in the left lumbar region, midway between the last false rib, and the crest of the ilium, and about two inches outside the external border of the quadratus lumborum. The orifice is about half an inch in diameter, and was stopped by means of a small gum elastic plug.

Dr. Oliffe next exhibited some pathological specimens, which bore directly on the subject, viz: the possibility and the necessity of performing the operation for artificial anus, in cases of intestinal obstructions resulting from an organic stricture of the intestines. The specimens consisted, 1° of a portion of the large intestine, presenting a carcinomatous thickening of the cellular tissue, situated at the point of union between the sigmoid flexure of the colon and the rectum; 2° of the parts interested in the operation for artificial anus, to remedy the disease. The history of the case from which the specimens were taken was given in detail: what follows is a short abstract. Mrs. B. ætat 53, had always enjoyed uninterrupted health until April 1843, when constipation appeared and gradually increased. In June 1844, the alvine

cretions were completely suppressed, and the usual means employed produced no good effect: consequently Dr. Amussat performed the operation of enterotomy, and the relief obtained was immediate. This case was published in the *Medical Times*, of the 17th of August last, (Volume X. 401, 425, and 421,) with an exact narration of the patient's state up to the 30th July, or 30 days after the operation. From that period to the commencement of November, the patient continued to improve, troubled only (like all persons having an artificial anus in the lumbar region,) with constipation, which was relieved by enemata. Towards the middle of November, she began to experience violent griping pains, which soon increased to such a degree, as to render it impossible for her to support the gum-elastic stopper, which she therefore removed; peritonitis supervened, and death took place on the 10th January, 1845, six months and ten days after the operation. *Autopsy.* The lesion was found to consist of an annular stricture of the sigmoid flexure; the left ovary was diseased. This affection, in appearance of a cancerous nature, did not seem to have any connexion with the intestinal stricture, the testine adhered to the fundus of the uterus, the artificial anus was found to be perfectly established: the peritonæum had not been opened.

This was Dr. Amussat's ninth operation, and was performed in the presence of several practitioners, among whom was Sir Philip Crampton of Dublin, who warmly congratulated Dr. Amussat on his success as well as on that of preceding cases. At a late meeting of one of the Dublin Medical Societies, Sir Philip recommended the Irish surgeons to adopt the treatment of the skilful French operator in similar cases. This subject had already been brought under the notice of the Irish members of the profession by Dr. Oliffe in a paper on "Intestinal Obstruction," which he read at the meeting of the British Association held at Cork in August 1843. Dr. Oliffe then entered into lengthened reflections on the subject of obstinate constipation and obstruction, and related several cases which had been successfully treated by his method, by Dr. Amussat; and others which had terminated fatally because the operation had not been resorted to, and concluded by expressing his hope that this great innovation would henceforth form an integral portion of modern surgery. Mr. Maclise then gave the details of a case of perforate anus which he had just seen treated by Dr. Amussat's method. The child had been operated on by Dr. Nélaton at the *Hôpital des Cliniques*, death took place the following day. Mr. Maclise gave the result of the autopsy, and added that he was convinced that the posterior surface of the lumbar colon, was removed from the peritonæum to the extent Dr. Oliffe stated. Dr. Oliffe in reply said, that he had repeatedly performed the operation on the dead bodies of children and adults, and that when proper precautions were taken, the peritonæum never was opened. Dr. Redfern corroborated the views taken by the preceding speaker, and stated that he had seen several cases which terminated fatally in England, and in which the operation had never been thought of. Dr. Oliffe said, that the operation had been performed in England by Mr. Leales of Leeds, by Mr. Jukes of Birmingham &c., but he mentioned some cases which had required it, and where it had not been performed: amongst others he alluded to a remarkable case detailed by Dr. James Johnson at the Westminster Medical Society, and published in the *Lancet* of the 10th November 1842. Mr. Webb said, that a patient had lately died of obstinate constipation at Guy's Hospital, and that at the *post mortem* examination, the only lesion found was a small stricture of the colon descendens. A discussion now followed in which Drs. Claney, Edwin Lee, Maclise, Redfern and Oliffe joined, after which the society adjourned.

Academy of Sciences. Annual Sitting of the 10th March—Baron Ch. Dupin in the Chair. The annual meeting of the Academy took place to-day; numerous and distinguished audience attended. M. Arago proclaimed the prizes. *Prize for the mechanism of the production of the human voice*, not awarded; a sum of £48 was given to M.

Dequevauvilles, one of £40 to Mr. John Bishop, London, and one of £32 to M. Charlotti, as an encouragement. *Prize on the comparative structure of the organs of the voice*: the sum of £80 was accorded to Dr. Mayer of Bonn, and one of £40 to Mr. J. Bishop, London as a recompense. *One experimental physiology.* The prize was awarded to M. Pouchet, and honour mention to M. Bloudot and Dr. Dubois d'Amiens.

Medicine and Surgery.—Professor Piory was awarded £60 for his researches on diseases of the spleen and intermittent fever; Professor Trouseau and Dr. Belloc £60 for their treatise on phthisis laryngea. Drs. Barthez and Rilliet, £48 for their treatise on children's diseases. Dr. Poiseville £28 for his experiments on the influence exercised by various substances on the rapidity of the circulation. M. Lacanchin £28 for his work on hydrothymia. Dr. Cazenave, £20 for his treatise on syphiloides; M. Tardieu, £20 for his work on glanders; M. Denis, £20 for his researches on the blood; M. Reybard, £20 for his researches on empyema; M. Pumet, £20 for his researches on the antidotes for corrosive sublimate; Drs. Rognetta, Fournier, Deschamps and Touilloy were honourably mentioned. No work was judged worthy of a prize, the sums awarded were merely recompenses. *On vaccine.*—The prize was not given, but a recompense was accorded to Drs. Bousquet and Friard, and a third candidate; to the first £200 and the other two £100 each.

Eulogium on Aubert-aubert du Petit Thouars, by M. Flourens.—The eloquent perpetual secretary, through whose kindness I have now an opportunity of laying before your readers several extracts from this eulogium, listened to with a religious attention, and received with repeated and merited applause, commences thus:—"The celebrated man, whose history I am about to relate, marked his place in the scientific world by patient researches, and by a new and bold theory. We must take into account the works which he published, the emulation he raised in the breasts of his adversaries, and the difficulties he removed for his successors. He was descended from a noble family, who for many generations had followed the military career, and who, uniting improvidence for the future, with carelessness for the present, could often say, '*Tout était perdu, sauf l'honneur.*' Aubert du Petit-Thouars never lost this chivalrous and adventurous character. He adopted it in scientific subjects; it was a patrimonial inheritance, and he united to the loyalty and courage of his ancestors, their peculiarity, and their generosity." "Aubert du Petit-Thouars came into the world on the 5th Nov. 1758, at the Chateau de Boumois, in Anjou. An orphan at an early age, his grandfather, the noble commandant of Saumur, performed towards him the duties of his lost parents. He was educated at the College of the Flèche, and there his very existence seemed bound up in that of his brother Aristide, whose lively wit, whose intrepidity and courage, indicated the hero, and who on a memorable and fatal occasion, was destined to throw such lustre on our navy. Confined within the walls of the college, and finding the hours long and tedious, the two young men procured a copy of Robinson Crusoe, and their imaginations exalted by its perusal, dreamt of nought but voyages, discoveries, and desert islands to people and civilize. To attain his end more promptly, Aristide, who acted as ringleader, ran away with the intent of going to a sea-port, and becoming a sailor. Pursued and caught, he was imprisoned, and during his incarceration he amused himself in writing with his brother, the history of the adventures they had dreamt."

"On leaving the military college, Aubert obtained a commission in the army. On joining his regiment, his simple manners and good-natured looks caused some practical jokes to be played off on him, with the intent of testing his courage; he remained a long time quite unconscious of the fact, but as soon as he understood it, he commenced by challenging the oldest of his comrade, and declared that he would fight with them all, one after another. His companions sought in vain to soothe him, made him excuses; but he would listen to nothing, saying that he was determined to do as he said. He was, however, obliged to consider

himself satisfied, since instead of adversaries, he found but friends."

"He had reached the rank of Captain, and each day added to the pleasure he experienced in the study of botany; having become acquainted with MM. de Jussieu and de Lamarck, he perceived, that he also was a botanist, and began to be sensible of his powers. Then the desire of voyages, declared itself again, and all around him seemed to unite to render the passion more violent. It was just at the time that the fate of the unfortunate La Peyrouse, was the theme of general conversation, and Aristide resolved to fit out a vessel and go round the world in search of this courageous navigator. On learning his brother's resolution, Aubert wrote to him thus, "I forsake all to go with you; you shall act the part of Cook, or Bougainville in this expedition, and I that of Com-merson, or Banks." But this voyage, this fitting out, this glorious research, could not be accomplished without great expense. Aubert and Aristide Du-Petit-Thouars proposed a national subscription. Louis XVI placed his name at the head of this list for the sum of £400—a pious engagement, which the unfortunate monarch was prevented from fulfilling. The subscription failed, and the difficulties increased. The two brothers perceiving that all depended on their own exertions, united their patrimony and sacrificed all they had to meet the necessary expences. At length commenced for them that dangerous and glorious career they had so long desired! Aristide was the chief of a noble enterprise, Aubert was about to accompany him, to travel, independent and devoted to the advancement of science."

The distinguished orator then followed Aubert from his leaving Paris for Brest in July 1792, related his tribulations on the road there, his separation from his brother, his adventures at Tristan d'Acunha, his botanical harvest at the Cape of Good Hope, and after a voyage of six months his arrival at Mauritius, the rendezvous appointed by Aristide—who, however, never reached it—his sojourn, and peregrinations in the *Isle de France*, a spot for ever celebrated by the author of the touching narrative of Paul and Virginia, at Madagascar and Bourbon, dwelt on his sorrow at learning the heroic death of his brother; his return to Europe, and his arrival at Rochefort, on 2nd September, 1802.

M. Flourens gave at length the theory of Du Petit Thouars on the growth of trees, the discussions upon which caused to be mentioned the other works published by the same author, after his appointment in 1807, as director of the *Pépinière du Roule*, and his nomination in 1820, as member of the Academy of Sciences. He terminated thus: "this happiness was of short duration. In 1827 the *Pépinière du Roule* was suppressed. It may be, that this establishment had no longer the utility it presented, during a century: still perhaps in behalf of agriculture, the useful art, under whose *Ægis* all others exist, it ought to have been respected. Be this as it may, M. Du Petit Thouars in vain reclaimed, protested, petitioned the King, the Chambers, addressed himself to public opinion: all was labour lost. He was so deeply grieved at this event, that his health became affected, and soon after his existence, so agitated, so troubled in appearance, but in reality, so calm, drew to a close. Of all the members of his family a sister alone remained: she had been, during the long years of his exile, the tie which united him to his country: she had arranged for his return to France; his faithful companion, she shared ever after his griefs, and his joys: and even now, still devoted to the memory of the two brothers, who were so dear to her, it is the care, it is the veneration of their glory which still sustains and animates her."

"Aubert du Petit Thouars, departed this life on the 12th of May, 1831. He had lived isolated and almost poor, nothing seemed to disturb the tranquillity of his retreat; but, tears soon revealed what had been his most agreeable, his most secret occupation. The poor bewailed the loss of their benefactor. In a heart naturally generous, the pleasure of performing good and beneficent acts must have been soon preferred to that of success or discoveries. There is, in the life of a man, a

period for the ambition of the mind. The mind then desires to penetrate, to understand everything. But the more the mind is elevated, the more feeling the heart becomes. The more we endeavour to render ourselves worthy of enlightening our fellow creatures, the more we experience happiness in being useful to them."

"At the close of a long career, and with respect to the works of the mind, the most brilliant that ever existed, Voltaire, the great Voltaire said, *J'ai fait un peu de bien, c'est mon meilleur ouvrage.*"

Academy of Medicine. Sitting of the 11th of March, M. Caventou in the Chair.—Dr. Pariset, on the decision of the *conseil*, read a letter addressed by Dr. Fabre, with the two first volumes of the *Bibliothèque du Médecin Practicien*. This work, said the distinguished perpetual secretary, adopted recently by the University, is a series of monographs on the various branches of medicine. It is at the same time a dogmatic and clinical treatise and as such highly useful to physicians and surgeons. The president stated that Dr. Fabre should be thanked for his work.

The president then informed the Academy of the loss they had sustained in the death of Dr. Ollivier d'Angers, which event took place on the 11th March, at 7 a. m.

The following committees for the prizes were then named: 1° *Prize of the Academy*, Drs. Bricheteau, Rayer, Renauldin, Ferrus and Louis; 2° *Portal prize*—Drs. Baudelocque, Cornac, Guersant, Rochoux, and Laugier; 3° *Civrieux prizes*—Drs. Fabret, Solly, Melus, Espiano, and Burdin.

On the State of the Brain in Insane Persons Afflicted with Paralysis.—Dr. Jolly read a report on a memoir of Dr. Belhomme. The principal object of this memoir is the study of the anatomopathological condition of the brain of individuals affected with paralysis; it contains fifteen observations tending to prove that softening and induration of the brain are two constant effects of the same cause, *encephalitis*; that these two effects correspond, the former to acute, the latter to chronic inflammation of the cerebral substance. It contains also several physiological experiments performed by Dr. Belhomme in order to prove how little influence the lesions of the cortical substance exercise on the acts of the *vie de relation* when compared with those of the medullary. The reporter here differs in opinion from the author of the memoir, inasmuch as he considers it impossible to draw from traumatic lesions any positive conclusions as to the effects produced by pathological alterations. As to the localization of insanity—the principal object of Dr. Belhomme's memoir—the reporter expresses himself thus:—It may happen that physical and moral resemblances, constituting individual shades in the organization, of families, are capable of permitting our establishing as a law, that a morbid hereditary or congenital predisposition, so especially frequent in nervous affections, exists in their members. It may likewise happen that an anomaly of the intellectual or affective functions may be produced by some accidental molecular or dynamic modification of the fibres of the brain. But is that enough to authorize the conclusion that organic lesions are absolutely necessary to the production of insanity, or that we must always seek for the causes or traces of the affection in the *post-mortem* examination? The author has sustained this opinion with a perseverance worthy of praise, and though I am far from reproaching him on this subject, still I can but regret that I cannot coincide with him, and I would ask Dr. Belhomme himself are we sufficiently acquainted with the internal structure of the normal condition of the brain, to be able to appreciate the morbid alterations corresponding to such or such a lesion of the intellect? I would ask him how, with what instruments, he was able to establish the affinity between such a cerebral fibre and such an intellectual faculty? Microscopical anatomy will perhaps teach us at some future period this concord, but in the mean time we must content ourselves with the facts furnished by clinical observation. Now, whoever studies attentively the mode of development of mental alienation will remark: that in many cases it consists at first in individual pecu-

liarities, moral or intellectual, which manifest themselves by the usual, and as it were instinctive acts, the general health being, during this period, perfect. These actions, hardly unusual, become more and more marked, are more developed and exaggerated, from day to day, and constitute at length mental disturbances, and real insanity: this is produced by inappreciable and purely physiological causes, effected by the progress of age or the modifications which these causes produce in the various sensations, ideas, or ratiocinations. Is this the mode of development of an inflammation of the brain? In other cases, on the contrary, it is caused by a sudden violent emotion, such as unexpected news, deferred hope, deep grief, jealousy; in short, some violent passion which destroys the harmony existing in the ideas, and destroys, more or less deeply, more or less durably, the intellectual acts. Is this, let me ask again, the effect of cerebral inflammation? Finally, can an inflammatory state, or an organic lesion, of the brain be admitted in the numerous instances in which alienation appears with the rapidity of lightning, with the rapidity of thought,—the latter being unquestionably much more rapid than the former,—and, therefore, still more so than inflammation, or any morbid lesion? It must be confessed that it is a curious phlegmasia which begins and ceases with our existence, which shows itself in the thousand shapes that alienation presents, which complies with such docility, and so wonderfully, to all the wanderings, to all the caprices of the intellect! Again, if acute or chronic encephalitis is the cause of mental alienation, how comes it that children, and young men, so frequently affected, and so often victims to cerebral phlegmasia, so seldom become insane? How comes it that insanity is the almost exclusive appanage of nervous, sensitive persons, rather than those of a vigorous, sanguineous, and inflammatory temperament? Evidently, insanity to declare itself, does not need the presence of an inflammation, a softening, an induration, or any organic lesion of the brain. A hereditary predisposition, a faulty education, a moral emotion, a mere nothing suffices: for, in the wonderful co-ordination of the numerous elements of the mind, all so mobile and fragile, it is enough that one of them be deranged, or destroyed, to cause all this intellectual mosaic work to be dissociated and fall into ruins. There is no appreciable condition, no pathological lesion on which we may establish any positive conclusion as to the causes of insanity: it is only logical deduction which enables us to make it; this fact is proved by pathological anatomy, and by the opinion of those who have made this branch of the healing art, the object of their special study. Nay, more, I repeat, though perhaps the partisans of localization will consider the proposition somewhat paradoxical, I assert that insanity is incompatible with an organic lesion of the brain, whenever this is capable of interrupting the sensations or perceptions necessary to the performance of the intellectual faculties. I assert that insanity, like delirium in fever, like hallucinations not necessarily explained by a disease of the brain proves not the existence of an anatomical lesion of that organ, any more than the anomalies,—or so to speak—the insanity of the stomach in pregnant females, or chlorotic girls, prove structural lesion of the stomach in the latter cases. For, if it were so, if the functional disturbances of the brain in insane persons, and of the stomach, during pregnancy or chlorosis, were the necessary effect of an organic lesion of the affected parts, in my opinion, this lesion must appear and disappear at stated times, in order to correspond to the intermittence of the symptoms so frequent in insanity."

The reporter after relating the researches of Dr. Belhomme, on the causes of the dyspnoea so frequently experienced by paralytic insane persons, which he considers as the natural and necessary consequence of the lesion of the *par vagum* at its origin, when it is not produced by those of the costal or diaphragmatic nerves; concludes thus:—"As it may be perceived, the object of the researches of the author of the memoir is not to add any new fact to those already known. But this is not the only condition neces-

sary to obtain the approbation and support of an Academy; it is also highly meritorious to observe and draw the attention of the profession to litigious subjects, to elucidate obscure, and confirm attested facts. In this respect, and notwithstanding the several objections I have made, still I consider the memoir of Dr. Belhomme worthy of attention; consequently, I have the honor of proposing: 1° Its insertion in the bulletin; 2° That the author be thanked for his communication." Dr. Ferrus: This subject is so important, that I propose deferring the discussion until the report is printed. This proposition, combated by Dr. Rochoux, when put to the vote, was rejected.—Dr. Ferrus: It is true, that anatomy frequently fails in discovering the organic lesion, and that these alterations may be present, without alienation, still must it be concluded, that nothing exists, because we can find nothing? Ought it to be concluded, that when anatomical lesions are discovered, they have produced no intellectual or moral disturbances? I do not think so, and I consider, that much discussion would be avoided were we to employ the term organic modifications, which may, or may not be appreciable, instead of anatomical lesions. In conclusion, if Dr. Belhomme attributes maniacal delirium to inflammation, I differ from his opinion, and approve the critical remarks of the reporter: but, if on the contrary, Dr. B. means that in every case an organic lesion of some kind or other exists, I agree completely with him. Dr. Rochoux did not consider it possible for mania to exist without some disturbance of the mind. Dr. Prus was not of the opinion of Dr. Belhomme, that softening and induration subsequent to inflammation, are the causes of insanity, and dwelt upon the danger attendant on such an opinion, as patients might be treated by antiphlogistics in cases where very different means were requisite. Dr. Castel attributed the cause of mania to a diminution of the sensibility, not to organic lesions of the brain; the same remark in his opinion was applicable to paralysis. Professor Gerdy thought that insanity might exist without any organic lesion being observed. After some more remarks from Drs. Ferrus, Castel, Rochoux, Prus and Gerdy, the discussion ceased. The conclusions of the reporter were then adopted.

GARLAND DE BEAUMONT, D.M.P.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN SCIENCE.

By SIGISMUND SUTRO, M. D.

Tooth Ache.—This appellation is given to those pains which attack the teeth, or the structures with which they are connected. It may depend either upon congestion, inflammation, or a lesion of innervation. 1° *Congestion: this may have its seat either in the membrane exterior to the fang of the tooth, in that lining its central canal, or in the ganglion, which supplies the tooth with nerves.* Congestion, when seated in the lining membrane of the fang, may be known, by lancinating, throbbing pains which are increased by any excitement of the system; these pains are variable in their character, sometimes lasting but for a few minutes, and again for as many hours; they are generally increased, towards evening, and when the patient is in bed. The tooth, whose lining membrane is affected, is sensitive to the touch, or to pressure, and frequently conveys the sensation, of being somewhat above the level of the surrounding teeth. The frequent application of cold water to the affected tooth, is one of the best means of cure, that can be adopted in this form of odontalgia. 2° *Congestion in the lining membrane of the central canal, and of the dental nerves.*—Tooth-ache dependant upon these causes, may be distinguished from the variety just described, by the tooth not being painful on pressure, nor conveying the sensation of prominence over its fellows. It may be also distinguished by the effect which cold water produces upon it: if the tooth be carious at the crown, cold water immediately gives relief, but if it be not so, the pain undergoes an exacerbation for some time, but under the use of the remedy it eventually disappears. Young, plethoric persons, and pregnant women, are those most subject to this form

what of him who departs this life in the expectation of a better! How many ceremonies, sorrowful and joyful, is this agent summoned to witness! What foolishness, what philosophy, does it not mix with! The clown sips it over his vulgar laugh, the courtier, over his polished smile, does the same. It joins in the rustic dance of the village green, and in the more refined evolutions of the assemblies of the great. It is the welcome guest of the hamlet gossips, and in the soirees of the learned, it mingles alike with statesmen, heroes, philosophers, and kings!

Critical, or cynical reader, be careful, in conning these lines, not to judge harshly of them! They may seem to be frivolous, but they are not intended as trifles. They are full of the meaning of the heart, and to whomsoever may consider them discursive, we will simply say, that we hold but cheaply the man, who, in a journey of science, cannot find in his occasional pausing places, the opportunity of sentiment.

"*Vis, fortior vitium*," is a motto of the physiologists; it applies to many things, and to few more than to tea. We might prove it by some learned references, for scholars have deigned to write upon the subject, and we could quote some curious experimental facts, for we have busied ourselves in investigating it; but such things are not necessary. We know as much of tea as De Quincey does of opium; as much of the profit or the penalty of using it; we have seen both sides of the balance-sheet of custom, and feel qualified to speak oracularly. Genius of tea! After all the preface we have spoken in your praise, you must not take it amiss, if we state some less flattering facts about you. We have dealt a little with your use, we are now going to say a few things about the value of you.

Now we do seriously affirm, that we know of no substance, not strictly medicinal, which exerts so powerful an influence upon the nervous system as tea. Some people can it is true, take large quantities of it with impunity, so can monkeys cat tobacco, hedgehogs cantharides, goats hemlock, and swine the roots, and thrushes the seeds, of henbane. But these things are exceptions, or, as we call them, *idiosyncrasies*. Whilst as a rule tea excites, and finally enervates the system, so does it also often act like a poison. It is more frequently the case that people cannot take even small quantities without injury, than that they can take large quantities with impunity. We have met with scores of individuals who could not take a draught of green tea without a sensation of faintness, and a total inability to sleep for some time after. We have known the protracted use of the beverage to cause incurable paralysis, and we have also seen its continued indulgence to a great extent, cause a marasmus almost equal to that of Vogel's consumptives, who are described as having "faces like triangles, and limbs like oaten straws, and hearts of butter, and stomachs as weak as blotting paper, and flaccid feeble, marrowless little bodies." With the *debility* which tea induces, is also connected an *irritability*, which is called *wakefulness*. So it is, but it is of a morbid kind, there is nothing natural or healthy about it, and its purchase is never unattended with risk. Even the Chinese, to whom as a beverage tea is more adaptable than to ourselves, are often hurt by the too plentiful use of it. The difficulties of their language render it incumbent upon the learned to devote a vast portion of time to its study, and they qualify themselves for night-labour by drinking largely of tea. But they are weakened in mind, and depraved and emasculated

in body in consequence. By the Medical Student, as we have said, it is used with the object of prolonging his periods of intellectual toil, and most effectually, but mischievously, does it answer his intentions. It undermines all his energies, and leaves him permanently dyspeptic or decrepid.

"Hence the sunk cheek, the hollow lifeless eye:
Hence loss of balmy sleep, and appetite,
Convulsive motions, agonizing spasms,
And symptoms, which, rightly to describe,
Had foiled the Coan Sage."

We knew a man, who, whilst preparing for a prize examination, restricted himself to an exclusive vegetable diet, and in place of a little wine, which he had been accustomed to take after dinner and supper, he drank largely of strong green tea. More than once he swallowed as much as a couple of quarts during the nights. The practice, even if it had not been pernicious, was quite uncalled for, inasmuch as the candidate for the honour was a man of first-rate ability, and need not have gone out of his ordinary way to beat any competitor of his standing. But he wished to exceed even himself, and he thought no risk too great for the gratification of his ambition. The effect of the tea was entirely to disincite him for sleep; he became restless, but his mind was unusually active and energetic, and he prosecuted his reading to the utmost. For five or six nights he never went to bed, and only dozed at intervals, and very unsoundly, in his chair. The occurrence of some unpleasant head symptoms induced him one night to intermit his labour and go to bed. But he could not sleep; anxiety and horror took possession of him, and he wandered in the delirium of waking dreams. With the fancied attribute of ubiquity, he became the creature and the resident of every clime. He headed the British Senate, and dictated laws for the world—he joined in the war song of the Red Indians of North America, and toiled in the silver mines of the further South—he lived among the arctic snows, feeding upon seal oil and clothed in the skins of wild beasts, and he luxuriated amid the perfume and effeminacy of Persia—he bowed before the Cross in the Cathedral of St. Peter—subscribed to the Koran in the Mosque of St. Sophia—and prostrated himself before idols of wood among the inhabitants of the South Seas. Anon, he reached the stars, and whilst mingling with a creation less earthly than our own, awoke from his delirium. The familiar objects in his room wore an unnatural aspect—they seemed to move, to be alive, and though, without eyes, he fancied they looked at him. He bade them welcome, invited them to conversation, and was found by his attendant discussing a scientific question with a chair! We were summoned to see him—he was pale, anxious, and fretful, with a feeble pulse that could scarcely be counted. A dose of hot brandy and water and ammonia reduced his pulse, and restored him to consciousness. He laughed at the folly that had possessed him, and said he should be quite well shortly. But still he could not sleep; reading and study were suspended, he was dieted, exercised, and cheered with conversation, but to no purpose. Opium was tried, so was camphor, musk, and henbane—still he could not sleep. Mind and body slowly gave way, and at the time when his hoped for prize was grasped by a stranger's hand, he was a maniac!

The delirium of drunkenness is nothing more than a state of excessive nervous debility, occasioned by the sudden withdrawal of alcoholic stimulus. We have known a large bleeding, upon only a moderate indulgence, bring on delirium tremens. And it not infrequently happens that a rapid exhaustion of the nervous system, from

whatever cause, will be followed by symptoms resembling those that are said to be peculiar to this disease. We have repeatedly observed this after the use of strong green tea. We once called unexpectedly upon a fellow student, and found him in close conclave with his servant and landlady. He had called them into the room for company and protection, for a sudden fit of horror had seized him, and he dared not sit alone. He was a remarkably temperate man, but much addicted to drinking large quantities of green tea. On this evening he had been unusually indulgent, and fancied that his mental disturbance was a consequence of it, for he had felt similar effects on previous similar occasions.

The meeting of Friday night was in every respect most important. The large room in Hanover Square, capable of holding from 1500 to 2000, was nearly full. At the very lowest calculation a thousand medical men were present, assembled, too, from all parts of the kingdom. To speak of their respectability would be a work of supererogation. A single glance shewed that the room contained the practitioners possessing the largest amount of business known about the metropolis; and the fact, most fairly developed, that nearly every gentleman in speaking on the part of the Association was not blest with the set form of "public speech," and was one of an order of men quite apart from your glibly-spoken man, who are never happy but in associations, and public displays—this fact, we say, speaks eloquently of the changed face of Medical Politics in the present day, and offers our legislature an ominous portent of an opposition that no bad measure can withstand. So simply, so honestly, so purely from the heart proceeded the truthful sentiments of the respectable speakers, that we confess the speeches of Dr. Lynch, Dr. Webster, of Dulwich, and such old favourites in the line of public talking (*Slang Whangers*, we believe, they call them in America), jarred on our ears, and still more on our hearts, as sadly out of time and place.

The declaration of Mr. Ancell, that the Association were quite prepared to build their new Incorporation on the College of Surgeons—modifying the latter to the wants of the age, and with full respect to the just and equitable demands of the body of General Practitioners, presents the body in a light which must recommend it forcibly to the support of all those prudent and practical Medical Reformers, who seek to adjust their aims in some little proportion to their means. We see in this assurance a most important concession; and taken with other points in which the committee have judiciously yielded to opinions coming from outside, the body gives us a sanguine confidence that the indefatigable managers will realize our prophecy made months ago, that "with wise management, they would yet enclose in their fold the whole profession."

We applaud the sagacity of the Committee in their resolve to treat before the meeting the new Bill as but an extension of the Charter, and wider and still more systematic degradation of the body of General Practitioners. Did one ever hear of such cool effrontery as is unveiled in the Government proposition of constituting as the future brethren, and equals of the present highly educated General Practitioner, any youth of 22, who may have studied medicine for two years at a University? The inceptor of medicine is to be a rather honoured member of our body, for in addition to the title of Licentiate of Medicine and Surgery, he is to hold this novel degree from

his University; yet 24 University months, which, their terms considered, mean just as many weeks, suffice to give the stripling a place identical with ours, and to hand over to him equally with the best of us the keys of life and death. Add to this, that though both *present* and *future*, Licentiates of Medicine and Surgery will be obliged to be licentiates or members of a College of Surgeons—they will not be allowed to register as Surgeons. What a splendid spectacle have the General Practitioners of England unbarred below them! Yet the Bill may pass, and as we are informed there is no disposition felt to modify it in a single essential; may pass almost unaltered. How does it behave the Profession, then, to be up and stirring! And what a tremendous responsibility rests on the National Association? We confess the meeting of Friday gave us renewed and vigorous hope that its managers are quite equal to cope with it. It was a great and potent demonstration; and that not the less for the petty, alien, discords that ever and anon mixed with it. The English sky is not the less wholesome, and scarcely the less beautiful, because a sharp breeze or frowning cloud occasionally come in with their influences. The lesser discord proves the greater harmony; men do not differ in essential points who protrude their divisions on smaller ones so ostentatiously.

NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

R. R. Pennington, Esq. in the Chair.

In pursuance with a requisition emanating from the Committee of this Association, a very full and influential meeting of general practitioners, in number upwards of 1000, was held in the Hanover Square Rooms on Friday evening, the 14th instant. The meeting was summoned for six o'clock, and shortly after that hour, the large room began rapidly to fill. Among the gentlemen present, we noticed Mr. Pennington, Mr. Squibb, Mr. Moore, Mr. Dodd, Mr. Bird, Mr. Isaac Brown, Mr. Nussey, Mr. Beaman, Mr. Streeter, Mr. Davis of Hampstead, Mr. Rushworth Keele of Southampton, Mr. Bowling of Hammersmith, Mr. Warner of Cirencester, Mr. Morrah, Mr. Bonney of Brentford, Mr. Fuller, Mr. Tegart, Mr. Clifton, Mr. Martin of Reigate, Mr. Vickers, Mr. Hardwick, Mr. Propert, &c.

Mr. Moore in proposing that Mr. Pennington be requested to take the chair, took the occasion to eulogize that gentleman's conduct, and spoke of him as a General Practitioner of upwards of sixty years standing, enjoying a very high reputation among the profession, and the esteem of the public.

The proposition was seconded by Mr. Dodd, and carried unanimously.

Mr. Pennington, on taking the chair, observed that when he last had the honour of presiding over the Association, the members of the medical profession were just beginning to awake from their slumbers, and to take a survey of their affairs. He had great pleasure in again meeting them after the lapse of three months, during which many important events had occurred. In the report which would be read, would be given the detailed account of the rise and progress of the Association in its advance to maturity; he would not therefore detain them for more than a few minutes, but he would venture to express a sincere hope that their deliberations would be conducted with the temper and dignity befitting members of a learned profession. He would add that in the whole career of his professional life, he had never witnessed more zeal, assiduity, and perseverance in any cause, than had been manifested on this occasion.

The minutes of the previous meeting were then read, after which the report of the provisional committee was read by Mr. Bird, the secretary.

The report was apparently divided into several sections, each embracing the consideration of the respective resolutions passed at the previous meeting of the Association held at the Hanover Square Rooms, and detailing the measures which had been adopted with

first object of the committee, it was stated, was to carry out the third, fourth, and fifth resolutions, by endeavouring to effect the organization of the General Practitioners throughout the country into one effective body, and by obtaining the amalgamation of the Medical Associations, previously in existence, with their own. In this they had so far succeeded, that the Marylebone, Finsbury, and Tower Hamlets Associations, and the Association of Apothecaries and Surgeon-Apothecaries formed in 1812, had joined with them, and the British Medical Association had recommended such of its members as were general practitioners to join it, a similar resolution being adopted by the Medical Protection Assembly. With the view to further this object, it had been decided that the president and secretaries of each of these Associations, when they became united with this Association, should be elected members of the committee. Medical Practitioners throughout the Provinces had also joined the Association in great numbers, inasmuch that within the short space of three months, their members were upwards of 3,800 in number—so large a voluntary Association of General Practitioners had never before been formed in this country.

From the statistical details which had been furnished by one of the local secretaries, it was calculated that more than one half of the legally qualified general practitioners had been enrolled, and as it must be recollected that a great many medical men were averse to interfering in medical politics, the provisional committee thought they were fully entitled to claim for the Association the title of the NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY. With respect to the fourth resolution, the co-operation of the Society of Apothecaries had been solicited, and nearly all the court of examiners, with several members of the court of assistants, and some of the members of the company had at once joined the Association. It had however been intimated that the society as a corporation could not be amalgamated with the Association, but would be happy to forward its views, and also as far as possible those of other Associations having reference to Medical Reform. The principal questions bearing upon the position and well-being of the General Practitioner were then touched upon; the necessity of having a College of their own, governed on the representative principle (cheers) was pointed out, and the necessity of asserting their competency to practise—not as apothecaries alone,—not in medicines only but in medicine, surgery, and midwifery, (loud cheers). They held the the College of Physicians and Surgeons in respect, (no, no) but they must protest against being made Licentiates of either, (hear, hear). The memorial that had been sent to Sir James Graham, and the application for the charter had given general satisfaction, (murmurs). Sir James Graham had enquired whether the separation of College of Surgeons and the institution of a College of general practitioners would not cause the stranding of the former college (great applause) the answer to which was to the effect that the recent charter and the distinction that had been instituted of Fellows and Members, had caused the separation,—a distinction, which, while it might certainly cause a higher degree of education for a few, must prove generally injurious to the science of surgery in this country, (cheers).

The report afterwards proceeded to discuss the features of the New Bill, which, it was stated, was different from that of 1844, but not to such an extent as might have been expected from Sir James Graham's promises during the recess, or from his speech in the House the night the Bill was introduced. The Apothecaries' Act was left untouched by the first clause, but the 31st withdrew all legally qualified and registered practitioners from its influence; no provision was made for the election of general practitioners as members of the Council of Health. Clauses 13 and 32 empower the Council of Health to register all those persons now in practice, or who may be so hereafter, by the respective titles of physicians, surgeons, and licentiates in medicine and surgery,

but there is not any power for them to register as surgeons and licentiates in medicine. The examination of the latter—the general practitioner—is to be conducted by the College of Physicians, assisted by the Court of Examiners of the Apothecaries' Company in medicine, and in surgery by the Royal College of Surgeons, the certificate from the latter, in such cases, authorizing its possessor to practice as a licentiate, and not as a surgeon. Clauses 22 and 23 give the universities the power to create a new class of graduates after two years study, to be called INCEPTORS, to be registered as general practitioners. (hisses.) Clause 28 gives the power to the Council of Health of stating what medical institutions are to be regarded as public institutions, and it also by the bill possesses the power of displacing General Practitioners from appointments to such institutions, inasmuch as it will be entitled to name the necessary qualifications for the possessor of such offices: its orders must be obeyed under a penalty of twenty pounds. A copy of the Bill had been placed in the possession of the Provisional Committee by the fourth, and by the sixth, copies were forwarded to all the local secretaries, with some brief comments attached. Meetings had consequently taken place in different parts of the country respecting it, and many communications had been received by the committee, all expressing disapprobation and regret at its provisions. The great errors of the bill were owing to the non-recognition of the General Practitioners as a collective body prior to the drawing it up (cheers), and all legislative enactments must prove abortive until this most grievous error is rectified. The bill, in its present state must be most strenuously opposed. (enthusiastic cheering.)

The incorporation of the general practitioners had become absolutely necessary; even if this Bill were to become law in its present state, the incorporation would still be required for the protection of their interests. In consequence of the communications the Committee had received, some modifications of the suggestions they had submitted as the heads of their Charter had been recommended, and these would be still subject to the consideration of the Association.

It was now recommended that the voting for officers, &c., should be by means of voting papers, either by proxy or otherwise, the electors to have acquired the franchise by membership of five years standing. It had also been recommended that the distinction between those general practitioners who lived private, and those who were tradesmen as well, should be marked by creating the former, Fellows, and the latter, Members, but the committee were of opinion that this would be arranged better by a properly constructed code of bye-laws. The form of incorporation recommended by the committee is as follows:—the College to be styled the College of General Practitioners, in Medicine, Surgery, and Midwifery, with a common seal, power to sue and be sued, and to hold lands not exceeding £5,000 per annum in value; to consist of every gentleman in actual practice prior to the 1st of August 1815, the licentiates of the Apothecaries' Company, the members of the three Colleges of Surgeons, doctors or bachelors of medicine of English Universities, members of the three Colleges of Physicians in actual practice as general practitioners at the date of the charter, and who enrol themselves within a twelvemonth after that date, and finally, of those who undergo the prescribed course of education and examination after the granting the charter. The officers to consist of a president, elected triennially, three vice-presidents, one to go out every year, and a council of 48 to 60 members, half to be selected from among the country practitioners:—the members of the council to be general practitioners of fifteen years standing, and the first president, vice presidents, and council to be nominated in the charter, and hold office for three years; all future officers to be elected by the commonalty of the college, each member attaining the franchise after having held the diploma of the college for five years. One third of the council to go out annually, and not be re-eligible for a year. The council to have the power of framing bye-laws, and regulating the

education of candidates. The court of examiners to consist of 18 gentlemen, selected for their acquirements from all ranks of the profession, but to be principally general practitioners; no member of the council to be eligible on the court of examiners, nor any member of the college eligible under ten years standing. The president or vice president to preside at each meeting of the court of examiners, but not to have any vote.

The chief modifications that will be required in the Bill to effect this object, will be the total repeal of the Apothecaries' Act, the representation of the Council in the Council of Health, and the registration of its members in the place of the proposed licentiates of medicine and surgery. In addition a more effectual penal clause against unlicensed practitioners will be necessary; (Applause.) the withdrawal from the Council of Health of the power of designating the class of practitioners who may fill public medical offices, leaving to the public the right of selecting medical men to fill their public offices, as they have that of electing whom they choose to attend them in private. No one should be admitted to the examination for the diploma for practice under 22 years of age, nor without presenting testimonials of five years medical studies, and the same should be required of the inceptors, and further, the proposed examinations in midwifery not to be open to any but to the registered practitioners. These heads of the Charter, with the remarks appended to them, were merely thrown out for the considerations of the Association.

The report concluded by asking for donations from the members of the Association in support of the funds, and to carry out its objects, and stated that it was not deemed desirable to demand any fee for enrolment, nor any annual subscription. The total amount of donations hitherto, was £1,260 14s. 9d.; the expenditure up to the 4th of March £208 5s.; and the liabilities incurred since £120, leaving a balance in the treasurer's hands of about £850.

The conclusion of the report was greeted with long continued cheering.

Mr. Rushworth Keele, of Southampton, rose and said: Gentlemen—In rising to address you on the present occasion, allow me to express the sincere pleasure it has given me to hear the applause which the reading of that report has elicited. It is a report, for the drawing up of which the Committee of this Association deserve every credit. I shall not on the present occasion trespass upon your time, for any considerable length, but the observations which I am about to make are, I can assure, you not prompted by any feeling of envy or dissatisfaction. Perhaps it may be said, that I feel disappointed at not having procured the honour of the Fellowship. Gentlemen, I consider it no honour to be a Fellow of the College of Surgeons of England under its present management. I have been a member of that College for forty years, and I now say, that I am not at all sorry in not having been made a Fellow. This I consider however, not alone as an injustice, but as an act of degradation to me, and I can conceive no possible object for which the present Bill of Sir James Graham has been introduced, but to perpetuate the power which the Council of the College of Surgeons now possesses of inflicting such degradation upon my professional brethren. We have heard occasionally a good deal about the Church being in danger: this cry, however, was never raised when religion was at stake—it was danger to the benefices and livings that called it forth. In like manner, we now hear a great deal about the interests of Surgery and Science, being about to be jeopardised by the proceedings of the General Practitioners. Gentlemen, it is not Surgery, nor Science, that says so, but the interested Council of the College of Surgeons. The General Practitioner seeks, not to destroy, but to uphold the Profession of Medicine and Surgery; and, notwithstanding, the slur which the late despotism of the Council would attempt to fix upon us, all we want is a fair and impartial trial from the public; and I have no doubt, but that their verdict will be in our favour. I shall trespass upon your time no longer

Gentlemen, but will conclude by moving, that the report just read be received.

Mr. Cooper: As it is not my intention to make a speech this evening, my observations shall be very brief, and to the purpose. The report just read is one that calls for an expression of our thanks for the care and labour with which it has been drawn up; and, however I may feel inclined to dissent from the opinions contained in some portions of it, yet, I must confess, that common courtesy requires that it should be seconded. Gentlemen, I feel very great pleasure in seconding the motion of Mr. Keele. Carried unanimously.

Mr. Bowling, Hammersmith: Gentlemen—after hearing the report, which has been just brought before your notice, I very much fear, that you would consider any attempt of mine to expatiate upon its merits self-evident as they are—as a work of supererogation. Notwithstanding the praises bestowed upon it by Mr. Cooper, the Gentleman that has last addressed you, he has contrived, nevertheless to mix up with them some portion of censure. Sir, it would give me very great pleasure to be informed by that Gentleman, as to what he considers objectionable in that report, were he to do so, it would be for me, no very difficult task, to point out, that what he considers defects do not exist; and that, that report which you have just heard, is perfect in every particular. (Cheers.) Gentlemen, I am not much accustomed to public speaking, and, consequently, must appear to some disadvantage before you. However, with all my defects in this particular, I shall trespass on your time a little longer. (Cries of go on, go on, and Cheers.) In my mind, Gentlemen, to our cause, and to its success, there is wanting but one element, and that is unanimity. Around me, and about me, are numbers, wealth, talent, and intelligence, and in the cordial good feeling that characterises this evening's proceedings, I clearly recognise an omen of our ultimate success. Let no interested discussion, let no petty jealousies or squabbles be brought amongst us to interrupt this harmony; let all feelings of self be merged in the nobler consideration of respect for the mighty cause we advocate. The cause we advocate, gentlemen, is to prevent injustice being perpetrated, and degradation fixed, upon the men who passed their examinations with an Astley Cooper and an Abernethy. (Cheers.) It is to prevent such degradation that we are met here this evening, and that we have haggled so long and incessantly. It is to protest against an *ex post facto* law which would lower us from our just position as members of the College of Surgeons: and I have not the slightest doubt, but that if you pursue the course you have hitherto adopted, that ere long you will find yourselves restored to a just participation of your collegiate rights, or that you will be eventually established as a separate and perfectly independent medical incorporation. (Vehement cheering.) Pursue your present course, and no Home Secretary dare oppose you. (Long continued cheering.) I move

“That the report read, be forthwith adopted, and printed for the use of this Association.”

After reading the resolution Mr. Bowling sat down amid applause.

Mr. Warner, of Cirencester: Sir—It gives me very great satisfaction to be called upon to second the resolution which has just been proposed by Mr. Bowling, and I have not the slightest doubt but that the gentlemen around me will feel the same pleasure in unanimously carrying this resolution, that I do in seconding it. I consider the report that called forth that resolution as perfect in every detail, and that the Committee, charged with its execution, have rendered a service not alone to the profession, but to the public. Gentlemen, the movement we are at present engaged in, is one not for the benefit of party or profession, but for that of the public at large. This language to some might appear strange, but when I ask those persons who is it that ministers in sickness to the great bulk of the population of this kingdom, to its rural population exclusively, to the majority

of the clergy, and of the nobility of the realm when I ask them this, and answer “It is the general practitioner,” the language, I have lately used will no longer sound strange? The attempt therefore, to raise the standing or character of the general practitioner must not be looked upon any longer as an attempt to exalt the importance of a particular profession; it should be considered in its proper light, as an effort to serve the public through the medium of a profession. Gentlemen, I am a country practitioner and as such necessarily possess some knowledge of the opinions of my professional brethren. (Cheers.) I may also, without affectation, say that I have had, some opportunity of acquiring such knowledge, from the fact of my having organized and got up Medical Reform Meetings in the county where I reside, Gloucestershire. In an area of one half that county, Gentlemen, there is not one “pure,” or physician. The population, including farmers, clergy, and nobility, the highest as well as the lowest, are dependant for medical relief upon the General Practitioners. The opinions of these practitioners, Gentlemen, are perfectly in accordance with yours: they recognise the justice of your proceedings, and with you they will cheerfully labour, until the imputation sought to be affixed upon them as a body is removed. I have no doubt, but that the state of things which prevails in Gloucestershire, also prevails extensively elsewhere, and I make no doubt, but, that if supported by the nobility and clergy who recognise in us their medical attendants, we were to call upon Sir James Graham, for justice, he would not, nor dare not, refuse our claims. Gentlemen, I am happy to be able to give such a practical contradiction, as the unanimity exhibited by you this evening enables me to do, to the reports of want of union among us, that have gone abroad. I would merely ask of the originator of these reports to look upon the present assembly, and then again to utter such statements if he durst. In my opinion, Gentlemen, the cause of all the evils, which call for reform in our profession, is the inadequacy of representation enjoyed by its members, and until this want is supplied, all these evils must exist in full force. So fully recognised has this been, that it already has become a truism. Making these observations, however, I would wish it to be borne in mind, that I bear no ill-will to the College of Surgeons. I know very little of the gentlemen constituting the Council, but I have heard of one gentleman, who has made himself prominent by his writings in their defence. Gentlemen, I can assure you, that if you persevere as you have hitherto done, despite the tricks, and tyranny of the members of that Council, you must be at the end triumphant. Thanking you most sincerely, gentlemen, for the kind and patient hearing, which you have given me, I shall conclude by seconding—Dr. Lynch—suddenly starting up—Sir, (here his words were lost in cries of Chair, Chair, Order, Order, Name, Name: the most violent uproar prevailed for some time. He again attempted to speak, but was silenced by shouts of Name, Name, “Mr. Ancell knows my name.” The uproar was again renewed. When order was somewhat restored, Dr. Lynch again resumed.

Mr. Chairman,—The reading of the report just heard has given me some pleasure, and I must do it the justice to say that to a great deal of it I agree. That report states, that this is a most momentous crisis for our profession—I will go further and say, that the proceedings of this night will exert an influence for good or evil, upon the interests of our profession for the coming half-century. Sir, I for one say, that at the present moment, all past dissension, and mutual recrimination should be forgiven and forgotten by all classes of sincere Medical Reformers, and I consider this the best instrument of success, that can be used by us, to foil the expectations of our opponents, who are counting upon a triumph from our past disunion. All our efforts, Gentlemen, should be directed to one grand end,—namely to rid ourselves of the incubus of misrule which at present oppresses us. That these efforts, and their objects, are appreciated abroad, is evident from the numbers of country practitioners who have enrolled in our ranks. I believe that if our present at-

tempts to right ourselves should prove ineffectual, that the blame of this failure must be thrown upon the shoulders of those who first originated this movement. (Hisses and uproar.) Sir, I consider that the humblest individual in the profession, no matter what his opinions may be, has a right to be heard upon the present occasion. Entertaining this opinion, I shall proceed to express what I think about Sir James Graham's Bill. This among much that is objectionable contains also much that is good,—(uproar again),—the evil portion of it must be rectified, (the confusion still continued, it was impossible for some minutes to catch what the speaker said.)

Look to his speech (cries of "what does his bill say?") and the declaration of his wish, that all members should enter the profession by the one portal. In addition to my previous partial condemnation of the Bill, and my avowal that its injurious clauses must be removed, I will go further and say, that the General Practitioner must be fully and fairly represented on the Council of Health. Holding these opinions in common with many others who have sincerely at heart the welfare of the medical profession, I must candidly say, with them, that you should deliberately consider, ere you agree to the adoption of the report just read. (Uproar again, chair, order, question, &c. &c.) Sir James Graham is a man of masterly, comprehensive mind, and has devoted its best energies to the framing of his Medical Bill, in which, if there are errors, they are those proceeding more from the difficulty of the subject with which he had to deal, than from any deliberate neglect of the wants of the general practitioner. When to these considerations we add another, and very weighty one, that in the House of Commons he possesses, as a Minister of the Crown, a majority of 100—a majority, powerful enough to overcome all opposition that might be brought against this, his favourite measure—we will find arguments sufficient to convince us, that we should consider well, ere we adopt that report. The most eminent men that figured in our profession, the Hunters, the Bells, the Coopers, the Clines—all have agreed that medicine and surgery are one and indivisible, that in them there should be no distinction, and that any such, if attempted, would be absurd and anomalous (cheers.) Gentlemen it is needless to say that I, as a General Practitioner, fully subscribe to the truth of this axiom, and I am well aware that there are among the General Practitioners many who, entertaining similar opinions, still consider, as I do, that the establishment of a third grade in medicine, would tend to retrograde the profession, and to form a medical hermaphrodite (pardon the expression, it is not complimentary as a cognomen, I grant you, but it expresses what I mean), instead of a new and respectable third College of Medicine. Instead of bearding the Home Secretary with such a formidable array of power, would it not be better and wiser for us to fight for a recognition of the right of the General Practitioners to the benefits enjoyed by the College of Surgeons. Gentlemen, I have not the least hesitation in saying—that if the General Practitioners, drilled, trained, and banded in organized union, demanded from Sir James Graham, who only requires for this purpose a little, gentle, pressure from without, a remodelling of the College of Surgeons, and a separate division of their body from the Apothecaries—who should in future be designated by their proper title—that he would at once cheerfully accede to the proposition. Then, I say, bring at once your volunteer army, backed by the auxiliaries of the press to besiege the fortress of Lincoln's Inn Fields. Should the infatuated garrison persevere, as they have hitherto doggedly done, in their refusal to capitulate, at once scale the ramparts, mount the breach, and demolish their defences by the battering ram of a third medical estate. (Loud cheers.)

Another reason I have for opposing the adoption of your report is, the conduct of your committee, which excluded from its meetings both the profession and the public (cries of no, no, order, question, and chair,) and that act of theirs,—(Uproar again; cries of "are you a member?"—"chair"—"do you move an amendment?" The

noise continued for some time; when order was again restored, Dr. Lynch resumed.) Yes, I move an amendment on two points. I now object to the five years franchise. (Uproar again.) I now, sir—(greater uproar, and cries of sit down, and chair)—sir, you will not hear me. I assert that this is a public meeting, and that I have a right to, and will be heard. (Deafening cheers.)

Mr. Sutton, (so we caught his name) rose to order. Dr. Lynch stated his objection to the 5 year's franchise; now this and other points of the report were not considered as binding upon the Members of the Association; they were merely drawn up for their consideration and approval as the case might be.

Dr. Lynch, am I to understand—

Chairman, move your amendment, Sir.

Then I move that this restriction of the franchise be struck out of the report. The immortal Bichat who wrote his four great works died at 31 years of age,—(Cries of question, clapping and cheers. During the uproar, Dr. Lynch sat down.

Mr. Jones, Portugal Street, rose to second Dr. Lynch's resolution, but after making a few remarks, which met with general disapprobation, he was forced to sit down.

Dr. Lynch rose again, and amid loud cries of order, order, spoken, endeavoured to say something. What it was, could not be heard, and it was only by a gesture of assent made by him to the chairman's question of "Do you withdraw your amendment Sir?" that we were able to learn that he had done so.

The chairman rose to move the passing of the resolution, but was for some time interrupted by a gentleman whose name we could not learn.

The resolution was eventually passed.

Mr. Bonney, Brentford.—Mr. Chairman and Gentlemen, I feel exceedingly sorry that after the sample of declamatory eloquence which you have just heard, that the fourth resolution should be entrusted to me for proposal. Though the call has been made upon me at the eleventh hour, yet I will endeavour to respond to it. Happily the subject is not one involving an abstruse principle. The resolution that has been entrusted to me, and which I now proceed to read to you, proposes that this association be called "The National Association." Were this association confined in number to a few, or composed of those whose station in life did not command consideration and respect, then this would be a *misnomer*. But consisting as it does of general practitioners, who have been acknowledged by the Home Secretary as entitled to the highest position in the community, I have no hesitation in saying, that never was name so well applied. Sir, this Association deserves the name proposed for it, for another reason, namely; that it has for its object the attaining of national good, by increasing the respectability of the general practitioner throughout the kingdom. I have heard it stated by an intelligent gentleman, that the number of practitioners of Medicine for his district had been over stated in the last census, and according to the phrase, *ex pede Herculem*, I suppose it is the same in other parts of the Kingdom. The Association now numbers on its roll more than half the General Practitioners of the kingdom. This Association nobly deserves the name of "National," from the total disregard of self interest evinced by its leaders. He concluded by moving the adoption of the following resolution

"That, the voluntary enrolment of nearly 4,000 General Practitioners, from nearly all parts of the Kingdom, as members of this Association, within the short period of three months, exceeds in numerical strength any Association that has been formed in this country, and demonstrates an unanimity of purpose, hitherto deemed unattainable by the Members of the Medical Profession, it is accordingly resolved that the Association thenceforth adopt the title of the "National Association of General Practitioners, in Medicine, Surgery, and Midwifery."

Mr. Woolridge, Southampton, said that in consequence of the illness of a gentleman who had just left the room it devolved upon him to second this resolution. After expressing his disapprobation

of the Bill, this gentleman sat down after seconding the resolution.

Mr. Henry Ancell, one of the Secretaries, said that a deputation from the Practitioners of the Isle of Man who were at present in the room, requested leave to co-operate with the Hanover Square Association. Their reasons for so doing were, that the Isle of Man though an appanage to, was separate from, the kingdom of Great Britain and had laws of its own. No mention of the Isle of Man being made in the New Bill, they considered themselves called upon to unite with their medical brethren of England in their search for justice.

The resolution of Mr. Bonney was then carried unanimously.

Mr. Fuller in rising to move the next resolution, said, Gentlemen a very agreeable task has been just imposed upon me, namely that of returning thanks to the Apothecaries Company, for their exertions for the last thirty years in the cause of Medical Reform. There is no one who recollects what the profession was thirty years since, will refuse to coincide with me in this opinion. Mr. Fuller after adverting to the sacrifice made by the Apothecaries Company in giving up their claims to corporate recognition, concluded by stating, that if they were unanimous in their demand for justice, that Sir James Graham would not refuse their claim.

"That this meeting appreciating the laudable exertions of the Society of Apothecaries during the last 30 years in the cause of medical science and education, and sensible of the advantages that consequently have been insured in the professional acquirements of the General Practitioner of Medicine, cordially acknowledge the benefits that the Society has conferred both on the profession and the public. The meeting desires further to express its thanks to them for the disinterested conduct they have evinced in disclaiming any corporate or particular interest, while advocating the claim of the General Practitioner to a separate and independent corporation. This meeting trusts that the Society at the present important crisis will be ready to intimate to the Government its desire to be relieved as a corporation from any further control over Medical affairs, and that it will use its best endeavours to forward the wishes of the great body of General Practitioners, in securing their proper position in the present medical arrangements of the Government."

Mr. Bottomly, Croydon, seconded the resolution, which was carried unanimously.

Mr. Clifton, Islington, would not trespass upon the meeting at that late hour, but would at once read for them the resolution he had the honour to propose.

"That the National Association records its solemn protest against the proceedings of the Council of the College of Surgeons in obtaining, and subsequently in carrying out the recent Charter, whereby a few gentlemen have been arbitrarily elevated over the heads of others, previously their equals in professional rank, senior to many of them as Members of the College, and not inferior to most of them in scientific and practical knowledge."

Mr. W. Chaldecott, Dorking, begged to second the resolution. Carried unanimously.

After Mr. Davis and Mr. Sutton had spoken, Mr. Martin, of Ryegate, rose: Gentlemen—I am sure that the resolution which I am about to read for you will meet with your approbation, and that the facts contained in it are so evident as to require no commentary from me. I shall not detain you but will at once read the resolution for you.

"That the General Practitioners are the ordinary medical attendants of most of the higher and middle classes of society, and exclusively of the labouring classes—that a large majority of the medical appointments to public offices in the provinces, and to a great proportion of those in the metropolis are held by them—and that the entire Medical Staff of Her Majesty's Army and Navy are, in the most comprehensive sense General Practitioners. Supported by these undoubted facts, this

National Association is unanimous in declaring it as its most grave and deliberate opinion—that any Act having directly or indirectly a tendency to lower the professional status, or to impair the usefulness of the General Practitioner, is unjust and impolitic.

Mr. Teggart, Pall Mall, begged to second it. Carried unanimously.

Dr. Webster, Dulwich, congratulated the meeting on the harmony, which had so peculiarly distinguished the proceedings of the evening. He felt happy at the questions which had been put to them by Dr. Lynch, and he was sure that the answers received to them, would satisfy that Gentleman, and those of his party, that the intentions of the Hanover Square Association were sincerely directed to the attainment of Medical Reform.

Mr. Browne, Edgeware Road, moved that

“That the undoubted tendency of the Bill purporting to regulate the profession of physic and surgery in this country, brought into Parliament by Sir James Graham and Mr. Manners Sutton, on the 25th of February, is to lower the future General Practitioner to an inferior and degraded position, and consequently to unfit him for the station that he now holds, and the due performance of the onerous duties that have hitherto devolved upon him, as detailed in the foregoing resolution.

Seconded by Mr. Vickers. Carried unanimously.

Mr. Hardwicke, Kensington, moved that

“That this Meeting pledges itself by every practicable means to continue its strenuous exertions to maintain, upon a solid foundation, the respectability of character and position which the General Practitioner has attained, and which, in the opinion of this Meeting, can only be accomplished by a respectful but firm opposition to the Bill, unless with extensive modifications, and by an independent Charter of Incorporation.”

Seconded by Mr. Cradock. Carried unanimously.

Mr. Dermott called the attention of the meeting to the opinion of Sir Charles Bell, that all the ruling Councils would be better constituted, both as to scientific character, and professional good, if elected by the mass of the profession. The new Bill was exceedingly defective. The clauses touching the General Practitioners were most unjust: in future they would have no man in their body who would be a surgeon, and present surgeons must lose titles—for Surgeons were confined to Fellows. A sufferer himself by the Charter, and as one to be injured by the two bills, if passed, he joined his fate to the others, and would give his best support to the cause.

Mr. Cooper, (St. Pancras) in an intemperate speech of some length, which was repeatedly interrupted by expressions of disgust from the gentlemen present, moved an amendment to the effect that the meetings of the committee be open to all the members of the Association; and further, that no public step should be taken without having been previously submitted to the members generally. His conduct in moving the amendment was evidently very distasteful, and one gentleman near our reporter, enquired—where was his friend Wakley.

Dr. Lynch seconded the amendment.

A COUNTRY MEMBER pointed out the injustice that would be done to country practitioners whose co-operation had been solicited, if the amendment were carried, as the proceedings of the committee would be controlled by the town members, and the former would not derive any benefit from the proposed arrangement.

Mr. Nussey, as chairman of the provisional committee, eulogized the conduct of the committee, defended its constitution, and deprecated the proposed amendment.

The amendment was then put *scritim*, by the president, when twelve hands were held up in its favour, including those of the proposer and seconder, while an overwhelming majority testified against it. The original proposition was then put and carried unanimously.

Mr. Nussey then proposed a vote of thanks to the secretaries for their zealous attention to their duties, which was carried unanimously by acclamation, after which thanks were voted to the president, and given with three hearty cheers.

THE DEFENSIVE ASSOCIATION OF SURGEONS.

At a meeting of Surgeons, held on Monday the 17th instant, at the British Coffee House, Cockspur Street, it was resolved:—

“That, the following brief statement of the objects of the Defensive Association of Surgeons, be published.”

STATEMENT.

THE College of Surgeons exists, of right, for its Members, and the great and paramount object of the Defensive Association of Surgeons is to secure the sway of this principle of common sense in the government of that National Corporation.

The main evils complained of by Surgeons compress themselves under two heads:—

Firstly. The irresponsible management of the Surgical Colleges.

Secondly. The varieties of grade recently introduced amongst the Members of the College of Surgeons of England.

1^o In the nineteenth century we need not demonstrate that all public, and still more all national, institutions should be responsible to those whose funds they spend, and for whose benefit they exist. Every municipal corporation in the kingdom recognizes this salutary principle by legislative enactment; and it is contended, that in a large scientific commonwealth, there are no other means of carrying out fully its high aims, while securing at the same time deserved eminence in the governing, with content and good fellowship in the governed. True, that in the recent charter, some semblance of elective power has been given to other than Members of the Council, but, inasmuch as the privilege has been restricted to a select few chosen by the Council, and made matter of implied debasement and insult to 95 per cent. of the Members of the College, it is clear, that this miserable instalment of the representative principle, is more objectionable than would be even its denial.

2^o The Association is impressed with the conviction that at a moment when wealth is so superabundant, and the candidates for the learned professions so numerous, a wise Government should take advantage of such circumstances for raising the whole body of Medical Practitioners to so high a point of Science as would preclude the existence of inferiorly educated grades. Its Members have observed however with deep regret that Her Majesty's Home Secretary has provided in his recent charter to the College of Surgeons, for the creation of a low class of Practitioners unknown before to that College, to which by an *ex post facto* law of the greatest injustice, nine or 10,000 surgeons of previously equal standing have been reduced. They further see by the new Bill, this Session introduced to Parliament, that this forcible and uncalled for creation, of a degraded class of medical men, is not only confirmed by that measure, but that the large body of British surgeons are distinctly stripped of their titles as “Surgeons,” and that equality of position with them, is, for the future, offered to any youth who may spend two years of medical studies in any of the British Universities.

The Defensive Association of Surgeons are convinced, that the New Charter, and proposed

Government Bill, thus menacing the interests of British surgeons, will re-act on the prosperity of the Colleges to which they belong; and thus doubly urged to action, respectfully and earnestly invite their surgical brethren to unite with them, in one great effort, to repair the wrongs already inflicted, to ward off those that are now but too clearly menaced, and introduce among all classes of surgeons that good fellowship and contentment so necessary to the happy and successful cultivation of their science.

The first aggregate meeting of the Association will be held at the Western Literary Institution, Leicester Square, on Wednesday, the 26th inst. at 6, for 7 p. m.

In the meantime, surgeons wishing to co-operate with the Association, are requested to communicate with the Hon. Secretary, 10, Golden Square.

W. Griffith, Chairman.

W. B. Costello, Hon. Secretary.

GENERAL MEDICAL PROTECTION ASSEMBLY.

The usual weekly meeting of this body was held on the 17th inst. After the minutes of the last meeting had been read and confirmed, the secretary read a letter addressed to the sub-committee by Mr. M. W. Hilles, tendering his resignation as a member of that body, but professing his willingness on every occasion to co-operate with the efforts of the Exeter Hall Association in favour of Medical Reform. To this the sub-committee directed the secretary to send a reply, stating their unwillingness to lose the benefit of Mr. H.'s very valuable services, and expressing a request that he would recall his resignation. To this letter, Mr. Hilles returned an answer, stating his appreciation of the esteem expressed for him by his brethren of the sub-committee, and his adherence to his purpose of resignation.

Mr. Ross brought forward a motion condemnatory of the bill of Sir James Graham on the grounds of its want of any provision, whereby the General Practitioners would be fully and fairly represented in the Council of Health; for the degradation which it inflicts upon the profession by allowing Chemists and Druggists to practice medicine without any restriction or penalty; and, finally, for the absence in the bill of anything like a recognition of the representative principle.

Mr. Hunter begged to second the motion. He thought the conduct of the Association was of late rather inconsistent. Up to a short time since, they had been vehemently opposed to Sir James Graham's Bill, and yet last week found them turning round, and offering their old enemy a vote of thanks. Was any compliment due to the man who had stated last week in the House of Commons that he did not know what were the grievances of which medical men complained? He for one would never agree to such an act of sycophancy, and he knew that Sir James Graham cared just as much about their opposition as their vote of thanks.

Mr. H. Rugg, was opposed to the motion for three reasons. Firstly, he thought the course, that Mr. Ross should have adopted, was to give notice of this motion for the next night of meeting. And secondly, that many gentlemen, who were now absent, and who would feel much interest in discussing such a motion, might then be present. Lastly he thought, that the effect of such a motion would be to stultify the vote of thanks passed at their last meeting to Sir James Graham. Mr. Rugg then proceeded to exculpate his client, the Home Secretary, from the charges of neglect of the interests of the Medical Profession brought against him by Mr. Hunter, and stated, that Sir James Graham, sought nothing so much as the means of reconciling that portion of the profession which had become justly discontented with the conduct of the College of Surgeons. Mr. Rugg, concluded by moving, that Mr. Ross reserve his motion for discussion, before an extraordinary

meeting of this Association to be held to-morrow evening at 9 o'clock, and that the Secretary be directed to give notice of such meeting.

After some further discussion in which Messrs. Ross, Hunter, Curtis, and Rugg, took part, Mr. Ross consented to withdraw his motion, but gave notice of a series of resolutions to be moved by him before the extraordinary meeting.

Mr. Hunter, complained of the habit which prevailed with the conductors of all the Medical periodicals, of "burking" more or less completely the reports of the Association. He considered this a most disreputable proceeding, and one that should not be tolerated.*

Mr. Lewis gave notice of a motion for next Monday evening, "That the members of this Association who had joined the Hanover-square body, be requested immediately to withdraw their names, for the purpose of expressing their disapprobation of the absurd restraints imposed by their new charter upon the franchise."

Mr. Rugg would never agree to withdraw from the Hanover-square Association. He considered it better to continue to go there whenever he chose, to have a cheer, or a hiss, at anything that pleased or displeased him, or to make a speech. He thought that Mr. Wakley had been long playing a double game with them. He came down here several times, and when he spoke, some of the members appeared to be completely fascinated by his eloquence, and to such a degree, as to be unable to look him in the face. He (Mr. Rugg) would never be one of that party, but would invariably oppose Mr. Wakley whenever he thought him to be wrong. Mr. Wakley, at length seemed to be somewhat conscious of the trickery pursued by the Hanover-square Association, and appeared willing to make amends for his past misconduct.

Mr. Hunter hoped his repentance might be sincere!

Mr. H. Rugg hoped so too!

After some further discussion on unimportant matters, the meeting broke up at about half-past ten o'clock, P.M. Seven gentlemen were present.

VALUE OF A GIESSEN DIPLOMA.

(To the Editor of the Medical Times)

Leicester, March 10th, 1845.

Sir,—In your last number, page 496, is a correspondence between a Mr. C. Wilson and John Bond, M.D., relative to the degree of Doctor of Medicine of the University of Giessen.

Having seen so many advertisements on the subject, on the 8th February, 1844, I wrote to the Professor of Medicine at that University regarding the qualifications, rules, regulations, and fees for M.D.

Enclosed you have the original letter, in answer, signed by the Dean of the Medical Faculty of Giessen, which puts to rest the vague conflicting statements set forth by interested parties.

I am Sir,

Your humble servant,

JAMES ANDERSON.

Giessen, February 18th, 1845.

Honoured Sir,—In answer to your letter dated the 8th instant, I have the honour to inform you, that the degree of Medicinæ Doctor can be granted to you without your personal attendance after presenting:

1. Your curriculum vitæ.
2. Your testimonials of medical studies.
3. Your diploma as member of the Royal College of Surgeons, or of the Apothecaries' Hall, London, Edinburgh, or Dublin, or other certificate authorizing you to the medical practice.

* We have devoted as much space to the Medical Protection Assembly proceedings, as we could afford, or their importance perhaps justified. We would impress upon the complaining members, the difference perceptible in this respect between our journal, and a contemporary, which reports only what is said, either by Mr. Wakley, or his followers—laudatory of himself—a poorer compliment to their importance than anything we have suggested. Ed.]

In case of want of any of the latter papers, you must come over and be examined by a colloquium with the Members of our Faculty during three hours.

The honorary reward amounts to £22 10s. in English bank bills or post bills.

I have the honour to sign,

Most respectfully,

DR. EM. LUD. WILL. NEBEL,

As the Dean of the Medical Faculty at Giessen.

To the Editor of the "Medical Times."

34, Rue de la Chaussée d'Antin.

March 2nd, 1845.

Sir,—This morning I posted the letters from Dr. Bond, (*alias* Mackenzie) which, I trust, you have duly received. I did not anticipate receiving any others, but, to my surprise, the enclosed arrived this afternoon. It contains so much valuable information, that I hasten to send it to you by a friend who leaves for London to-morrow morning. Had it reached me yesterday, as it should have done, you would have received it with the others. I am Sir,

Your obedient servant,

C. WILSON.

68, Mortimer Street, London.

March 27th,* 1845.

Dear Sir,—I leave here for Giessen to-morrow night; I shall remain absent about twelve days—certainly not longer. I think, therefore, in consequence of the slowness of the German post, that we must leave things as they are until my return. Should you come to London, if you call on my wife she can give you every information, and can, in fact, attend to the business as well as myself; (she frequently does so in my absence.) She will take the money, &c., and give an acknowledgment. Should you speak to Dr. Roberts, do not ask about me as Dr. Bond, but enquire for Dr. Mackenzie, which is my real name,—Bond being only used in the advertisements to guard against the curious many. You will find my name in the College of Surgeons' List, as a Member; date of diploma, 1840.

In haste, yours truly,

R. H. MACKENZIE, M.D., M.R.C.S.L.

P.S.—I shall of course arrange everything about your diploma at Giessen, so that when I return there will be nothing wanted by *pro forma* the copy of the diploma for enrolment, birth-place to appear in the diploma, and the cash. I shall, however, pay on account sufficient to make all right. As I have a list of the Members, I have thus the proof of your being a Member of the College.

THE BETEL-NUT.

(To the Editor of the Medical Times.)

Birmingham, March 17, 1845.

Sir,—Your Paris correspondent, Dr. Packman, is perfectly right in his correction of the strange error into which Mr. Hagger has fallen, respecting the betel-nut plant. Information on subjects of science cannot, however, be too precise. It might, consequently, have been well for Dr. Packman to have added that the *nut*, in question, is the produce of a monœcious monadelphous plant, the *areca catechu*, medicinal cabbage tree, belonging to the family of the Palms; and that the betel-leaf is furnished by *piper betel*, the betel pepper, a climber, of the Linnæan class and order, diandria, trygynia, and of the natural family *piperaceæ*.

A spirited figure of the former plant may be seen in Loudon's *Encyclopædia of Plants*, page 301, species 1394; of the latter, in the same work, page 28, species 507.

I am, Sir, your obedient servant,
P.

SUGGESTIONS FOR DEFENCE.

(To the Editor of the "Medical Times.")

Leicester, March 17th, 1845.

SIR,—I beg to furnish you with the copy of a letter which I have addressed to each of my representatives in Parliament, trusting that you

will urge upon your readers the necessity of *individually* petitioning Members of Parliament to oppose those objectionable parts of Sir James Graham's Bill which is calculated to injure them.

I am, Sir,

Your obedient servant,

PETITIONER.

(To Sir John Easthope, Bart.)

SIR,—As a constituent, whose interests, together with those of the profession generally, will be materially affected by the passing of Sir James Graham's Bill on Medical Reform, I respectfully beg your assistance in opposing the same (specifically) on the following grounds:—

First,—Because, by compelling me to drop the title of "surgeon" for the assumption of an inferior designation, I shall be degraded in a body which I entered with a view of obtaining equal privileges, and whose demands in the shape of education, examination, and fees, I fulfilled in order to obtain those advantages.

Secondly,—Because, after having obtained qualifications at considerable expense, which would hitherto legally enable me at any time to practise as pure surgeon or general practitioner, I shall be compelled, in accordance with the demands of the New Bill, to select one particular branch, and relinquish the possibility of changing my mode of practice without undergoing such examination as shall a second time authorize me for the intended change. This objection will apply with still greater force to those who, in addition to possessing the diploma of the College of Surgeons and Apothecaries' Company, have also qualified themselves to practise as physicians.

Thirdly,—Because, as a Member of the College of Surgeons, (provided the proposed Bill come into operation), I shall be deprived of those advantages which I obtained at great trouble, and for which I have paid, and which I now possess over the apothecary, by being placed on the same legal equality and by being designated by the same degrading appellation.

Fourthly,—Because a certain self-elected and small body of men will be alone permitted to retain the title of "surgeon," to obtain which I paid equal fees and fulfilled equal demands; and because, in addition to this injustice, I shall be further injured by the elevation of those who have merely fulfilled the requirements of the Apothecaries' Company to the same footing as myself, who have, in addition, undergone the education and examination of a surgeon—the apothecary receiving the equal distinction of licentiate in surgery and medicine.

Fifthly,—Because I shall not be sufficiently protected by the proposed Bill. The power which it is Sir James Graham's intention to continue to the Apothecaries' Company having been proved, by many years' experience, too expensive in its operation to secure the privileges of the regularly educated man by putting down the illegal practitioners.

I am, Sir, with much respect,

Your obedient servant,

THE HUNTERIAN ORATION.

In accordance with the notice given some time since, a meeting assembled at Exeter Hall on Wednesday evening, to hear the Hunterian Oration delivered by Dr. Jordan R. Lynch.

When the oration was concluded, the meeting proceeded to the discussion of business. Mr. Simpson read a report of the proceedings of the Association since 1843. The adoption of the report was then moved by Mr. Ross who in an argumentative speech exposed the inconsistent conduct of the Committee of the Hanover Square Association, and the defective points of Sir James Graham's Bill. Mr. Wakley in answer to a question put to him by Mr. Cooper, "whether it was true that he had sent his subscription to the Hanover Square Association with a request to be placed upon their Committee?" replied that it was true, he had sent them his subscription, for which the gentleman who wrote him an acknowledgement, stated that the Committee felt grateful; but that no

and the tumour was found to be one of a malignant character.

These examples, in his opinion, served, with that which had just been read to the Society, to show how parties of the greatest experience may be misled in the diagnosis of tumours which simulate aneurisms.

NOTICES TO CORRESPONDENTS.

Bristolensis, with the M.D. degree, though obtained next July, will be entitled to register as physician. The M.B. of Trinity College, Dublin, might also probably register as a physician, although the Council of Health would appear to have the power of registering medical men in any mode that may seem good to it, though composed mainly of university representatives. If the Bill pass in its present shape, B. must take down his "brazen indication" of surgeonship.

A Subscriber, Langport.—Foreign degrees will depend entirely for their value on the decisions of the Council of Health; and it seems to us extremely probable, that no degrees obtained by purchase during the last two or three years from foreign universities, will give any title to registration. Elsewhere will be found the charge for Giessen diplomas.

Dr. Darby.—The letter is interesting, but our space is so pre-occupied, that reprints are quite out of the question—we are obliged to reject at least one hundred communications weekly.

Lucifer, Bedford Square, complains that Mr. Bannerman did not extract from Mr. Wakley, a more abject admission of his base and unexampled conduct, as the Editor of a public Journal, in not only breaking the faith of a man of honour by giving Mr. Lawrence's name as the author, but in publishing after the lapse of nearly twenty years a private communication, more particularly as it had been cancelled.

A Subscriber, Isle of Man.—The question whether the Licentiates of the Faculty of Physicians and Surgeons, will be considered unqualified practitioners, will depend for its solution entirely on the will of the Council of Health. Sir James Graham has called them illegal practitioners, and the Council may possibly, but not probably, follow his example.

Papers by Dr. Rigby, on Inflammation of the Cervix uteri; by Dr. Lewins in answer to Dr. Clay; by Dr. Roden on one Pharmacopœia for the Empire, by Dr. Shirley Palmer on the Betel-nut; and by Dr. Costello on Insanity, will appear in our next number. We may take this opportunity of adding that we shall commence our new volume, with a course of twelve lectures by the celebrated anatomist and physiologist, Dr. Knox, of Edinburgh, on Special Physiology.

An old Subscriber tells us that third year's students can, for seven guineas get the diploma of the Glasgow College: we are not told the nature of the examination.

We think that M. D. can only register as physician or licentiate in medicine and surgery, in either case being marked as accoucheur, if he please. We consider that gentlemen possessing a variety of diplomas, will have to choose, in which one of the three grades, they may wish to register.

A Licentiate of the Hall will register should the bill pass, as a licentiate in medicine and surgery.

A Subscriber. (Canterbury).—The bill is perfectly silent on the question, whether physicians by the bill can practise as general practitioners. Foreign-purchased degrees are left equally in doubt.

Mr. Jones.—The first volume of the Pharmaceutical Medical Times will contain 24 Numbers with title-page and index; ten are now published.

H. F. B.—First: cases of unsuccessful candidates will be returned. Second: original remarks will constitute a merit in the papers. In these however, we would counsel brevity.

An Annual Subscriber, with a surgical diploma, may register himself as a licentiate in medicine and surgery.

L. G.—Yes we think so.

Mr. Lane.—It is a matter of some doubt; but we presume that the Glasgow graduates will be allowed to register under some one of the three designations.

A Medical Student.—We are acquainted with no such institution.

Gamma.—Graduates of Foreign Universities unless registered, will, by the New Bill, be forbidden to take the name of Doctor.

An old Subscriber.—The Kreuzbrunn is a mineral spring at Marienbad.

We have received numerous copies of resolutions passed against the Bill. Our space is so much occupied that we can only from time to time give a brief summary of their general nature. Gentlemen wishing the full insertion of any series of resolutions of especial importance should transmit them as advertisements. If editorially we single out one meeting, we offend those passed by, and to give all would be more than would suffice to fill our Journal weekly.

"Incognitus" informs us that Mr. Ancell is an apothecary, but agrees with us, that his secretaryship unless carefully counterchecked, is likely to involve the National Association in jeopardy. He fears that, however worthy, a person so much under journalist control, may not have that "disdain of truckling, which befits a truly independent Association."

A Student.—Several pencillings are only awaiting a spare column for publication. One of the earliest will be "Pinel."

A Six month's Subscriber.—An apothecary may not put surgeon on his door if the bill pass. Neither may the Member of the College of Surgeons and licentiate of the hall. He will be licentiate of surgery not a "Surgeon."

O. Z. J. M.—The Bill does not provide whether a German diploma shall entitle a person to practice or not. The Council of Health will settle that point at their discretion. We imagine that no foreign diplomas obtained without residence will be recognised.

M. D.—The new "Association of Surgeons" will not oppose the National Association, but rather endeavour to concur with it, as far as may be practicable. They will fortify each other.

Dr. Curie's case in our next.

Other Correspondents next week.

THE MEDICAL TIMES.

SATURDAY, MARCH 22, 1845.

O Navis, referent in mare te novi
Fluctus! O quid agis?

Horatii Lib. i., Ode xii.

We want words to express the momentous value to medical men of each instant of time during the present crisis. Their future fate—years of weal or woe—is now most certainly in question, perhaps under creation, and the fair probability that that fate will be adverse to them, and, to a degree exceedingly wrongful and oppressive, demands that every energy of their nature, every endowment in their possession, should be given to instantaneous and perseveringly vigorous action. The Bill before Parliament introduces into the fortunes, especially of General Practitioners, a revolution unparalleled in social annals. Old practitioners will be thrown back into the unsettled and equivocal position of their earliest days; skilful practitioners will be so placed, that their very science will lie under suspicion, and all,—old and young, the skilful, the aspiring, the successful, and the struggling—will be damaged in public estimation, and reduced by parliamentary enactment to a new and disgraceful place in the scale of society. These are certain effects of the Bill, effects as necessary as any other results in the whole chapter of causation. Yet this measure, acting thus largely, and for ill to the medical men of Great Britain and Ireland, is introduced by one of her Majesty's Secretaries of State, and being supported by Her Government, will inevitably be carried, if any signs of a distracted or weak opposition mislead the minister, or the House of Commons, into a doubt that it may not be, after all, a great, or dreaded calamity to the medical profession. What a spur to action! Even selfishness comes in to inspire a heroism of resistance!

As some doubt has been expressed that the Bill means so extraordinary an injustice as that

of despoiling nine tenths of the "surgeons" of this realm of their customary position and titles, it may be as well to put this glaring iniquity of the measure beyond the probability of a doubt. This one fact of unparalleled injustice and innovation being clearly demonstrated, our medical brethren will be insane if every iota of power and force and influence they possess, be not strained to the utmost, in vehement, albeit gentlemanly, opposition;—an opposition, indeed, which here means nothing but the most rightful self defence.

All Medical Practitioners, by the Bill, have their status decisively defined by the registration list. Now, but three grades are therein recognised. Clause 13 enacts the registration of all persons who can show to the said council, testimonials that they are qualified "to practice as a Physician, or as a Surgeon, or as a Licentiate in Medicine and Surgery." The Physician and Surgeon are thus placed in precisely similar positions: each have to pay £5: the Licentiate is placed in a perfectly different order, and has only £2 to pay. Now, be it observed, that so clearly are there only three grades under which any practitioner can be registered, that when by-and-bye the Bill provides for a new class of men under the name of "Inceptors of the Faculty of Medicine," it specifically fixes that they shall register in the third class, namely, as Licentiates in Medicine and Surgery. To show that the fact of Membership or Licentiate-ship of any College of Surgeons will not entitle the possessor to register as a Surgeon, we have it arranged by clause 20, that all future "Licentiates of Medicine and Surgery," must on registration as such, be admitted as Members or Licentiates of some College of Surgeons. They will be Members of a College of Surgeons, and yet will not be Surgeons. The "Surgeons" will be a grade just as much above them as Physicians above Apothecaries. So far, then, it is perfectly clear, and beyond all doubt, that all future Members, or Licentiates, of a Surgical College, will not be allowed to register as Surgeons, and consequently will not be allowed to hold themselves forth as Surgeons. It remains to be seen, whether members who have entered up to the present time, will be placed in any better predicament. Clause 32, provides for the registration of this class: we there find these words:—

"It shall be lawful for the said Council on the application of any person legally practising or entitled to practice at the end of this session of Parliament, as a Physician or Surgeon of the Kingdom of Great Britain and Ireland, or as an Apothecary in England, to cause the name of such person to be registered as a Physician, Surgeon or Licentiate in Surgery and Medicine, as the case may be." * * * * "And on payment of a fee of 20s. in the case of Fellows or Associates of the said Colleges of Physicians and of Surgeons, respectively, and of 5s. in every other case."

Now taking the clear purport of these words with the context supplied by the other clauses, we think there cannot be a doubt, that the pillaging of the present body of English Surgeons, of their social standing and legal titles is deliberately intended by Government. The Surgical Fellows—again placed equal with Physicians—are clearly named at least as a party registering as Surgeons: and they are further named as the only persons, who, with the Physicians, are to pay (for the higher Registration title,) the higher Registration fee. If the Fellows, paying the higher fee, can only register as Surgeons, under what title can those register who pay five shillings—the smaller fee—(we

lished the case of a boy who died from malignant or hæmorrhagic small-pox. The disease when first seen, was of the distinct kind, and in the maturative stage. Hæmorrhage from the nose, vomiting of blood, and the formation of vibices and petechiæ afterwards marked its progress.

ENCEPHALOID DISEASE OF THE URETHRA.—Mr. Bloxam has published in the *Provincial Medical Journal*, the case of a man, 69 years of age, who had around the urethral aperture of the bladder, a group of encephaloid tubercles, the largest of which was not bigger than a marble, the neighbouring openings of the ureters being contracted, and thus by the distension of those canals had been produced considerable disease of the kidneys. The tubercles, in consistence, were decidedly softer than the healthy brain, and they possessed scarcely sufficient firmness to retain their shape and structure during excision; their colour internally was white.

OPIMUM IN STRANGULATED HERNIA.—Mr. Rowland, in the *Provincial Medical Journal* has added another to the long list of cases in which a successful termination of the strangulation of hernia has been obtained by the internal administration of opium. The preparation he used was the tincture, and he gave 240 minims in 18 hours; narcotism was not produced.

ASCITES AND PERITONITIS.—A case is narrated in the *Provincial Medical Journal*, of ascites following subacute peritonitis, subsequent to crysipelas of the leg, in which exacerbation of the inflammatory symptoms of the abdomen took place, and terminated fatally. The evidences of inflammatory action after death were sufficiently evident; the symptoms prior to death were not so clear.

BRIGHT'S DISEASE.—Dr. Favéll at a meeting of the Sheffield Medical Society, exhibited the kidneys of a man 67 years of age, who died from granular degeneration of the kidneys. They were admirable specimens of 'Bright's disease.' The right kidney contained on its surface a considerable number of serous cysts, and the left had a large one attached to its extremity, capable of containing about an ounce of fluid.

IODIDE OF POTASSIUM.—Dr. Branson, at a meeting of the Sheffield Medical Society, exhibited drawings representing an eruption which followed the exhibition of the iodide of potassium. In color it was like that of purpura, but presented a gyrated form. It caused very considerable itching.

RUPTURE OF THE UTERUS.—Mr. Fawell at a meeting of the Sheffield Medical Society, narrated the particulars of a case of rupture of the uterus, occurring in a woman 44 years of age, which terminated fatally. She had previously borne twelve children, all with considerable difficulty, from deformity of the pelvis caused by the projection of the promontory of the sacrum. The rupture occurred at the sixth month of pregnancy, premature labor having been induced; an arm was found presenting, and the operation of turning was practised, but with exceeding difficulty. The indications of the rupture did not present themselves until the next day. On examining the body after death, an extensive rupture was found through the anterior parietes of the neck and body of the uterus, and through the posterior and contiguous portion of the bladder. The substance of the uterus was thick and pulpy, and had evidently been the seat of chronic disease.

GOSSIP AND NEWS OF THE WEEK.

A meeting was held, on the 19th inst: at Bedford. Mr. Hurst in the chair. The introduction of General Practitioners in the Council of Health, and the further restriction of quackery were suggested, and the bill generally approved of. In clauses 19 and 20, the words "after examination" were asked to be expunged (proving the Meeting's misunderstanding the bill), and a letter from Sir James Graham was read, that "Members" of the College would register—a circumstance establishing the same fact for the Home Secretary. We repeat again, that by the bill, "Surgeons" and

"Licentiates" will be distinct classes in the register—the first paying £1, the other 5s! Why is there one class of "Licentiates" if they are all to register as "Surgeons?" Are they, with less price, to be more than "Fellows?" Why is there no fee fixed for a Licentiate of Medicine and Surgery registering as a Surgeon? Would there be such an omission if he were to register as a Surgeon? The *Fellows* have a fee expressly named.

Royal College of Surgeons.—Gentlemen admitted Members on Friday, March 7th, 1845:—H. B. Marsh, W. Davies, W. Ayre, C. R. Hall, J. Davis, F. Bennett, J. Daubeney, W. Tredwen, W. H. Clarkson, C. Palmer, T. Wise, and J. Colgrave.

Apothecaries' Hall.—Gentlemen admitted Members on the 6th of March, 1845:—William Henry Wright, Augustus Priestley Hamilton, Henry Edwin Farnell Shaw, William Symonds Rootes, Henry Freeland Carter, George Ashdown, Edw. Charles Hulme, Joseph Frain, Octavius Fredk. Heritage, Richard Clewin Griffith, Thomas Underhill, Junior, and Richard Bark.

Apothecaries' Hall.—Gentlemen admitted Members on the 13th of March, 1845:—George Cotton, Frederick Henry Johnson, John Cross.

DEATH OF PROFESSOR DANIELL.—On Thursday last, March 13, this distinguished chemist, and natural philosopher, died suddenly in the Council Room of the Royal Society, having, till within a few minutes of his death, been in the enjoyment of perfect health. In our number of next week, we shall present our readers with a biographical memoir of the deceased.

SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from p. 502.)

PROTO-CHLORURET OF IRON: See hydrochlorate of iron.

PROTO-CHLORURET OF MERCURY: Internally as a purgative, four to six grains in a bolus or pill, combined with jalap, aloes, or nitre, to prevent its action on the salivary glands. As a contro stimulant, one to five grains and more, exhibited as above, as antisyphilitic 1-5th, 2 5ths, and 3-5ths of a grain to a grain in friction on the gland with a little saliva, or on the gums. Against pellicular angina, fifteen to twenty grains. In large doses, twelve to twenty-four grains, as an hyposthenic, antiplastic remedy in pneumonia, pleurisy, complicated fractures, &c. Externally, calomel prepared by steam is employed in the treatment of syphilitic ophthalmia, and to remove specks on the transparent cornea. It is applied by insufflation, to effect which the free edges of the eyelids are separated, and a pinch of calomel is blown all over the diseased surface by means of a quill or glass tube. The motions of the eyelids when set free, and the discharge of tears, carry the powder into all the folds of the swollen conjunctiva. At night time a drop or two of Rousseau's laudanum, or of what is better, an aqueous solution of opium, may be instilled between the eyelids.

PROTO-IODURETS: see iodurets.

PROTO-NITRATE, AMMONIACO-MERCURIAL: see soluble mercury of Hahnemann.

PROTO-NITRATE OF MERCURY: internally, as an antisyphilitic in the dose of from one to two grains in syrup.

PROTO-TARTRATE OF MERCURY AND POTASH: a mixture in variable proportions of tartrate of mercury, neutral tartrate of potash, and cream of tartar, which ought to form part of the liquor of Pressavin, and which is now never used.

PRUNES: decoction, half an ounce to an ounce to a quart of water—as a laxative.

PRUSSIAN OF IRON: see hydrocyanate of iron.

PYRETHRUM: internally, half a drachm to a drachm as a masticatory to provoke the discharge of saliva, and relieve tooth-ache. Externally, as a rubefacient.

PYROTHONIDE (Ranque): an empyreumatic acid liquor obtained by burning rags, hemp, cotton, or paper in the open air, collecting the liquid which results, and diluting it with three or four parts of water. Used externally in collyria, injections, topical applications, fomentations, &c., pure or diluted with water, in the treatment of acute or chronic ophthalmia, hæmorrhages, fluor albus, simple or venereal gonorrhæas, non-ulcerated chilblains, simple angina, &c.

QUASSIA AMARA: powder, twenty to thirty grains in bolus or pill; infusion one to three drachms to a quart of boiling water; wine, one to three ounces; tincture, one to two drachms in potion, julep, or mixture. *** Tonic, and slightly febrifuge.

QUININE: see cinchonine.

QUININE, FERROCYANATE OF: a salt employed as a febrifuge, and which is preferred to the sulphate of quinine in the treatment of intermittent fevers, accompanied by an inflammatory condition. Mode of exhibition—four to six grains in bolus or pill.

QUINQUINA (Cinchona): powder, as a tonic, six to twelve grains in bolus or pill, or in a little water, wine, &c. As a febrifuge, from two to four drachms as the ordinary dose, and sometimes more; from two to three ounces have been given in the course of the day. Infusion, two drachms to an ounce to a quart of boiling water. Tincture, half a drachm to a drachm in an appropriate menstruum. Wine,

one to four ounces in the morning, fasting. Aqueous syrup, one to two ounces to sweeten medicines. Vinous syrup, half an ounce to an ounce for the same purpose. Soft extract, half a drachm to a drachm and sometimes more, in bolus or pills, or in solution in ptisan, apozema, potion, julep, &c. Dry extract (formerly called essential salt of La Garais), twenty to sixty grains as above, or by the endermic method. Externally in baths, two to four pints. In injections, fomentations, lotions, &c., one to two ounces to three pints of water, reduced to two by boiling. In poultices, three to four ounces of the powder added to eight or twelve ounces of linseed meal poultices. In lavements, one to three drachms of the powder mixed with a sufficient quantity of water, so that there may be a sufficient liquid mixture. *** This medicated injection ought not to be administered, until after the rectum has been emptied by means of a simple enema. This rule should be regarded as a general one, whenever it be desirable to exhibit a rather energetic enema.

The cinchona bark are tonics, febrifuges, antiperiodics, and antiseptics, par excellence. Nevertheless, they are not all endowed with the same properties and the same energy; so that the grey cinchona is most employed as a light tonic, stomachic, and antiscorbatic; that the yellow is eminently febrifuge and anti-periodic, and the red which contains much tannin, is employed daily as a tonic and antiseptic in the dressing of unhealthy wounds. The cases in which recourse is had to the cinchonas and their preparations are extremely numerous. As tonic, they are given in adynamic and gangrenous affections, typhoid fevers, gangrenous angina, passive hæmorrhages, scrophula, scurvy, dyspepsia, obstinate chronic diarrhæas, and finally in all cases where general debility seems to keep up a morbid diathesis. Since the discovery of the sulphate of quinine, the cinchonas are but little employed as febrifuge; nevertheless, there are fevers in which they cannot be replaced, such as the miasmatic and putrid fevers of the ancients. The cinchonas are employed externally in the form of decoctions, in lotions, injections, baths, poultices, &c., in the treatment of sordid, atonic ulcers, hospital gangrene, humid gangrene, mucous discharges, &c. Mode of exhibition—As a febrifuge, cinchona is administered differently according to the severity of the disease. In a malignant intermittent fever it is given in large doses successively in the intervals of the accessions, so as to prevent their return; the dose being then gradually diminished. In an ordinary intermittent fever, on the contrary, it is administered in small doses at first, during the entire duration of the apyrexia, and the doses are gradually increased, none being exhibited whilst the fever is present, for instead of diminishing it, it would be increased by it. Finally, where there is but little interval between the fits, the entire quantity is given immediately after the cessation of one of them. When cinchona is thus given in powder, it is advisable to combine a little opium with it, 1-5th or 2-5th of a grain, to prevent the vomiting which sometimes happens, and which nullifies the properties of the medicine. The exhibition of cinchona ought in general to be continued as long as nature requires to cure some intermittent fevers. Thus it should be given for a week for quotidian fevers, for a fortnight for tertians, three weeks for quartans, &c.

QUINTESSENCE, ANTIPSORIC: this preparation is nothing else than the water of Mettemberg, which we have indicated as being prepared with corrosive sublimate and hydrochloric acid, and which others regard as having the nitrate of mercury as its base.

RACAHOUT OF THE ARABS: four drachms of roasted cacao, twelve drachms of potatoe starch, twelve drachms of rice-flour, four ounces and a half of sugar, half a drachm of vanilla, mixed together. Mode of exhibition—one, two, or three teaspoonsful in eight or ten ounces of water, milk, or broth, as an anæsthetic.

RAISIN D'OURS: an astringent employed in atonic diarrhæa, chronic leucorrhæa, &c. Mode of exhibition—in infusion or in powder, in the dose of two drachms to four or five ounces of liquid.

RASPBERRY: the juice of the raspberry is employed in the preparation of syrups, conserves, drinks, &c., which are very frequently employed in medicine, as cooling and refreshing.

RATHANY: powder, twenty to forty grains in bolus or pill. Infusion, half an ounce to an ounce to a quart of water. Extract, prepared from the infusion, twenty to sixty grains in bolus or pill. Syrup, half an ounce to two ounces as a sweetener. Used as a succedaneum of catechu, is especially adapted for the treatment of fluor albus, uterine hæmorrhage, &c. It has also been recommended for yellow fever.

RHAMNUS CATHARTICUS: ten to twenty of the fresh entire berries, two to four drachms of the expressed and fermented juice; twenty to eighty grains of extract in bolus or pill; one to two ounces of syrup in a purgative potion, or three to four ounces in enema. A very energetic purgative, adapted for cases of dropsy, and as a vernifuge.

REFRIGERANTS: the refrigerant medication, such as baths, affusions, drinks, topical applications, &c. Used cold, is suited for a great number of cases, but especially for the neuroses, acute phlegmasia, &c.

RHAPONTIC: this root possesses the same properties as rhubarb, but it must be given in doses half as strong again.

RHUBARB: powder, as a tonic, six to twelve grains in a little water or wine; as a purgative, twenty to forty grains in bolus or pills, or suspended in an appropriate menstruum. Cold infusion, one to two drachms to a quart of water. *** This cold infusion or rhubarb tea is prepared by suspending the rhubarb broken up into pieces and tied up in a piece of linen, in the menstruum. Wine, half an ounce to an ounce. Simple syrup, half an ounce to an ounce in a draught, julep, &c. Compound syrup (formerly called the compound syrup of chichory), two to four drachms, and more as a purgative. Tincture half a drachm to two drachms in an appropriate menstruum. Extract, six to thirty grains in bolus or pills. Rhubarb possesses well marked tonic and purgative properties. It is also employed as a vernifuge, and in the treatment of diarrhæa, &c. When roasted, it becomes very bitter and astringent.

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COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine at University College.

GENTLEMEN,—We now pass on to the subject of rheumatism, an affection closely allied to gout, and which occurs in two forms, acute and chronic. The same terms, sthenic and asthenic, may be applied to these as to gout, inasmuch as the acute is sometimes mixed up with chronic disease, and the chronic disease originates from the acute: they in fact, pass into each other. The essential character of rheumatism, is inflammation in several joints, chiefly the larger ones, and in their neighbourhood. A greater number of joints are affected in this disease than in gout. Sometimes some parts are affected, and sometimes others. The inflammation is not of the common type, for instead of being fixed, it is remarkably wandering, sometimes affecting the knees, the ankles, or the elbows, and then disappearing in those parts, to appear in a new locality. Sometimes, however, it is entirely local, from local causes. When a person sits in the draught of air caused by a doorway or window, he may get a crick in the neck, which is a kind of rheumatic affection. The same may be said of lumbago, and sciatica, which are neuralgic forms of rheumatism. It likewise partakes of the character of common inflammation. Rheumatism rarely occurs in persons whose health has been previously quite robust. It is frequently preceded by very marked febrile disturbance before any local inflammation takes place. Local inflammation does not come on for three or four days after the febrile disturbance has begun, but the reverse sometimes is the case: occasionally there is chilliness, feverishness, sickness, languor, restlessness, heat of skin, quick hard pulse, thirst, furred tongue, and scanty and high coloured urine, and with these there may be a sharp cutting or aching pain in one joint. This is soon followed by tenderness or swelling in the part, without any abatement of the fever; in this respect there is considerable difference between this affection and gout. The pain proceeds from joint to joint, and is chiefly felt on motion: it is not by any means so severe as in gout. The parts usually first affected are the lower extremities, and next in order come the upper large joints, and subsequently the smaller articulations. It often simultaneously attacks various parts. The intellectual faculties are generally clear, and in this respect, rheumatic fever differs from other pyrexia. The character of the inflammation is indicated by the state of the blood, which in rheumatic inflammation, is more highly buffed and cupped than in any other. Sometimes the perspiration is of a very peculiar character, and very profuse. In some instances there is a deposit of lithate of soda. When the disease is treated locally not constitutionally, the rheumatic inflammation will go on to another joint, although it may be removed from the part which has been treated with local remedies. In the acute disease the effusion of serum is very rapidly

dispersed, and in persons who die after suffering from acute rheumatism, on examination after death are found traces of inflammation in the joints that have been affected. In some instances there is a tendency to suppuration. When the inflammation lingers in a part, it produces exostosis of the bony parts, and infiltration of the softer textures. There are cases in which the inflammation has been originally chronic. In the low form, rheumatic inflammation produces swelling and tenderness of the joints, without fever, and in course of time distortion of those parts to an enormous degree. This is a modification of rheumatism, analogous to gout, but differing from it in affecting a greater number of joints, as well as in some other particulars. The distortions occasioned by this gouty rheumatism are very enormous, the patient in some cases being rendered bed-ridden and deprived of the use of limb after limb.

This completes the history of rheumatism in general, and we must now advert to the distinctive kinds of rheumatism, or rheumatism in particular. The distinction between the forms of rheumatism is very easy, more particularly in chronic cases, in which the peculiar products of the inflammation are more confined to the specific parts that are affected. In the first place, there is the most acute and inflammatory kind—the acute diffused articular rheumatism—which affects all the joints, and is not confined to any particular structure. In acute rheumatism of the knee, you find the patella is floated up by the effusion under it, besides which there is a considerable enlargement with tenderness and swelling of the surrounding bursæ, and the skin may assume the appearance of common inflammation. This form resembles common inflammation, and is, consequently, more tractable. The second variety is the acute fibrous, or fascial rheumatism, where the inflammation attacks chiefly the fibrous textures, the fasciæ between the muscles, the aponeuroses, the periosteum, and the fibrous coverings of the viscera, more particularly the pericardium. In the other form the pericardium is not affected. The endocardium is also affected. The seat of this inflammation is confined to the joints, themselves; there is more or less pain and swelling in the joints, and also swelling between the joints in the fore-arms, the backs of the hands, and in the legs. There is a sort of diffused swelling over the limb affected, not simply a fluctuating swelling in the capsules and bursæ, but more diffused. This is one of the least tractable forms, and is less amenable to common antiphlogistics, and requires specific treatment: depletion alone produces little benefit here. If the disease goes on long, it tends to produce the chronic form, together with muscular paralysis and atrophy. The third variety is the synovial or capsular rheumatism, affecting exclusively the capsules of the joints, and the synovial membrane. It is usually accompanied by great swelling and distension of the capsules of the joints, particularly those of the knee joint. It is, like the other variety, intractable, and bears a close resemblance to gout. It occurs chiefly in cachectic and debilitated subjects, from an imperfect action of the kidneys. This is the form which, becoming chronic, more particularly tends to produce the

distortions of which I have been speaking. There are depositions in the joints, forming nodosities, and creating permanent stiffness. In this form, too, it is that that peculiar deposit of lithate of soda has been found on the skin after perspiration. This affection closely resembles the chronic form of gout; it is said, too, sometimes to cause metastasis, but it affects the heart less than the other varieties. The fourth variety of rheumatism is the periostitic. Here there is pain, tenderness, puffiness and swelling over some bony surface, either over that of the cranium or the tibia. This is generally the result of syphilitic poison. Its tendency is to become chronic, and to produce nodes and bony deposits. It may also arise independently of syphilis. This form of rheumatism affects the head, producing obstinate headaches. It is not confined to the dura mater, but affects the interior of the head. It seems, too, to produce symptoms of a tetanic and convulsive character, closely resembling an attack of chorea. Another variety is the neuralgic, which is seated in the nerves, producing severe pain. This rheumatic inflammation affects the sheath of the nerves. In lumbago, the inflammation affects the loins and back, and by-and-by the pain settles down into the course of the sciatic nerve, whence there may be severe pain and tenderness, down to the leg, and sometimes into the scrotum, which obviously arises from the rheumatic affection becoming localised in the sheath of the nerve. It is a form of rheumatism which is less tractable than the others, even with antiphlogistic means. This is another circumstance which tends to prove that the inflammation is dependent not on common causes, but that it is an inflammation of a particular kind, wandering in the system, and exciting inflammation in many parts, and exciting either acute or chronic symptoms in proportion to the intensity of the cause. There in fact seems to be something in the blood, which ought to be excreted, an opinion which is confirmed by the peculiar efficacy of certain medicines. Now, taking this view, you will be able to understand what is called metastasis, or the translation of rheumatism; not a translation of the whole disease, but of the morbid matter in the system, operating sometimes on one part, and sometimes on another. This is not the same thing as the disease being translated from one part to another, in which case there would be no simultaneous appearance of the disease in various parts, which we find to occur when the disease is very active. All these inflammations are the results of the operation of the same cause the, *materies morbi*, or morbid matter diffused through the system, simultaneously affecting various parts. Now there is one peculiar rheumatic affection of the heart, that excites more permanent suffering in that organ than any other cause. The heart is continually in motion, never at rest, the inflammation seeming to be completely lodged in it. When the joints are still, the heart is working tumultuously, owing, in connexion with the fever, perhaps to the exciting quality of the blood itself. This is one reason why the heart is so liable to suffer during the attacks of acute rheumatism. I have found that of all the cases of acute rheumatism which I have closely examined within

the last eight years, that the heart has been affected in three-fourths of the number.

The effect of the heart being much influenced, will be to cause pericarditis and endocarditis in a marked form. Sometimes the effect is to produce peculiar excitement, not only of the heart but of the brain, such as delirium and phrenitis, which are not at all uncommon during the occurrence of this specific inflammation in and about the heart. In many instances, there is an increased action of the heart, though the patient does not complain of it, and it is obvious that this irritation of the heart keeps up the rheumatic fever. This is one of the circumstances that renders those cases more intractable than they otherwise would be. This complication tends to retard recovery. The patient may be cured without knowing that his heart is affected, but by and by he begins to suffer from symptoms of structural disease in that organ. All the kinds of rheumatism I have been describing, may, like gout, be sthenic or asthenic, acute or subacute. The varieties I have described, are chiefly of the sthenic kind, the difference in the asthenic being, that there is less heat and fever, and the joints are usually relieved by warmth. The chronic form, is that which lasts long, and, although it may be asthenic, yet is not always so. The diffused form is acute; but the synovial, the periosteal, and the neuralgic are commonly asthenic. The causes of rheumatism are cold and wet after great exertion or fatigue, under the effects of which the acids may be transformed into lactic or lithic acid. Thus, we find it to occur in persons in bad health, and in whom the alvine and urinary excretions become disordered, and the latter is lessened in quantity and deposits lithate of ammonia. Malaria, too, is a predisposing cause of rheumatism: it in many cases arises from an hereditary predisposition. Pleuritic attacks also predispose to this affection and so does scarlatina:—in such cases of scarlatina it is that we find the kidneys oftenest affected. Syphilis is a peculiar cause of the periostitic form of rheumatism.

The treatment of rheumatism will vary according to its kind. In the sthenic acute cases, particularly the diffused articular, also in the fascial and synovial varieties, copious blood-letting in the very early stage will sometimes arrest the disease, and mild purgatives and other evacuants will complete the cure. But, if the disease has lasted two or three days—especially if it has been preceded by much general disorder—then there is no probability of mere depletion curing the disease; indeed there is some risk arising from its use at this period, or under the above circumstances. Depletion subdues the common inflammation, but it does not remove the cause of the disease from the system. It converts the acute or sthenic into the chronic form of rheumatism. Very often free blood-letting in rheumatism causes metastasis to the heart. The same objection may be applied to local blood-letting from rheumatic limbs, particular in the acute fibrous form. It is much more favourable if the rheumatism remains in the limbs without affecting any other part of the body, such as the interior, or the heart. Local treatment never will remove the constitutional cause, nor will blood-letting do so. Blood-letting reduces the system to such a state, that other medicines can be brought into operation, and in that way only is it efficacious. It should be used at the first onset without carrying it to an extreme extent. The chief object to be gained by it is to reduce the increased action. The average quantity of blood which it is advisable to draw at a single blood-letting, is from 16 to 20 ounces. If the heart is attacked, then apply local treatment. Now what are the medicines which can attack the constitutional causes of rheumatism? There are several that seem to have this power. Mercury, combined with opium seems to have some efficacy in this way, and though it is more of an antiphlogistic remedy, it is yet an important one, and should always be employed when the head has become implicated. In the acute inflammatory form, a large dose of calomel once, twice, or three times a day should be given; the first dose not being combined with opium in order to act as a purgative; the proportion of calomel with opium, in the sub-

sequent doses, must vary according to the symptoms. If the inflammatory symptoms increase, it should be combined with antimony, and if the nervous symptoms predominate, opium and morphia should be combined. Dr. McLeod who has written on this subject, discredits mercury, but Dr. Chambers is a great advocate of it. It is not so efficacious alone as in combination with other means, and the most important of these is colchicum, which is the great anti-rheumatic, as well as the great arthritic or gout remedy. It is of great consequence to use colchicum from the beginning; not that it takes effect in very acute cases, but it begins to saturate the system, which requires that there should be a certain quantity of the remedy in it, or, at least, that the patient should have taken it for some time before it begins to produce its specific effect. The best form to give it in is that of the wine; the dose varying from 20 minims to half a drachm, or even more, three times a day, combined with an alkali. Its effect is to increase the quantity of lithic acid in the urine in a very signal manner, and, as this takes place, the urine increases in quantity, and specific gravity, and in proportion to these effects, the pains become reduced, and subside. There are other remedies that seem to produce the same effect, though in a less degree. These are, iodide of potassium, and guaiacum; they operate much in the same way as colchicum, but with much less certainty. Mercury should be administered with colchicum until the gums are affected, or diarrhoea is produced. The object is not to produce diarrhoea if possible, for that is far from being of advantage in the treatment of rheumatism, and I have cured some cases of the disease without sickness being produced. When the rheumatism is severe, diminish the quantity of colchicum, and join opium with it. In the synovial form, mercurial treatment is rarely necessary at all, but the colchicum treatment is the great remedy. The other forms of rheumatism are of the lower kind. Lumbago, which is of an acute character, may sometimes require cupping at the loins, particularly if the kidneys are much irritated, but, generally speaking, colchicum is the proper remedy for it. Sciatica, which often originates from lumbago, may require cupping over the sciatic nerve, but that will yield to colchicum, given in increased doses, and continued for a long time. In the sthenic forms of rheumatism, whether acute or chronic, blood-letting, and purgatives, or antimony, are required, and colchicum is to be given. Mercury may be sometimes necessary, particularly in the fascial form. It is in this form, that guaiacum combined with ammonia, is efficacious: and iodide of potassium is another effectual remedy here. Tonics are also found useful in this form. Vapour, hot air, and hot baths, are highly serviceable in some of the other forms of rheumatism. The use of the hot bath in acute rheumatism is a most pernicious practice, and I have known many instances in which it has been attended with the most disastrous results. Stimulating embrocations are of great use, particularly those combined with iodide of potassium. In cases where the inflammation is localized, local depletion, blistering, embrocations, and the shampooing bath are necessary. In fascial rheumatism, strychnia applied externally is of use, and some people give it internally. In periosteal rheumatism, great benefit is derived from iodide of potassium as well as colchicum. Sciatica often takes on the chronic form, and it may then be relieved by turpentine frictions, and acupuncture.

FRACTURED TIBIA.—At a meeting of the Sheffield Medical Society, the president exhibited a portion of the tibia of a boy, who had been knocked down by a railway truck, laden with materials for making the road. The carriage passed over the leg, and caused so much mischief as to require amputation. The constitutional shock was, however, so great, that he sank. On examination, it appeared that the articular surface of the tibia was cut off in the form almost of the letter V reversed, the angle not being quite so acute; the integuments above the knee were very much cut and bruised, as well as the muscles, and the joint was opened, but over the injured bone there was only a slight wound.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN, WITH NEW VIEWS ON THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine,

Formerly Physician to the Bicetre and Salpêtrière Asylums; Author of the "Traité Médico-Philosophique sur l'Aliénation mentale," "Médecine Clinique," "Nosographie Philosophique," &c., &c., Translated with Notes illustrative of some important doctrines in Physiology, Phrenology, and Moral Education.

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

M. Archambault of Bicetre in his translation of Ellis' work, has exposed in a very clear manner his opinions on this subject, and we cannot do better than borrow largely from him.

"A man," says he, "sees a relative, superior being, witches; he hears voices, when there is no sound, no external object, nobody, nothing in a word to strike his sight, or his hearing: this man is labouring under hallucination. He does not *think* merely that he hears or sees; but he hears and sees in reality; for him the sensation exists, although at the moment the senses are not excited. Esquirol's work mentions the case of a retired Prefect, who became deranged in consequence of the military events of the Empire. This unfortunate man imagined that he was accused of treason, and disgraced; he attempted to cut his throat with a razor. On coming to himself he heard the same accusing voices again; when cured of his wound, they continue to assail him and remind him night and day that he has been a traitor, and that he ought to die. The voices by turns employ all the European languages with which the patient is familiar, one only is heard less distinctly than the rest, addressing Mr.—in Russian, an idiom with which he is less acquainted. In the midst of all these voices, he can distinguish one, that of a lady, repeating that he must take courage, and confidence. Mr.—frequently retires in order the better to *listen*, and to *hear*; he questions, he *answers*, *challenges*, *defies*, and flies into a passion in addressing himself to the person with whom he thinks he is conversing. He is convinced that his enemies by various means are able to find out his most secret thoughts, and to reach him with reproaches, threats and the sinister counsels with which they overwhelm him. In other respects, he reasons correctly: all the intellectual powers seem to be in a state of perfect integrity. He sustains conversation on various subjects with the same spirit, knowledge, and facility as before his derangement. When interested in the conversation, he no longer hears the voices, if it begins to flag, he hears them imperfectly, he then retires from the company in order to hear more distinctly what they are saying. Mr.—sets out for Paris; on the way, the voices repeat to him "kill thyself, thou must not survive dishonour."—"No," he replies, "I shall not put an end to my existence, until I have established my justification. I will not bequeath to my daughter a dishonoured name." He pays a visit to the minister of police, who endeavours to reassure him, but he is no sooner gone from his presence, than the voices besiege him again.

"This gentleman betakes himself to M. Esquirol's establishment; full of care and anxiety, he confines himself to his room, cannot sleep; and refuses all visits, and also refuses with a bitter smile, all the remedies offered to him. By degrees, however, M. Esquirol insinuates himself into his confidence; yet even his conversation, witty, sustained and lively, he would break from to listen and reply to, the voices. M. Esquirol nicknames them chattering gossips, and the patient himself soon adopts the disparaging epithet. He begins to speak of his illness, and discuss the objections of his physician: the physical sciences, he observes, have made such progress that the transmission of sounds by means of machines to a great distance, has become possible. At length he begins to feel confident in what his physician tells him, although at first he could scarcely believe him to be a medical man, or that the books brought from M. Esquirol's library for his reading, were placed in his room for any other purpose than to deceive him. He imagines that the events of 1814, upon which the conversation is made to turn, are me-

means to discover his opinions; and that the newspapers announcing the government of the Bourbons are printed on purpose to deceive him. M. Esquirol proposes to take a walk with him through Paris; he refuses at first, but two days after, addressing him, he exclaims suddenly and without being led to it, "let us go forth." In the company of Esquirol, he proceeds at once to the Garden of Plants, where he sees a great number of foreign soldiers. He has scarcely advanced a hundred yards, when pressing the arm of his companion, he says, "let us return: I have seen enough, you have not deceived me, I have been ill, I am now cured." Henceforth, the voices are heard only in the morning. The most indifferent conversation, or a short walk relieves him of their importunity; he sees that this symptom was nothing more than a nervous phenomenon, and wonders how he could have been so long deceived by it. In the space of two months he was completely cured of his hallucinations, as well as of the delirium to which they gave rise."

"I have related this case at length, because it furnishes an instance in which the hallucination is perfectly detached from the other symptoms, and predominates as the principal feature of the delirium, and keeps up and gives a motive for the anxieties and suspicions of the patient. It is a remarkable circumstance, that it was not by combating directly the cause of the insanity, namely the hallucination, that the physician cured his patient, but by persevering in the effort to gain his confidence, scrupulously avoiding the transmission from the world without, of any thing but its stern realities, the truth of which could be proved in an instant. Once undeceived, the patient no longer attaches a greater importance to the pestering voices than the physician himself does, he regards them as a nervous phenomenon which for the future, can have no influence on his judgment and moral determinations. Mr. ——— continues for a short period still to labour under the hallucination, but the mental alienation had terminated. The hallucination then is not delirium, but a phenomenon which often complicates it, and gives rise to it. It is a new feature, new materials in sooth, for the human intellect to work upon. If it yield to them, the individual is alienated in mind; he judges and conducts himself according to an order of *impressions*, which have no existence for the rest of mankind. I use the word *impression* because as M. Leuret observes, the hallucination is not for the patient, a belief, but a sensation, an impression, the same as if he felt and received the impression in reality. We may at once conceive the influence of such a phenomenon, and the tenacity of the delirium that rests on *sensations*; and hence it is that when mental alienation is complicated with hallucination, the disease is much more serious. For how are we to prove to a man who hears, sees, touches, and perceives odours and savours, that he does not hear, see, touch, taste, or smell? How convince him, that he is labouring under hallucination of one or more of the senses, when at the same time he perceives and judges by means of these very senses, the realities of the external world, with the same correctness as persons do who are in their perfect senses? Most commonly the best reasoning of the physician will go for nothing for such a patient, in whose opinion, physical and electrical influence, and even the police have power sufficient to convey to him the annoying sensations. And moreover, it may be asked, does the madman who judges and reasons from his sensations, judge and reason in a different way from that in which the rational man judges according to his sensations? Our astonishment therefore at the present day, should not be greater at seeing the same tenacity in these patients, the same faith as those possessed, evinced of old, when they went at night to keep Sabbath, and saw legions of devils, with whom they danced and conversed, and bargained to deliver their souls. The fear of death, nor the sight of torture, nor pile prepared for their burning, nor death itself could extort from them a disavowal."

In Sir Wm. Ellis's work, are to be found several instances of well marked hallucination. In one case the patient recovers his health, and the only illusion that remained was, that voices were

addressing him continually. In another, invisible spirits were constantly informing the patient of the infidelities of his wife; and in two other instances, the patients were surrounded by witches, one of them disputing and fighting with them; the other complaining of being pinched and struck by them. These are examples of hallucination of the hearing, sight and touch.

"*Hallucinations of Taste*," continues M. Archaubault, "are rare: but on the other hand, illusions furnished by this sense, are very common. In Lauret's *Fragments Psychologiques*, there is a case which appears to be an example of hallucination of the taste. The patient, a female in the hospital, when asked if she was well fed, replied, 'Yes, we eat fowls and chickens.' But as her answer was mingled with other irrational ideas, M. Leuret is not sure that it ought to be taken as part of her delirious conceptions."

"*Hallucinations of the sense of smell*, are also very rare. M. Leuret mentions the case of a female at the Salpêtrière, who not only heard the cries of the victims, that were being massacred in the vaults under the hospital, but who smelt continually the horrid effluvia arising from the putrefaction of their bodies."

"*Hallucinations of all the Senses*.—Not only have hallucinations of one or more of the senses, been observed, but even of all the senses at the same time. M. Lauret mentions a case published by M. Selus, of a patient at Bicêtre, who at night heard threatening voices, and saw wholly or partially the persons uttering the voices; these persons were extremely light, made with paste-board and inflated with wind. The patient could struggle with and repel them easily, either with her hand or foot; these persecutors would touch her and push her; the breath was offensive, infecting her nostrils and mouth. In this work, there is also another case that presented hallucinations of all the senses."

"It has been already stated that persons labouring under hallucinations, were able to judge with the same correctness of external objects striking the senses, as persons who enjoy their perfect reason. But this circumstance which is not the most remarkable one recorded in the chapter of hallucinations, has contributed in no small degree to mask the morbid character of these singular phenomena. How large a share have they in the history of nations! Hallucinations of the sight, had long been designated, visions, but till the time of Esquirol, they had not been perfectly analyzed; they continued to be confounded with phenomena of a different order, or to be separated from those to which they were analogous. Esquirol, in studying the different features of delirium, found in the insane, not only visions of the sight, but also (if the expression might be allowed) visions of the hearing, as well as of the other senses. A logical mind like his could not permit distinctions between phenomena so similar, phenomena in fact that differ no more from each other, than the sensations themselves do. The name of *visions*, special as regards the hallucinations of one of the senses, could not be applied to those of the other, and in consequence, Esquirol proposed the term *hallucination*, which science now accepts in this determined sense."

"The hallucinations sometimes observed in persons who have never had any delirium, are one of the features of the delirium so frequently met with, as Esquirol has pointed out in mania, melancholia, monomania, extacy, eatalepsy, hysteria, and febrile delirium. This phenomenon is frequently the precursor to the explosion of the other symptoms of alienation; the patients struggle long with their hallucinations before they speak of them, and before they act according to these new sources of determinations, and of course, of errors. We have seen in the cases of Esquirol, and of Sir Wm. Ellis, that the hallucinations might persist after the disappearance of the delirium, and the patient be able to reason and conduct himself independently of this morbid influence. In mental alienation, the hallucinations are sometimes so dominant as to tear the patient away from the most attractive conversation, or the most active occupation; but it sometimes happens also on the other hand, that the hallucinations are dispelled by a strong appeal to realities. We have seen the Prefect of the

Empire when disabused of his anxieties and fears, escape on the slightest distraction, from the importuning voices; and Sir Wm. Ellis's patient learning by experience to relieve himself by labour from the torments inflicted on him by the gas flung on him by the witches. And here perhaps we have the secret of the moral treatment to be applied to certain cases of hallucination. To aim by time, and by gaining the patient's confidence, at undeceiving him, as Esquirol did so happily in the case related, or to expect from the patient's own experience that he will at last discover the means of escaping from the annoyance of his chimeras, in active occupation, would be running the risk of waiting a long time, and in the majority of cases for ever. One moment's reflexion on the moral and intellectual habits of the insane will suffice to shew what we have to expect on this point; they in fact dwell but too complacently on their wandering ideas, and moreover are generally wanting in the attention and energy necessary to enable them to shake them off. M. Leuret aims at sustaining this attention and energy, by directing the moral treatment either by inducing the patient to undertake some manual or intellectual occupation, or by directly combating the hallucination, and forcing the patient to act and think as if he had been freed from it."

Thus, in hallucinations all takes place in the brain; in illusions, on the contrary, it is the activity of the senses themselves, and their impressions that arrive perverted at the cerebral centre; in hallucinations the brain alone is active, and the action of the senses is null: of this, as has been said before, dreams offer a continual example; the brain perceives sensations of sight, hearing, taste and smell, in which the senses of sight, hearing, taste and smell have no share.

We shall now add some examples of the different forms under which hallucinations present themselves.

A lady 45 years of age, is attacked with maniacal delirium, in which she continues for several years. The agitation, and disorder of the ideas subside into an apparent calm, which is complicated however with various hallucinations; she imagines herself pursued by a spirit that watches her. She sees the spirit; it penetrates into all parts of her body at will, converses and sleeps with her. As soon as she retires to bed, she sees a vivid light descend upon her, which subjugates her completely: this spirit is sometimes bold, and makes her feel all the effects of a union of the sexes. She converses freely with it and can hear it say very distinctly that its power is absolute, and that she cannot escape from it. This patient in the midst of the scenes of her delirium, remains motionless and trembling, sometimes she utters cries of indignation, and her hair seems to stand on end; she conjures the spirit in a strong and moving voice, to spare her, and again a prey to panic-terrors, she prostrates herself with the most ardent fervour on the earth.

It is evident that this patient is labouring under hallucinations of sight, touch and hearing, from which spring false comparisons, erroneous judgments, and her irrational words and actions; and what characterizes them is, that they are independent of all external impression of the senses.

In the beginning of attacks of mania and of the other perversions, more or less complete of the intellectual and moral functions, the hallucinations are to be considered as the most characteristic symptoms of these affections.

Already in melancholia (lypomania,) or, to express ourselves more correctly, in partial, chronic delirium, the patients become from day to day, more irritable and distrustful, from their referring to themselves every thing that takes place around them. They travestie every thing they feel, and take it in a wrong sense; the sentiment of self is perverted; their ideas and affections are transformed into veritable external sensations; their hallucinations become in a manner, illusions as distinct and real, as the objects themselves that excite them; these hallucinations are materialized, so to speak, and become sounds, smells, savours, and sensations of touch: phenomena, that continue obscure and uncertain in chronic delirium, but which foretell for some time before the disorders

of the brain which we shall find by-and-by, in all their force, especially in the state of mania, the most exalted of the disorders of the intelligence.

Hallucinations precede almost always the explosions of mania, but there are some rare cases occurring only in young persons of excitable constitution, where the hallucinations show themselves at the same moment as the general delirium. We subjoin two instances. A young man aged 29, had received a tolerable education, but his disposition was always strange, addicted to dissipation: he experienced considerable losses and some domestic afflictions; he left his wife and came to Paris. After supper, he goes to bed, and in half an hour after descends from his chamber, asking with an air of wildness whether any one had seen his wife. At two o'clock in the morning fancying that he heard thieves breaking into his room, he jumped out of the window, and takes to the fields, he sees pursuers, feels that he is stopped near Charenton, by men who call him by his christian name; he jumps into the Seine to escape from them, and is at last received into a house on the bank of the river. He is put to bed and attended with care. The next day he makes a declaration before the authorities of what had happened to him, but his story is so incoherent that he is sent to the Bicetre. Five days after his admission he is more calm; he acknowledges that all he had experienced was a mere series of errors, and chimeras devoid of reality, and in the whole there was nothing real beyond his running away and his immersion in the Seine, and his arrest and detention at the police office. Fifteen days after, this patient was able to resume his usual occupations. In this case the hallucinations alone were converted into complete mental alienation, but of brief duration.

EGYPTIAN MAGIC AND MESMERISM.

To the Editor of the Medical Times.

(Concluded from page 527.)

SIR,—All nervous excitement, stimulated by strong coffee, strong tea, or opium, produces, while it lasts, a similar exaltation of the imaginative powers, and even, as it would seem, of the reasoning faculties—(else why use the subsequently exhausting stimulants resorted to by public orators and actors?), while it also confers even on difficult, or embarrassed speaking, unwonted facility, fluency and brilliancy. These things are of daily occurrence. I have known brilliant improvisers, under favourable circumstances, and as they expressed it “properly primed”—who could not in other moods, and on ordinary occasions, utter a dozen words without stammering or obscurity. Again, every public orator, who is really endowed with genius (a fatal gift, because it enables its possessor to mortgage his vital functions for one *eclatant* throw) feels the truth of the apothegm of Demosthenes that the “orator is half made by his audience.” Of any human act, impromptu and fervid oratory comes nearest to inspiration, and the orator during the imaginative excitement of susceptible genius, feels and recognises by some mysterious but infallible intuition, the exact measure of the elevating sympathy of the audience.

It is probable that the species of jugglery I have described, and various kindred juggleries are traditional from the established order of Egyptian *Sophoi* or priest-magicians, a term for chemists, astronomers, and men of science, including the Truth-worshipping Magi, who travelled to Bethlehem to attest their long expectation of “THE BRANCH.” Their recorded contest with Moses cannot escape recollection. In three instances, their *natural magic* is admitted by the Hebrew legislator to rival the real miracles, although in the fourth attempt (Mr. Crosse’s galvanic experiment) to create a *caroi*, or the lowest form of animal life, they fail. No supernatural agency is intimated. The words are remarkable “and the Magicians did so.”

The “stone of imagination” among the Jews was evidently derived from these natural magicians; and was a kindred sorcery to that practised in Egypt at the present day.

Jeremy Taylor, on the authority of a Rabbinical comment on Leviticus, describes the “stone of

imagination,” like Dr. Dee’s, as a certain dark and smooth mirror, in which pictures and little faces were represented, declaring hidden things.

It may be remarked that Justin Martyr, in his first apology, (Apolog., edit. Thirlbie, 1725, p. 27,) alludes expressly to the art now practised by Egyptian magicians, as being practised in his time, and with the same peculiarity, “through the medium of children, innocent and pure by reason of their tender age.” The northern superstition that none but the chaste could see or communicate with spirits and fairies, is of the same description.

One may catch other retrospective glimpses of links in the chain of tradition, and traceable, like other magical juggleries to Egypt. The Syrian monks, according to Gibbon, in the time of the Emperor John Cantacuzene, who joined them, subjected themselves to an artificial process, by which those quietists, closing their eyes and concentrating their thoughts, pretended to visions, always preceded by the “light of Mount Tabor.” They described this light much in the same terms as Miss Martineau, in her mesmeric experiences, describes the light investing all things round her after the hypnotic process of mesmerism had produced an artificial sleep. The Alexandrian School of Platonists, including Proclus, Plotinus, Jamblichus, who learnt magic in Egypt, and pretended to miraculous *clairvoyance*, were, probably, self-hypnotists and mesmerizers.* Those quietists “dreamt dreams,” pretended to know and describe scenes passing at a distance, exhibited figures in “Hecatic *specula*,” and boasted of being able to invest themselves in a delicious and miraculous light.

“Elysian scenes, where Proclus long ago,
Saw all things glittering with a golden glow.”

Even in civilized Europe, within the two last centuries, there have been magical practices very slightly differing from those of the Egyptian jugglers—and that without reference to the *animal magnetism* of Sir Kenelm Digby, which he seems to have ascribed to *nervous sympathy*: or the later *magnetic tractors* of Du Mainaduc and Miss Percy, which preceded Mesmer; and the Catholic *ecstaticas*.

St. Simon, in the 5th volume of his memoirs, describes a similar incantation to that of Abdul Ebn Hakm, and the master juggler of Cairo, Sheik Abdul Kader,—as witnessed by Philip, Duke of Orleans—accompanied with that faculty which mesmerisers call *clairvoyance*. The recipient, in this instance, was a little girl, eight or nine years old, two years younger than the “Jungfrau Minnie” in the case I recorded. The magical mirror was a glass filled with water, into which the child was directed to look, while the magician muttered his incantations or probably resorted under that pretence to hypnotising passes. The child first described the persons, dresses, and furniture in a distant apartment, occupied by Madame de Nancre; and afterwards described the personages which would be assembled in the royal bed-chamber at the king’s death, which took place a year after. Her description of the room, the personages, the furniture and costume was precise. Among the attendants present, she described Madame de Maintenon, and the Duke of Orleans; but when repeatedly asked, she denied that either the Duke and Duchess de Bourgogne, or the Duke de Berri, whose presence would be officially requisite, were in the room. The child’s *clairvoyance* turned out to be correct; for it was found afterwards that those personages, who were at the time of the experiment in good health, died previous to the death of the king. This is St. Simon’s account. The occurrence took place in the Palais Royal at Paris in 1706.

By way of completing my narrative, I ought to add some concluding features of my adventure with Abdul Ebn Hakm, the renegade magician at Trieste. In reply to an urgent inquiry of my companion, he denied that the art he practised had anything irreligious in it, or had any connection

* So, Apollonius Tyanius affirmed that he saw the whole scene of the murder of Domitian, though 100 miles distant.

with the “black art.” He said that it had no reference either to the Deity, or the Evil Spirit. He affirmed that it was simply a knowledge (“knowledge” being in this case “power”) of the secret agencies of nature, known to the “wise men of the old world,” and of which he was, without any special merit of his own, through traditional transmission* the fortunate possessor. It was, he said, by a knowledge of these things that Cyrus, with the assistance of the Babylonian magi, as Plutarch affirms, and as Isaiah attests—c. 45, v. 3.—(“the treasures of darkness and the hidden riches of secret places”) laid the foundations of universal empire, and by these means that another conqueror in the “times of the end,” according to Daniel—c. 8, v. 23—(“a King understanding dark sentences”) should vainly attempt to lessen it. He added that there were caves in Egypt (I presume he meant the Theban tombs, or catacombs) extending for miles, like subterraneous towns, and full of the inscribed “treasures of darkness and secret riches” of the ancient world, and that recipes for making *human automata*—copied by Paracelsus the Hermetic philosopher—the *elixir of immortality*, and the *philosopher’s stone* were inscribed among them.

Among other circumstances of his wild doctrine he informed me, that after the trance produced by his incantations, he found himself invested with extraordinary clearness of foresight, adding, that if he felt doubtful at any time what to do, or where to go, he would perceive immediately near him with the most vivid instinct—and that in indifferent objects—some arrangement of lines or curves in the form of symbols which he understood, and which directed him.

Among other juggleries, Abdul pretended to answer questions by an art which partook somewhat of the above character, but which bore greater resemblance to the ancient “divination by arrows,” or the modern Chinese practice of telling fortunes by throwing sticks in the Joss temples. Cutting fourteen slips of paper of irregular lengths, from half a foot to a foot long, and a quarter of an inch wide, he, after burning incense (always a preliminary) and chaunting or mumbling an invocation, threw them into the air; and, according to the form which they assumed in their fall, he announced the decree of the oracle. I must confess (and any one who will take the trouble to try this simple juggling process of divination will be struck by the coincidence) that the papers in falling often do accidentally assume shapes resembling Hebrew characters, or rather, Egyptian Phonetic symbols; and indeed, this is very natural, inasmuch as the primary or elementary letters of the magic-devoted Egyptians are all geometrical.

Like the results of the mesmerizing process of magical intuition, I began with describing, and like modern mesmerizing exhibitions, some of Abdul’s consequent predictions were fallacious, and some confirmed. In this respect, they resembled the divinations by birds, and the augural invocations of Homer’s heroes:—

“One half he granted of the hero’s prayer,
“The rest the God dispersed in empty air.”

For example, while I was with my travelling companion, and the company in the darkened room, where the first experiment was performed, Abdul over-heard me speak of going on to Rome the next day, and express great pleasure at the prospect. After the incantation was over, he turned suddenly and mysteriously towards me, and told me, in his wretched *lingua Franca*, studded with Arabic scraps, from the Koran, that I should go to Rome, but should not reach it *alive*; which (however menacing the form of the intimation) turned out to be strictly true; for I was overtaken

* I think he used the word of “*feh lavis*,” a term I did not then understand, but which would connect his pretended traditional secret with the freemasonry of the Druses and Egyptian Ishmaelites or Assassins, and through them with the Gnostic Platonists of Alexandria in the sixth century.

† “Frankenstein” without acknowledgment, is borrowed from the extant recipe of Paracelsus for making a man!

by letters, which had been sent on from Paris, which compelled me, from domestic causes, unnecessary to explain, to return immediately, when I was almost within view of the "Eternal City." The circumstance occasioned me a disappointment which I have ever since deeply regretted.

He also told me that I should visit Egypt, but that I should not see the Pyramids; a prediction which, applied to me, was fallaciously or ambiguously unintelligible, but which, if it had been addressed to my friend, and travelling companion, would have been strictly true; for, with the intention of visiting Cairo, and crossing the Isthmus of Suez, at the point where Napoleon projected the removal of the ancient canal, on his way to Syria and Jerusalem, he was taken ill, and died at Alexandria."

"Falsum Veritate permixtum."

has always been the impression left on my mind by a retrospect of the whole of my encounter with the mesmerizing jugglery of the magician of Trieste.

I remain, Sir

Your obedient servant, and correspondent,
EDWARD CLARKSON.

SMALL POX IN THE MAURITIUS.

(To the Editor of the Medical Times.)

SIR,—The following extract of a letter received by me this day from Thomas Cotton, Esq., surgeon of her Majesty's 12th Regiment, contains some information on the condition of one of our colonies with respect to small pox and vaccination, which, I think, cannot but prove interesting to the readers of the *Medical Times*. With that impression I forward it to you for insertion in an early number. I am, Sir, your obedient servant,
GEORGE GREGORY.

31, Weymouth-street, March 8, 1845.

Port Louis, Mauritius, Nov. 9, 1844.

SIR,—* * * After the emancipation, the planters of this island suffered much from want of hands; some very philanthropic, but not very well informed people, unfortunately had influence enough to prevent the introduction of free labourers from India, but this has passed away. We are now inundated with them, and to these emigrants is, I believe, to be attributed our second invasion of small pox, which is now very extensively diffused. I think I must have told you, that we owed its first appearance of late years in this colony to the Lily, brig of war, bringing the negroes of a captured slaver, among whom the disease was making great ravages. Careless communication, arising from a very ineffective police, brought it on shore; this was in 1841. After killing a good number, and scarring many more, it disappeared for a year and a half.

When the small pox first appeared amongst us, there was no vaccine lymph in the island, but a successful supply was shortly afterwards obtained, and it has never since been wanting. There are stringent laws compelling infant vaccination, but the adults, negroes, natives of Madagascar, and Indians, are, I fancy, free to indulge their own views with regard to seeking security from vaccination. They tell me there have been second admissions of small pox at the hospital here, but I have not been able to verify the fact by examining the reports from our Small Pox Hospital.

Varicella is prevalent; it has attacked two of my men lately while in hospital. Do you find that chicken pox is particularly prevalent when small pox rages?

There has been but one soldier attacked with small pox since its first introduction from the Lily: this was a man of the 35th Regiment. The case was a very slight one, but I had a fatal case in a girl, aged 17, living away from the Regiment at a signal tower, in the enclosure of which were the crews of some Indian boats belonging to the port, who were among the first attacked, and who had it very severely. My patient had a very good scar on the arm, and had been vaccinated in infancy, while her father was serving in the 29th Regiment.

We, of course, look a good deal after our vaccination. I have scarcely ever succeeded in raising a vesicle on an adult arm, whether the cicatrices

were doubtful, or discernible. This surprises me, after reading the result of vaccination in the Prussian army some years back, which appears to have had great success.

Are you aware of any conclusions considered satisfactory with respect to the extent of the contagious atmosphere around the sick, either in rooms well ventilated, or in closed apartments, where the contagion may be considered as highly concentrated? I have heard some French medical men talk largely of the distance to which it may be transmitted. I combatted their opinion, but had no satisfactory data to offer. Dr. McKinnis, in his book "On the Small Pox in Ceylon," quotes from a French writer.

I hope we shall soon have some satisfactory statements with respect to the small pox raging here, as the Governor has desired all the practitioners in the island to give in returns specifying the numbers and races of the coloured population attacked. The rule here is to allow persons to be attended at their houses on the certificate of a medical practitioner, that the case admits of proper separation from the family, and that he himself undertakes the treatment. All other cases are supposed to be sent to the hospital. I fear very little care is taken to prevent the communication of disease through the medium of infected articles, such as clothes and bedding. In a country like this, which may almost be said to have no villages, with a scattered population daily increasing, of enfranchised blacks, living on mountain sides, and in small clearings through distant glens, we have need of laws as strong as those against plague, to prevent the march of small pox, when once fairly introduced amongst us. When you write let me know at what period may the convalescent be sent among the clean without fear, after perfect desquamation, if purified by a hot bath?

Your sincere friend,

T. COTTON.

To Dr. George Gregory, London.

PROGRESS OF FRENCH SCIENCE

FROM OUR OWN CORRESPONDENT.

Paris, March 20th., 1845.

§ On Accidental Contraction of the Limbs. By Dr. Morel Lavallée. Former Interne and Laureat of the Hospitals, Paris, Member of the Anatomical Society, &c. (1)—Contractions of the limbs are of two kinds—congenital, or those which take place during the intra-uterine life of the fœtus, and those which occur after birth, either from normal contraction of the muscular tissue, or from abnormal contraction, the result of cicatrization or other causes. Contractions of the limbs occurring after birth, will be solely treated in this memoir.

All the varieties of contraction, rigorously speaking, might be studied separately, but, though they present real differences, their analogy is very great. Thus they resemble each other in their causes, their seat, their symptoms, so much so, that it is impossible to confound them with any other affection. Again, if the prognosis differs in some cases, in many it is absolutely identical: finally, the treatment is precisely the same in all. These varieties, without complicating the subject, or making it more abstruse, may therefore be described simultaneously. Moreover, one species is often complicated with another, and this is, perhaps, an additional reason why they ought not to be studied apart.

1. CAUSES.—As contraction itself is but a symptom, not a disease, in enumerating the causes we must necessarily pass in review the different pathological conditions which give rise to it, by their influence:—1°. On the muscles.—2°. On the normal fibrous tissue.—3°. On the abnormal fibrous tissue.

1°. On the Muscles.—A muscular contraction is frequently produced, especially in childhood, by an affection of the nervous centres. This fact was

established beyond a doubt by Delpech, for if Mery, Morgagni, and other authors before him, attributed certain deformities to contraction of the muscles, he was the first who accurately traced them to the proper source. "When a nerve, or its principal branches are irritated, the excitation may be propagated to all the muscles to which they are distributed, so as to cause them to contract permanently, and to such an extent, as to change the form by changing the connection and direction of the bones." "What happens in the limbs, must, under similar circumstances, likewise take place in the trunk, because not only have diseases of the nerves the same influence on the muscles of the trunk as on those of the limbs to which the nerves are distributed, but also those of the medulla at their origin." (2)

The distinguished surgeon of Montpellier repeatedly alludes to this doctrine, and quotes in its support numerous clinical facts. Sometimes, shortening of the muscles is the direct effect of lesion of the nerves, which produces a contraction of certain muscles, causing them to predominate over their antagonists; at other times, the action is indirect: thus, instead of morbidly invigorating the affected muscles, diseases of the encephalon paralyse the antagonists, and deformity is contracted, as it were, by indirect means. The author has just witnessed, with Professor Velpeau, a case of this kind, in a child from Orleans, in whom—after the disappearance of the rash in measles—the nervous centres became affected in an extraordinary manner, producing a paralysis of the *flexors* of the right foot, and subsequently contraction of the *extensors*. The foot presents now that appearance of most unmanageable deformity to which the name of *pie-d-equin* has been applied.

Lesions of nerves, like those of the encephalon, exercise direct or indirect influence on the production of muscular contraction. The increase of nervous power caused by the local irritation of the nerve, is transmitted to the muscles which it supplies, and contraction is the consequence. Delpech relates a case of this description, which is too extraordinary to be omitted:—"A young lady, ætat. 24, of strong constitution, had always enjoyed good health until she became affected with an abscess at the inferior and internal portion of the left thigh. A foolish fear of the impossibility of obliterating the cavity of the abscess induced her medical attendant to inject it several times with the *balsamm viride* (3), a portion of which remained within the cavity after each injection. These injections caused so violent an inflammation, that several parts of the internal surface of the femur became affected with necrosis. The process of exfoliation—frequently checked by remedies unseasonably employed—was long, and accompanied by serious accidents. Several abscesses formed on the inside of the thigh, which extended as high as the pelvis, near the foramen ovale and the crural arch. These abscesses were not discovered, and therefore were not opened, until a late stage, a circumstance which produced considerable danger. During this tedious disease, which lasted for three years, the muscles of the posterior part of the leg were sympathetically affected; or rather because the crural nerve participated in the frequent and deep-seated inflammations of the internal portion of the thigh. They became in consequence so contracted, that the foot was drawn downwards and inwards, and presented an example of complete varus. The patient, during the whole illness, did not put her foot on the ground; no pressure had been made on the parts, and yet the deformity was highly developed by the contraction of the muscles. The young lady herself observed the progress of the deformity, which seemed to increase or diminish in a direct ratio with the pain in the thigh; the augmentation was always considerable, and the diminution which took place during the few

(2) Delpech Orthomorphie. Vol. I., p. 83 and 83.

(3) *Balsamm viride*, baume vert de Metz, a solution of arago, and sulphur zinc, in fixed oils; to the solution is added turpentine, aloes, and essential oils of juniper and cloves.

(1) This memoir, for which I am indebted to the kindness of the author, now appears for the first time, and will be published entire in a series of articles.—(G. A. B.)

short moments of relief was insufficient to procure any beneficial result. This affection, which the medical attendant never dreamt of combating—and which, had he done so, would probably have yielded only with the disease which had produced it—became highly developed: the sole of the foot was completely turned inwards by a rotation of the part on its antero-posterior axis; the extension was carried to the greatest possible pitch, and the tip of the toes was very low; finally, there existed with these deformities a deviation of the foot inwards, and a curve of its inner edge. The former was such that there were several large wrinkles and a deep furrow on the sole of the foot, separating the two edges, and extending from the heel to the tip of the toes. As to the latter, I never," says Delpech, "saw it carried to such an extent, and to give an idea of it, it may be asserted that the heel and the tip of the toes were not more than three inches distant from each other. In this position the malleolus externus was completely bare, and very prominent; the heel turned inwards and upwards, was kept firmly fixed in this position by a considerable tension of the tendon Achilles, which was itself turned inward; and the toes, especially the great toe, were inclined downwards and inwards somewhat less than the rest of the foot, and seemed slightly extended. The cure was obtained by mechanical means" (4).

There exists in this case a curious affinity, which appears to have escaped the attention of the author and of M. Bonnet (5), viz., the contraction of the muscles situated on the posterior part of the leg, caused by the participation of the *crural nerve* in the inflammation of the thigh. The internal popliteal nerve, irritated at its origin, produced the retraction of the muscles which it supplied, and the abolition of nervous influence had the same effect in its antagonist. This is not a theoretical view, founded on analogy, but is established on a principle clinically demonstrated, as the following case is a proof: A soldier was shot from behind through the lower part of the right thigh, which caused paralysis of the peronæi, the tibialis anticus, and the extensor longus digitorum pedis. The other muscles to which the internal popliteal nerve was distributed, caused the foot to turn inwards. Thus, by the division of the external popliteal, muscular contraction was produced by an excess of power of the internal popliteal nerve. This case clearly explains the precise mode by which the contraction was produced in Delpech's case, and both tend to prove the exact mechanism of muscular contraction.

The same law of antagonism is applicable to divisions of muscles or their tendons. Thus after a muscular wound with loss of substance, does not the close union of the two edges of the muscles directly produce a shortening of it, in the same way as a section of its antagonist would indirectly cause it, that is, if no abnormal adherences existed so as to prevent the extremities of the muscle from being separated in its fascia? Dupuytren quotes facts in support of the two opinions; thus he observed a retraction of the fingers after a wound with loss of substance, of the anterior muscles of the fore-arm; and permanent flexion of the ring finger from a traumatic division of its extensor muscle. It is true, that in the first case, another cause—long continued irritation—might have acted as well as the loss of substance, but such was not mentioned.

Having thus enumerated all the remote causes, there remains now to be studied those which act on the tissue, the seat of the lesions; when the immediate causes of the retraction of the muscles and normal fibrous tissue will be examined simultaneously.

2°. *Muscles and Normal Fibrous Tissue.*—The causes which act locally on these organs may be comprised under the two following heads:—*irritation* and *faulty position*, both not only existing separately, but also frequently together.

The irritation productive of muscular contraction, may be produced by various causes, or otherwise how can we account for the permanent flexion of the fingers, which often arises after the

application of a very tight bandage, as in the case of fracture of the elbow observed by Dr. Doubrovitski on himself, and in one of fracture of the clavicle related by Larrey? In the former, the contraction took place in a very extraordinary manner. On the removal of the apparatus the fingers were in their natural position, and the contraction did not take place until the swollen state of the limb had disappeared: as if the muscles—mechanically kept in their places by the engorged condition of the indurated cellular tissue—contracted as soon as they were no longer submitted to the influence of this cause. But it is principally in certain parts of the fibrous system that this effect of constant pressure is manifest, and it is generally the cause of retraction of the palmar aponeurosis; it is almost always complicated with a faulty position, but in taking into account the influence of these two causes, cases are found in which, if the former cause does not act alone, at least its power is far greater than that of the latter. Is not this the case with workmen who hold firmly the instruments with which they accomplish their arduous labour, with sailors in rowing, with ploughmen, with coopers, and with smiths in filing? Violent and sudden pressure may likewise be followed by lesions similar to those produced by pressure less energetic but more permanent. The author saw in the wards of Dr. Jobert de Lamballe an old soldier, who attributed fibrous contraction of the ring finger of the right hand to a cause of this kind. During the war at Algiers, while climbing a redoubt, he slipped and remained suspended by the right hand, which suffered considerably from the effort he was obliged to make. Gradually contraction manifested itself.

In wounds, contraction may be produced by inflammation propagating itself to the neighbouring muscular and fibrous tissues, or primitively developing itself in those parts. Cases of this kind have already been quoted. Professor Gerdy remarks, that contraction may be consecutive to a diffused phlegmon: to this distinguished practitioner we are indebted for the first fact of contraction of an aponeurosis produced by a phlegmasia.

Paracentesis of the Thorax.—The following cases of paracentesis thoracis in chronic pleuritis were performed in the wards of Professor Trousseau, at the Hospital Necker. The one was followed by a cure, the other by death, though the fatal termination in the latter ought perhaps to be attributed to the state of the patient rather than to the operation.—Case 1st. Lucile Molin, ætat. 15, of healthy parents, had never menstruated, but had always enjoyed good health until she was attacked with erysipelas of the face, for which she entered the hospital; this yielded to the usual remedies. When convalescent, she was seized with varioloides, went through it without accident, and left the hospital on the 10th of December, quite well. On the 1st of January, she was attacked with pain in the left side of the thorax, along with violent palpitations; a week, or ten days after, she began to cough and experienced considerable dyspnoea whenever she walked or went up stairs. On the 19th of January she was forced to keep her bed, and as the dyspnoea and cough continued to increase, she came into the hospital for the second time on the 26th of January. On examination next day, the following symptoms were observed:—

Her face was pale, and worn; her pulse was 136, weak, and compressible; she had frequent cough, with frothy expectoration: percussion on the left side of the chest, elicited a dull sound up to the clavicle; this side was also visibly dilated; along with these symptoms, high fever existed. On her admission, a purgative was administered. January 28th.—On examination to-day, the clavicle was pushed upwards, and outwards; the dullness had increased; and the heart was felt pulsating immediately under, and somewhat inside of, the right breast. The spleen was pushed downwards, its upper edge being on a level with the last false rib, while its lower edge nearly rested upon the spine of the ilium. The tongue was moist, its apex red, and its posterior portion coated thickly with a white fur, the skin was dry, and the urine scanty. The purgative which had been prescribed on her admission had produced several serous

stools. 29th—tapping was performed to day with the customary precautions. Whether the motion of the little patient, or the neglect of pressure on the abdominal parietes was the cause, the liquid escaped at first with difficulty; but soon after on having recourse to pressure, and on requesting the patient to expire, the liquid flowed out with impetuosity, and about 56½ ozs. of dark, urinous serum escaped, which after a short time was partly converted into a fibrinous gelatiniform mass. The heart immediately after the operation returned to its normal position, and the dilated lungs filled all the anterior portion of the thorax, the dullness disappeared, and the respiratory murmur became audible. An hour after, on auscultating the posterior portion of the chest, a sub-crepitant *râle* was heard from the apex of the left lung to somewhat below the scapulum; lower down, the dullness was complete as before the operation.—30th—Since being tapped, the patient has been easy, and has slept well. The cough, however, continues; it is moist, and unattended with expectoration, because Lucile, like very young children, did not know how to get rid of the sputa. She has, now, no fever, no dyspnoea, no nausea; she is thirsty, and her pulse beats 120. The secretion of urine is regular; the respiratory murmur at the apex of the left lung, and for the space of one and half inch below the left clavicle, is puerile; it is, however, lost over the entire anterior left side of the chest with the above exception. Posteriorly, the dullness is universal, as low down as the inferior margin of the scapulum, where a very feeble respiratory murmur, blended with ægophony, is heard.

R. Fol. Digital. Purpur. gr. ij.; Aquæ bullientis ðij.; fiat infusum, pro potu ordinario sumendum.

She is to have for diet, two cups of milk.

31st.—She has now, no dyspnoea, the cough is more severe; her skin is hot, and the urinary secretion is natural. In other respects, she continues the same as yesterday.

R. Venæsectio ad ʒv.

1st Feb.—The coagulum of yesterday is not very resistant; the cough is somewhat more intense; no dyspnoea; the skin is warm; the pulse stronger and more frequent; the sound on percussion is not so dull at the parts corresponding anteriorly and posteriorly to the apex of the left lung; and on making the patient draw in a long breath, a slight sub-crepitant rhonchus is heard. Repet. venæsectio ad ʒviij. et infus. digit. 2nd.—The coagulum, surrounded by a certain quantity of serosity, does not present the buffy coat as yesterday, and is firmer. 3rd.—The sound on percussion is quite clear anteriorly, and much more so posteriorly, than on the former days; the respiratory murmur is heard posteriorly at the summit of the lungs; and ægophony very loudly below the spine of the scapulum; the thirst is less; and she has some appetite. Continue the infusion and the three cups of milk. It is unnecessary to particularise the improvement which now took place from day to day. Suffice it to mention that on the 9th of February, Lucile was able to leave her bed, and in a few weeks afterwards, in good health and spirits, bade adieu to the Necker hospital.

Case 2nd.—Euphrasia Bonnaire, ætat. 54, servant, on the 9th Nov., 1844, came to the hospital on account of some rheumatic pains in the limbs, for which vapour baths were prescribed. On the 26th Nov., while coming from the bath, she exposed herself to a cold draught, and was seized with acute pleuritis, which, as it presented nothing uncommon, was treated by antiphlogistics, combined with calomel, digitalis, and blistering. A month after, as the fever still persisted, and as the effusion increased so as to reach anteriorly the clavicle and posteriorly the superior fossa of the scapulum, three canteries were applied to the chest. In the beginning of January, the affected side was evidently dilated, and the dullness extended about an inch beyond the median line, the heart was pushed to the left more than usual, and the liver protruded beyond the edge of the false ribs. It is necessary to state that the patient had been, for several years affected with cancer of the right breast. Notwithstanding the quantity of

(4) Delpech loc. cit. vol. i. p. 78.

(5) *Traité des Sections tendineuses*, Paris, 1842.

liquid effusion, the patient during the day breathed freely; towards evening, however, she was affected with orthopnea, cough and mucous expectoration; she had fever; her face was wan and puffed; the thoracic parietes were infiltrated; and she could not lie but on the right side. 24th Jan.—Paracentesis was performed and about 60 ozs. of a limpid, reddish, and somewhat bloody serum was withdrawn. During the operation the patient was requested to make an effort, and the abdomen was forcibly compressed; when the serum ceased to flow, the trocar was removed, and the wound closed with a bit of court plaister. 25th.—Respiration was easier; the face and neck were less puffed up; the dulness extends about 4 lines beyond the median line; respiration is bronchial. R. Vin. alb. Gall. $\frac{3}{4}$ iiss., potas. acet. $\frac{3}{4}$ ss. M. ft. haust. 26th.—Position satisfactory; she had slept all night. Contin. med. 27th.—She was prevented from sleeping by rheumatic pains in the right thigh; her pulse is not so frequent; the urine is more abundant; contin. med. 28th.—By careful percussion the effusion was found to have decreased about two lines anteriorly; the patient could now repose on her back; contin. med. 29th.—She passed a tolerable night, though coughing a good deal; the serum is copious, and the pleuritic effusion appears to have increased about four lines. R. Vin. alb. Gallie. $\frac{3}{4}$ iiss., potas. acet. $\frac{3}{4}$ i. M. ft. haust. From this date up to December the 12th the patient continued to improve slowly, when she was attacked by erysipelas on the side which had been tapped, and the occurrence of which was ascribed by her medical attendants to the irritation caused by the caustic issues, established prior to the operation of tapping the chest. For the cure of this dangerous disease, she was ordered the following mixture: R. Mucilag. gum Arabic, $\frac{3}{4}$ iiss., aq. distillatæ melissæ officin. $\frac{3}{4}$ ii., aq. distillatæ florum aurantii $\frac{3}{4}$ ij., syrupi Ætheris et syrupi cinchonæ, aa $\frac{3}{4}$ v. M. Two days after the attack of erysipelas, the thoracic effusion, and the symptoms dependent upon it, increased to such a degree that a repetition of tapping became necessary, and was performed. A considerable quantity—59½ ounces—of brownish serum was evacuated. The operation produced some alleviation of the patient's distress, which unfortunately was not permanent, as, notwithstanding all that could be suggested for her relief, she died on the 15th. *Section cadaveris*, forty-eight hours after death. The right side of the chest was much smaller than the left, and contained a quantity of reddish serum, similar to that drawn off, but no false membranes. All the surface of the pleura was covered by a soft layer of a yellowish-grey colour, somewhat similar to that of the sloughs in hospital gangrene. The pleura was smooth, except at its upper and anterior portion, where several red, hard, fleshy excrescences existed, whose volume varied from that of a pin's head to a millet seed, with here and there several roundish or hemispherical masses, formed exteriorly by a whitish, and interiorly by a soft reddish, tissue, presenting some analogy to encephaloides. These masses were prominent in the interior of the pleural cavity, adhering feebly to that membrane, and were covered by the layers just mentioned. The lung flattened on the vertebral column was healthy, but was kept *in situ* by no pseudo-membrane; it was about four inches distant from the thoracic parietes, and yet bronchophony and bronchial respiration could be heard.—*Liver*: On its surface, and penetrating somewhat into its interior, was found an encephaloid tumour, of the size of an almond, red in its centre, and of a yellowish-white colour externally, and presenting some similarity with the small tumours in the pleura. Some smaller ones here and there were perceived through this viscus.—*Uterus* presented nothing abnormal. The right breast was completely atrophied by a cancerous tumour, which adhered to the aponeurosis of the pectoralis. This muscle and the intercostals were quite healthy. The heart was somewhat hypertrophied. The spots corresponding to where the trocar had penetrated, were not more inflamed than the surrounding parts.

Academy of Sciences.—Sitting of the 17th. March.—M. Elie de Beaumont in the Chair. The Academy named the members of two committees for the

Prix des Sciences Physiques. The first was composed of MM. Flourens, Serres, Milne Edwards, De Blainville, and Velpeau,—the second of MM. Dumas, Reynault, Pelouze, Desprez, and Gay Lussac.

Received.—“Mechanics of Fluids, for Practical Men; comprizing hydrostatics, descriptive, and constructive, the whole illustrated by numerous examples, and appropriate diagrams. By Al. Jamieson, Esq., L.L.D.” Presented by the author, who, at the same time, drew the attention of the Academy to his “Short Notice on the Mechanical Properties of Porter's Patent Anchor;” to a model of the same, and a small work, containing certificates as to the excellence of that instrument. “Lesueur's Philosophy, or the Pantomimic System of the Universe, Book the first.” “Journal of the Royal Geographical Society, London, vol. xiii., 1844, Part 2.” D. Brewster, Esq., addressed the following letter to M. Arago, from St. Leonard's College, St. Andrews. “I have now completed nearly four years' observation on the polarization of the atmosphere, and have determined all the principal elements for obtaining the curves of equal polarization. I have not yet taken the results *per accurate* means, but the following approximate ones may interest you. Distance of Arago's neutral point from the anti-solar point, or the point opposite the sun; the neutral point being in the horizon $11\frac{1}{2}^{\circ}$. Distance of do. do. from do. at sunset, $18\frac{1}{2}^{\circ}$. Distance of do. do. from do. at the termination of twilight, 25° . Distance of Babinet's neutral point (above the sun) from the sun, at great altitudes, 6° or 7° , increasing to $18\frac{1}{2}^{\circ}$ at sunset. Distance of Brewster's neutral point (below the sun) from the sun, at great altitudes, 7° or 8° , increasing to 16° or 18° when the neutral point is in the horizon. This last observation, when the sun is near the horizon, is very difficult to make. I have discovered a secondary neutral point, accompanying Arago's in particular states of the horizon. It rises after the primary neutral point, and the polarization between the two points is negative. There must necessarily be, from the same cause, a secondary neutral point, connected with the neutral points, which you and I discovered, but, owing to their proximity to the sun, I have no hope of being able to observe them in this climate. My memoir on this subject, will, I trust, be printed in an early vol. of the Trans. of the Royal Irish Academy.”

On the Condition of the Circulatory Apparatus in Mollusca. By Messrs. Milne Edwards, and Valenciennes; read by the former.—Hitherto zoologists thought that the circulation of the blood took place in the mollusca as in man, by a complete vascular system, and that this nourishing liquid, after having been distributed in all parts of the body by means of the arteries, returns to the respiratory organs, and then to the heart, through the medium of membranous tubes, similar to the veins of vertebrated animals. But the observations published by one of the authors, (6) tend to prove, that this opinion is erroneous, and that in the mollusca, as well as in the crustacea, a considerable portion of the circulatory system is formed by irregular spaces which exist between the different organs. It has been ascertained, that in a certain number of mollusca, of the class of gasteropodes, as well as acephaloi and tunicatæ, that the canals which perform the functions of the veins, open in the abdominal cavity, so that their blood is in contact with the principal viscera, and that the whole venous system may be filled by injecting a liquid into the abdominal cavity. Desirous of elucidating this question as much as possible, the authors performed a series of experiments and dissections, first, on the living mollusca, sent from the different sea-port towns. But they were very soon able to extend their investigations much more on finding that the mollusca, placed in an appropriate liquid, were in no wise altered. Upwards of fifty preparations were thus obtained of which about twenty were laid before the Academy. From these researches the authors conclude that let the class, the genus, or the species be what it may, the circu-

latory apparatus is more or less imperfect—that a portion more or less considerable of the venous system is formed by irregular spaces alone—that a direct communication exists between the venous system and the abdominal cavity—that the circulation in the mollusca, as well as in the crustacea and arachnideæ, is performed partly by vessels and partly by hiatus—that if we wish to express by general formulæ all the facts already demonstrated, it may be said, that in all cold-blooded animals, the blood is not contained in a complete vascular apparatus, but circulates more or less rapidly in a species of cavities formed wholly or in part by the openings left between the organs.

On the Action of Intense Cold on Various Substances:—By Messrs. Donnay and Mariska, presented by Professor Dumas.—From their researches the authors conclude—that when powdered antimony is thrown into chlorine gas at 148° F., or 166° F. a great deal of caloric and light is developed, but this no longer takes place if the antimony was previously cooled, or if the chlorine was made to pass on the metal surrounded with solid carbonic acid—that when arsenic or phosphorus are employed, the reaction takes place—that monohydrated sulphuric acid crystallizes at 65° F. but if water be added so as to reduce its density to $0^{\circ}01$, or $0^{\circ}02$, it does not solidify entirely, but under the most intense cold remains viscous. In this state, though it wets the bodies it touches, yet it no longer reddens litmus paper, and has no action on the alkalies or alkaline carbonates, on the ioduret or the chlorate of potass—that potassium and sodium retain their metallic lustre in chlorine gas at 140° F. The authors, in concluding, state, that the solidification of the oxydes of azote and of ammonia, and other gases announced by M. Faraday, were long since performed by them, and that they are now occupied in seeking to obtain the liquefaction of fixed gases.

On the Elementary Nature of Ozon and the Composition of Azote.—By M. Marignac, presented by Professor Dumas. The researches of the author lead him to conclude that the hypothesis of M. Schonbein is erroneous—1^o that the production of ozone when water is decomposed by the pile, and its formation when phosphorus is placed in contact with oxygen and hydrogen, prove that azote has no influence in the production of this phenomenon—2^o that evidently it ought to be attributed to oxygen alone, or to a peculiar compound of oxygen and hydrogen—finally, that future experiments alone can decide this question.

On a Carbonate of Potass and Soda.—By M. Marguerette, presented by M. Pelouze.—This salt, obtained during the fabrication of prussiate of potass, is very soluble in cold and hot water, produces beautiful crystals which absorb a considerable proportion of water, and dissolve in 104° F. in their water of crystallization. These effloresce instantaneously *in vacuo*, but very little, if at all, in the open air. Thus the respective properties of the two carbonates are in perfect though uncertain equilibrium, since the least diminution in the atmospheric pressure destroys it. Formula: 2Na O. C O_2 , K O. C O_2 , $18 \text{H O} = 2 \text{Na O. C O}_2$, 8H O , K O. C O_2 , 2H O , or 2 eq. of carbonate of soda, and 8 eq. of water; 1 eq. carbonate of potass, and 2 eq. water.

On the Dangers attendant on the Use of Arseniferous Sulphuric Acid, and the Best Means of Purifying it, by M. Dupasquier; presented by M. Pelouze.—The author, after relating the accidents caused by this acid, states, that the arsenic contained in it, is in the state of arsenic acid, and that the best means of purifying it is by employing the sulphuret of barium.

On the supposed Influence of Climates in the production of Cataract, and on the Harmlessness of the Reverberation of Light on the Refractive Media of the Eye. By Dr. Furnari.—The conclusions of this memoir are, 1st, that contrary to the opinion generally received, the prolonged action of a tropical sun, and the reflection of its rays from hot and sandy ground, has no effect on the crystalline lens. 2nd. That the few cases of cataract observed in hot climates, and attributed to the influence of a bright light, are produced by the lesions of the lens caused by intense, neglected, or severe ophthalmia. 3rd. That the frequency of

(6) Mr. Milne Edwards. V. *Moniteur*, 17th Nov., 1844; and *Compte Rendus*, sitting of the 3rd February.

cataract in cold climates is owing rather to the customs and mode of living of the population, than to the influence of the climate and the direct action of a bright light. Thus the most frequent and direct causes of cataract are, the immoderate use of alcoholic liquors, age, traumatic lesions, professions which predispose to cerebral congestions, or which oblige the individual to work on very minute objects, with an artificial light, or before a blazing fire.

Dr. Pariset read a report on a memoir of Mr. Stevens on the perforation of the bones of the palate, and the means of remedying it.—Conclusions—approbation—adopted.

Academy of Medicine. Sitting of the 18th March.—M. Caventon in the chair. M. Lassaigue addressed a memoir, containing his chemical analysis of the membraniform morbid production in the contagious pneumonia of cows. M. Dupuy remarked, that a similar analysis, tending to a similar result, had already been published in the *Journal de Pharmacie*. Dr. Pariset read the speech delivered at the funeral of Dr. Olivier d'Angers.

On an Apparatus destined to replace Pessaries. By M. Bergeron.—Dr. Villeneuve read a report on this memoir. This apparatus, destined to replace the pessary in cases of prolapsus uteri, is composed of a bandage, to which is attached a metallic rod, bent so as to accommodate itself to the parts, and terminated by a small cup-like extremity, destined to receive the neck of the uterus. The reporter witnessed several cases in which it proved successful, and consequently considered himself justified in concluding that this apparatus was superior to those hitherto invented. Dr. Nacquart considered this apparatus very like one presented some years ago, and found to be very faulty, and that the praises given by the Academy might be employed to further mercantile views. Professor Velpeau remarked that analogous instruments had been already described; and that the present had the usual inconvenience of being a foreign body; moreover a bandage was needed, and this was not always without danger. It might however be useful when the prolapsus was considerable, or the parts very large; but when the prolapsus was slight, and accompanied with anteversio or retroversio, it was useless if not dangerous, and he considered the ordinary pessaries preferable. Dr. Nacquart insisted upon less praises being contained in the conclusions. Dr. Villeneuve stated that this apparatus was in no respect analogous to that alluded to by Dr. Nacquart. As to the report, facts were simply stated, showing the utility of the apparatus, leaving to the judgment of the practitioner the circumstances in which it ought or ought not to be had recourse to. Professor Dubois: The chief advantages of this apparatus were to keep the prolapsus reduced, and to allow of the instrument being easily removed and changed. As to the usual pessaries in inclined uterus, or anteversio or retroversio of that organ, he confessed he had but little confidence in them, as it was almost impossible to replace the uterus in its natural position, on account of the abnormal adherences which it contracted with the neighbouring parts. Professor Moreau coincided in opinion with Professor Dubois, and thought it impossible to assert—from the few facts announced—that this method was better than its predecessors. It had been repeatedly seen that a prolapsus, apparently cured, had relapsed. The new apparatus was just the same as a foreign body between the labia, producing chronic inflammation by constant friction, increasing the difficulty in cases of anteversio and retroversio in raising the organ. Nor was the idea new, since it was mentioned in Beauhin. Professor Gerdy, after detailing the inconveniences caused by pessaries, such as difficulty of standing, sitting, moving about, concluded by giving the preference to the old pessaries; and that we should seek to render them more perfect, not to invent new ones. Professor Cloquet stated that he had employed various kinds of pessaries. In one case he had had a bandage made so as to surround the body just around the hips, and from a plate placed on the sacrum a *tige* descended, passed over the anus, so as to support the pessary; the result was, that his patient suffered no inconvenience whatever. Dr. Nacquart proposed send-

ing the report back to the committee, in order to have the conclusions modified. This proposition, put to the vote, was rejected. Dr. Villeneuve consented to the proposed alterations. Professor Berard, as a member of the committee, refused his consent to any modification in the conclusions, as he had witnessed several successful cases, one especially of a lady, who had been relieved by this invention when all other pessaries had failed, and this occurred eight years ago. Professor Roux preferred the old pessary. After some further remarks from Professor P. Dubois, Drs. Nacquart and Capuron, Professor Gerdy proposed the following conclusion: "From the facts observed, the committee is of opinion that the apparatus is, in most cases, more efficacious and more convenient than those hitherto employed." Adopted.

GARLAND DE BEAUMONT, D.M.P.L., & S., &c.
Honorary Physician to the Spanish Embassy.

PROGRESS OF GERMAN MEDICAL SCIENCE.

By SIGISMUND SUTRO, M. D.

Peripheric Spleens.—In dissections of animals which had been performed twelve months after the extirpation of the spleen, the writer of this paper found all the meseraic glands swollen, and of a blue or blackish colour. This appearance induced the writer to consider the spleen as a large lymphatic gland, which he denominated, the placento-lymphatic matrix of the meseraic glands. Experiments which he performed on the reproduction of the spleen, confirmed him in this opinion. In these experiments he found that the food upon which the animals—the subjects of his investigations—had been fed, as also their sex, produced a marked difference in the results obtained. The reproductive tendency existed most strongly in animals of the male sex, which had been fed upon an exclusively vegetable diet. In the ruminantia, an organ, about the size of a cherry, subsidiary to that extirpated, was found to have been reproduced, after a lapse of somewhat more than twelve months. In ducks and hens, an organ fully as large as the natural spleen, was reproduced in ten months. The origin and mode of formation of this subsidiary organ is as follows. After some time, the small lymphatic glandules, in the neighbourhood of that portion of the *arteria lienalis* on which the ligature had been applied, were found to be studded with bloody *puncta*, which gradually acquired size, and finally were developed into a net work of capillary vessels. By the aggregation of several of these glandules, the new organ, supplementary to that which had been extirpated, is at length formed. These *glandule* exist in great numbers, in healthy animals, and also in man. Their diameter varies from that of half a line to four lines. Their colour, as has been said, varies from a blood red to a blackish colour, and their texture is analogous to that of the spleen and Malpighian vessels. They are most frequently found among the *ruminantia*, in the abdomen, external to the peritoneum, in the thorax, in the chest, and the writer has found them in the parotid gland. These *lienes secundarii*, are found, not only as appendices to the normal spleen, but also as an uninterrupted glandular chain, lying along the *arteria lienalis* and pancreas. The seemingly paradoxical question, "why the extirpation of the spleen produces no injurious effect upon the subject of the operation," is solved when we come to understand that these *glandule* perform the office of the spleen in the animal economy. Professor Mayer of Bonn, in *Medic. Correspond. Bl. Rhine, Aizte*.

Practical Observations on the Ferri Carb. Præcip.—This preparation, which is erroneously styled a carbonate, inasmuch as it contains no carbonic acid, was well known to the ancients, and employed by them under the name of the "*Aperitive Crocus of Mars*," against obstinate, intermittent fevers, serophula, and marasmus. In latter days it has been successfully given as a remedy to correct the cancerous diathesis, as an antidote to arsenic, and as a specific against various nervous disorders. The nervous diseases in which it

is supposed to exert a specific effect, are chorea, *saneti viti* and epilepsy.

That in chorea at least, it deserves the name of a specific, is obvious from the fact, that its beneficial effects are produced in persons of powerful muscular tonicity, equally, as in those of an opposite muscular development. Its curative effects under such circumstances cannot be fairly explained, by referring them to the generally tonic effects of chalybeate preparations. The writer of this paper has advantageously used this chalybeate in various neuralgic, chronic, uterine hæmorrhage, mucous fluxes from the urino-genital organs in both sexes, dyspepsia, obstinate intermittent fevers, chlorosis, serophula, and in the debility, consequent upon severe attacks of nervous fever. He has never seen it induce the constipation of which Kopp speaks, on the contrary, he has found it produce a different effect: in his hands, however, he has seen it cause retching, more frequently, than iron filings. When the precipitated carbonate has been taken for some days, the fæces become blackened, owing to the action of sulphuretted hydrogen, evolved by the intestines, upon the remedy. The form of exhibition which the writer deems most advantageous is that of powder, combined with sugar, or with powdered ginger or cinnamon. If, previous to its use, the tongue were found furred, indicating a disordered state of the *primæ viæ*, a dose of purgative medicine was administered. In cases where the alimentary canal was but slightly, or not at all depraved, the ferri carbonas was combined with powdered rhubarb. A proper time must also be selected for its administration. It must be taken when the stomach is partly empty two or three hours after breakfast, and after a lapse of the same space, or longer after dinner. During its use, acid or accecent food must be avoided; and persons of delicate constitution will derive very great advantage from taking, with the chalybeate, a small quantity of a generous wine, such as Malaga or Lunel. In its physiological effects, this remedy appears to operate almost analogous to sulphate of quinine. A combination of both materially increases their separate power. This fact is demonstrated very clearly in ague, that—obstinate to the usually specific powers of quinine—yields at once to the combined influence of the alkaloid and the chalybeate. The precipitated carbonate of iron, the writer thinks, should not be given in larger doses than from eight to twenty grains: and never in greater collective quantity than that of from two to three drachms a day. These small doses he thinks preferable to the larger ones that have been given in chorea, epilepsy, &c. He further states that German patients could never tolerate the enormous doses of this remedy—two to four drachms every four hours—which have been recommended by some English physicians. In the neuralgic, the writer recommends the remedy to be continued for some time after a cure has been obtained, as cases of relapse are not infrequent where the remedy has been—after a favourable termination of the disease—hastily laid aside. The paper concludes with the following case, proving the efficacy of the preparation of iron under review, in neuralgic diseases. Mr. T., a medical man, twenty-four years old, of stout, muscular conformation, was attacked in the April of his thirteenth year with a painful sensation of throbbing in the right orbit, in the course of the supra-orbital branch of the ophthalmic artery. This painful throbbing lasted from the middle of April to the same time in July, when it disappeared. Its period of diurnal attack was from eight or nine o'clock, a.m., until about noon, when it ceased, to recur on the morrow. When the sensation of throbbing had vanished, his health was perfect in every particular. This state of well-being continued during the autumn, winter, and spring, until April came again to torture him. Notwithstanding the employment of the strictest non-stimulating dietetic, and hygienic treatment,—exercise in the open air and sea-bathing—this neuralgia continued in its primal form, until Mr. T. had attained his twenty-fourth year, when it underwent some slight alleviation, which Mr. T. was inclined to attribute to laborious exercise in the open air,

and sea-bathing. The next year the pain recurred with unusual severity; when quinine—in doses of from six to ten grains twice a day; opium, belladonna, laurel water—all were unavailingly prescribed. At the recurrence of the attack in the succeeding April, Dr. Mohnike directed Mr. T. to take threetimes a day as much precipitated carbonate of iron as would cover the point of a dinner knife; he continued to take it during the whole summer; after it had been taken for five days the pain was lessened, and soon ceased altogether. He resumed the use of the iron, the succeeding April, before the usual period of the neuralgic attack; it was however unnecessary, as it never again recurred.—*Dr. Mohnike in Hufeland's Journal.*

HOSPITAL REPORTS.

ST. THOMAS'S HOSPITAL.

By Alfred A. Cherry, Esq.

Orchitis et Gonorrhoea: Alfred Ade, æt. 20, baker, a scrophulous, unhealthy-looking young man, was admitted into Job's Ward of this hospital, under the care of Mr. Green, 26th Nov., 1844.

He stated that three weeks since, he first perceived a discharge from the urethra, but unattended with scalding pain on passing his urine. Three or four days after that his testicle began to swell, and was very painful.

On admission, the testicle was swollen to a considerable extent; the cord greatly thickened, and very painful to the touch. There is also a discharge, but not so much as there has been.

His general health he says is good, but he seems of a weak sickly constitution, habits regular and temperate.

Mr. Solly stated that if mercury was exhibited in this case, his temperament was such as would induce scrophula of the testicle, and he would fear the result, he therefore ordered him—

Mist. iodin. ex dec. sarzæ bis in die, and the testicle to be strapped with empl. saponis.

30th.—The swelling of the testicle has considerably diminished in size, but the cord is more thickened and indurated. The pain and the discharge are less.

December 6th.—Better; but the enlarged cord is about the same.

21st.—The strapping has been left off for a few days, and the swelling and pain have returned in the same degree as before. The epididymis and cord are much enlarged. Three or four hours after the re-application of the strapping the swelling very materially decreased.

February 15th.—The same treatment was persevered in up to this time, when, as there was no swelling or enlargement of the testicle, and the discharge having ceased, he was presented cured.

THE LATE PROFESSOR DANIELL.

In our number of last week, we announced the sudden death of this distinguished philosopher, and we promised our readers a sketch of his life, and writings. His death, as they are already well aware, took place on the afternoon of Thursday, March 14th., under the most distressing circumstances. The deceased had delivered his usual lecture at King's College, which he brought to a conclusion a little before the usual time, that he might attend a meeting of the Council of the Royal Society. It appears that he had just finished some observations on a subject in which he took a lively interest, when he was observed to lean back in his chair, and to breathe hard. Mr. Bowman, the Assistant Surgeon of King's College, who was present at the time, was the first to observe that he had been seized with a fit. He was soon surrounded by several medical men, who happened to be present, and no time was lost in administering relief. The jugular vein was opened, and a small quantity of blood was taken

away, but he rapidly sank, and died in less than five minutes from the first seizure. An inquest was held on the evening of the same day, when a verdict of death by apoplexy, was returned, on the strength of the evidence of Mr. Bowman, and Professor Owen. An examination of the body, performed on the following day, fully confirmed the opinion given at the inquest, by showing that the death had resulted from simple apoplexy. It was stated at the inquest that the deceased was a remarkably temperate man, and that for the last two or three years he had touched neither wine nor spirits. He had generally enjoyed good health, which, a few years' since, was interrupted by an attack of a somewhat rare disease—bronchial polypus—but, on the very day of his death, he seemed to be in the enjoyment of the most perfect health. The funeral took place at Norwood, on the Monday following the decease, and was attended by his colleagues of the medical department, and by the professors. The principal of the College was also present, and a large number of students offered their last token of respect to their departed teacher. We are informed that a subscription has been set on foot, to place within the walls of the King's College a bust, or other fitting memorial of the estimation in which the late Professor was held by all those who had the pleasure of his acquaintance, or held him in respect as a man of science.

The following sketch of Professor Daniell's life, and scientific labours, was published in the *Illustrated London News* of last week, evidently from the pen of one who was well acquainted with the subject of it, as well as with his labours in the cause of science.

"Professor Daniell was not originally educated for scientific pursuits, but entered into business as a sugar-refiner. His fondness for scientific investigations, however, was manifested from boyhood; and he used frequently to amuse his young friends, when a lad, by exhibiting to them some of the wonders of pneumatic chemistry, which had then been recently made known to the world, in that burst of chemical discovery which shed lustre on the names of Black, Cavendish, Lavoisier, Priestley, and Scheele. His inclination soon led him to relinquish the business in which he was engaged, and during his leisure time he devoted himself actively to the study of Meteorology, and he contributed to the "Quarterly Journal of Science and Art" several valuable papers on subjects connected with this science. We may particularly specify one, which was published in 1820, on a new hygrometer—still the only accurate means we possess of at once determining the amount of moisture present in the atmosphere. In 1823, appeared his great work, entitled "Meteorological Essays," which was followed, in 1824, by an important "Essay on Artificial Climate," published in the "Transactions of the Horticultural Society;" for this he received the Silver Medal of the Society. This is not the place for us to dilate upon the practical importance of this Essay. The opinion of Dr. Lindley on its merits, in completely revolutionizing the methods of horticulture till then adopted, may be seen in an article contained in the *Gardener's Chronicle* for the 1st of March of the present year. He continued to publish various papers on subjects connected both with chemistry and meteorology; and in 1827 the second edition of his *Meteorological Essays* made its appearance, much enlarged. On the foundation of King's College, he was appointed Professor of Chemistry in that Institution; and the duties of this post he discharged up to the day of his death, as not half an hour before the fatal event occurred he had been engaged in delivering a lecture to his class. In 1830 and 1831 he published a description of his Pyrometer, for measuring the heats of furnaces, the expansion and melting points of metals, &c. For this simple, and perfect invention, the Royal Society, in 1832, awarded him the Rumford Medal, a triennial medal left by Count Rumford to the Royal Society, to be given for the most important discovery or invention relative to the philosophy of heat or its applications, that had been made throughout the known world since the time of its adjudication.

"His attention after this was principally directed to Voltaic Electricity; in 1836, he communicated to the Royal Society a paper describing a method of obtaining continuous and powerful currents of Voltaic Electricity from his celebrated constant battery; for this most valuable addition to our resources he, in 1837, received the Copley Medal of the Royal Society—an annual medal, appropriated to the most important scientific discovery made since the last award. As this medal is open to competitors of all countries, and in all branches of science, it is the highest honour that a scientific man can receive in this kingdom.

"In 1839, appeared the first edition of his "Introduction to the Study of Chemical Philosophy;" a masterly treatise on the action of molecular forces in general, though modestly professing to give little more than a simple introduction to the discoveries of Faraday, and their applications to chemistry.

"He continued his researches in the same field till the time of his decease, publishing the results of his experiments from time to time in the *Phil. Trans.* For two of these papers, which have a most essential bearing on the general theories of Chemistry, he in 1842 received one of the Royal Medals. In 1843, the University of Oxford conferred upon him the honorary degree of D. C. L.; and in the same year he published the second edition of his "Chemical Philosophy."

"For more than thirty years he was a zealous and active member of the Royal Society, and in the year 1839 was elected to fill the honourable office of Foreign Secretary to that learned body; he further held the post of Examiner in Chemistry to the University of London since the opening of that institution.

"It is worthy of remark, as showing the extent and variety of his knowledge, and the importance of his discoveries, that he is the only individual on whom all three of the medals in the gift of the Royal Society were ever bestowed.

"He had nearly completed correcting the proof sheets of the third edition of his "Meteorological Essays" when he was cut off in his prime, having only the day before his decease attained his 55th year."

Professor Daniell, in person, was tall and portly, his features well formed, his complexion florid, and his countenance wearing an expression of frankness and good humour. You could not have found in the three kingdoms, a better personal, mental, or moral representative of John Bull. As a man of science, he was modest and unpretending, always preferring others to himself, and studiously avoiding all occasions of controversy; as a public man his character was marked by the strongest sense of duty and the strictest impartiality; to the institutions with which he was connected, he attached himself with all his heart, and laboured incessantly for their advancement; his private character was adorned with every virtue to command respect, and with every gentler quality to secure attachment. His loss will be severely felt by all who knew him. By men of science, for he had not yet abated his exertions in its cause; by his colleagues, who feel how difficult it is to supply his place; by his friends, who will not soon forget the qualities which endeared him to them; and by his family, to whom his life must have been, in every sense, so important. For them, when time shall have softened down the now vivid and painful impression of so sudden a bereavement, there will remain the reflection, that the deceased did not pass an idle or a useless life; that his name will long be held in honour; that future generations will profit by his labours; that he has left behind him an unspotted reputation; and that, though snatched away in his prime, his life was not a short one when measured by its utility. Those who knew the deceased philosopher most intimately, are aware that to all who now grieve over his loss, there are still higher and better consolations. We trust, that the Government will not lose so favourable an opportunity as that which Professor Daniell's lamented death presents, of testifying its respect for science in the persons of his numerous family. We cannot imagine a more proper case for a pension.

AMATEUR SKETCH OF LIEBIG, PREFACED BY A DESCRIPTION OF GIESSEN.

By PROF. HORSFORD, of Albany, America.

(To the Editor of the "Medical Times.")

SIR,—Having seen the accompanying sketch of the illustrious head of the Giessen University in the note book of my friend, Professor Horsford, of Albany, U. S., who is at present pursuing investigations in our laboratory, I begged him to allow me to take a copy of it for your valuable journal. Hoping that you may deem it worthy of insertion in the *Medical Times*,

I remain,

Your much obliged correspondent,

J. S. MUSPRATT, Ph.D.

Giessen University, Dec. 1st, 1844.

Giessen impresses the approaching traveller pleasantly. It is situated upon the Lahn, one of the tributaries to the Rhine; upon basaltic peaks, on either side, are the ruins of castles and towers seven or eight hundred years old. Between them, and upon the Lahn, the cultivation is carried to a high degree of perfection: orchards of fruit trees, and woods of oak, birch, and evergreen beautify the landscape, and, beside the city of Giessen, not less than ten villages are seen, across the valley and about, among the hills. The road enters the "new town," in which the Medical College, Liebig's Laboratory, and residence, and a series of beautiful edifices more nearly in the massive Tuscan style than any other, are situated. Two low stone edifices mark the entrance to the "city proper," encircling which—a distance of, I suppose, a mile and a half—is a fine promenade occupying the site of the old ramparts. This promenade is skirted throughout with trees, and conduits one through a change of scene, looking from Giessen across the valley of the Lahn, that in summer must be especially beautiful. The old town has nothing to commend it to grateful consideration. London is said to have crooked streets, but they are straight lines, compared with the irregular avenues of Giessen, and the buildings along the streets, are not parallel to anything, even to the direction of the street or the structures opposite. The houses, with scarcely an exception are constructed of wooden frames, filled in with brick, and plastered over within, and without, and the braiding of the frame-work, is anything but a display of architectural skill. The hotel's have passages for carriages through the first story, and are entered, not from the front, but from the carriage-way. The pavements are execrating, the citizens seeming scarcely to have known the luxury of a side-walk. Even the pebbles of basalt which are strewn over the streets, and ground to powder by the ponderous unwieldy freight-wagons, are swept away in a short time by the scavengers, and preserved for enriching soils.

But I have already too long postponed an account of the sun of this German scientific world, the man who has congregated in his laboratory, students from every kingdom of Europe, Great Britain and from America, who is in organic chemistry, what Newton and Laplace were in astronomy and mathematics.—Justus Liebig. My first interview with him was in his private laboratory. The reception seemed to me rather that of a military officer, than of a scientific man. He was manifestly engrossed with some matters of thought, and while he conducted me through the apartments of his great laboratory, I could not but feel that working and thinking were the only avocations known here. A gentleman to whom I was introduced, spoke in a subdued tone as if conversation were contraband. Liebig turns to me and says, "you may converse in English for two or three days, but not more." All this without a smile. I then went to seek my lodging rather depressed. A few days rolled over and I was one of an audience, of about a hundred chemical students assembled in the lecture room, awaiting the entrance of the distinguished man. The course on organic chemistry, was about to commence. Gentlemen in every variety of costume, with note-books, pens and ink, or pencils, were seated, conversing upon various topics, while before them was the assistant just completing his arrangement of the suit of substances and articles of apparatus

to be employed in the lecture of the day. The hour of eleven was on the point of striking, the murmur of conversation had subsided into a whisper, when presently the whole audience by one impulse, rose, and I saw entering, and bowing to the salutation, Professor Liebig. He had just returned from England, where the attentions of the most learned, the most wealthy, the most eminent had been lavished upon him; as they have been shared by no man of science in modern times. The published account of the great dinner at Glasgow had reached Giessen; a welcome with appropriate honours had signalized his return: and now with all these demonstrations of regard fresh in his recollection and theirs, it was not difficult to see that veneration was mingled with the tide of emotion to which they had thus spontaneously given expression. In an instant the apartment was breathless, and the lecture commenced. What it was about I was able to see from the formulæ on the black-board, and from a word now and then which I understood; but I was too much absorbed with his manner to give much attention to what he said. He is about an inch and a half less than six feet and stands quite erect. His figure is slender rather than stout and east throughout, originally in the finest mould. Toil over the table has given a trace of curvature to his shoulders which is apparent when he stands quietly beside the black-board, but this vanishes in his walk or animated explanation. All his movements, and particularly those connected with demonstration and experimenting are graceful to a degree I have never seen equalled. To see him in an experimental illustration holding in the same hand three test tubes, and an equal number of glass stoppers, while with the other, he is pouring from vessels containing re-agents, at first a little excited my surprise. The portraits to some extent circulated in England and America presenting him in an overcoat, are caricatures. A lithograph lately published here is better; but no picture can possibly be made of him. There is an expression of thought in all his movements and attitudes which I could scarcely have believed upon the mere relation. Whether with the chalk and black-board, and these he uses in explaining all decompositions and recompositions of any complexity; or, with his index finger along his chin and nose presenting that most singular of all gestures, or with his apparatus, it is all the same. He is all mind; and it became as distinctly visible through its corporeal tenement as his chemical compounds are seen through the vessels containing them. The detail of chemical changes is clear and expressed in language comprehended by every one at all versed in the science. Occasionally, these details bring into review some of his own investigations and theories, then a new animation is superadded to his ordinary bearing, and the illustrations are dramatic. His large eyes expand, his features glow, and his gestulations are such, that I have fancied one might almost understand some of his themes even if he were unable to hear. His notes consisted of a few formulæ written out upon two or three strips of paper. The remark which I have heard made that Liebig is not an expounder of chemistry or an operator in chemistry, but is *chemistry*, seems to be verified. For example, he enters the laboratory, where he is surrounded by gentlemen engaged in a great variety of investigations. There is one upon benzoic acid, there is one upon allantoine, there is one with new compounds of cyanogen, another with quinine, another with cheese, another with a new gum, another with some plants, &c. &c.; and all of them engaged in courses of original investigation, all of them treading hitherto untrodden paths;—he is ready to tell each one the results for which he may look. Such is his familiarity with every fact in known chemistry, that its analogies are perpetually present, and enable him to promise with great certainty upon almost every investigation. He comes to a gentleman who has a problem in the shape of an unascertained substance. He directs him to bring a dozen or twenty test tubes, and perhaps as many re-agents. The unknown compound is in a few moments distributed among the test tubes and awaiting the re-actions.

The Professor goes on through the laboratory, repeating similar experiments with other products of investigation, and the next day, when he comes round again, if a test tube has been removed from its place, he knows which one, and demands its return. Moreover, the gentlemen who leave unascertained substances of interest when going away for the night, not unfrequently on their return, find, that the head of the laboratory has been around, and removed them for safe keeping to his private shelves. This vigilant surveillance, this powerful local memory, this readiness in affording explanation in all difficult matters have induced the opinion already expressed, that the man is something in chemistry what Zerah Colman was in calculation. However, Liebig for the encouragement of all his pupils, has said, "that it is not at all so." Every fact in the science has cost him labour to acquire, and labour to retain; and though now he is ready to pronounce upon the nature, properties and history of every known organic and inorganic body in chemistry, he has acquired this prodigious mass of scientific information only with prodigious labour. Subsequent interviews have apprized me, that Professor Liebig is equally capable of making his circle of friends happy, in the exchange of love in the various departments of science and literature.

Giessen University, December 1st, 1844.

DR. LEWINS ON OVARIOTOMY.

SIR,—Mr. Liston will not, I presume, respond to the letter, addressed to him by Dr. Clay, of Manchester, and published in the *Medical Times* of to-day. As an old friend of Mr. Liston's, who, for many years, had frequent opportunities of witnessing his consummate dexterity as an operating, and his skill as a consulting, surgeon, permit me to state, for Dr. Clay's information, and that of your very numerous readers, that particular circumstances made me intimately acquainted with the sentiments Mr. Liston entertained fourteen years ago, and it appears retains, in regard to the operation of *ovariotomy*, and to make a few remarks on Dr. Clay's communication, which I do without Mr. Liston's knowledge. It is certainly a cogent, if not a conclusive, "objection to the operation," if the real nature of the disease, it is intended to cure, cannot be ascertained but by means which expose the life of the patient to immediate and most imminent peril. But that is not Mr. Liston's only, or principal objection, to the performance of ovariotomy. His prime objection is, that solid and encysted tumours of the uterus and ovaria very frequently exist, without endangering life; and that when they do so, by being of a malignant nature, or by being complicated with other diseases, a cure cannot be accomplished by a surgical operation. Dr. Clay does Mr. Liston injustice, when he says that he condemns the operation, *because* he "had a rival in modern Athens who practised it." Mr. Lizars, is, of course, the gentleman alluded to. Mr. Liston, who is conscientiously opposed to the mode of attempting to remove ovarian and uterine disease, practised by Mr. Lizars, must, as a faithful teacher of surgery, express his disapprobation of it; but I have frequently heard the former pay a just tribute of praise to the adroitness of the latter, as an operator; and, on a memorable occasion, immediately before Mr. Liston's departure from Edinburgh, Mr. Lizars was one of 300 of Scotia's most talented sons, who met to bid him farewell; Mr. Lizars then said,—"By the removal of Mr. Liston, the Edinburgh College of Surgeons loses one of its most colossal pillars." As bearing on certain allusions lately made to Mr. Liston, and adverted to by Dr. Clay, allow me to quote from a speech of Lord Robertson's, on the occasion above referred to, premising, that, as a professional man, who has had ample opportunity of forming an opinion on the subject, I heartily concur in the sentiments uttered by the learned lord:—"Mr. Liston's skill, and surpassing dexterity, as a surgeon, I understand, is only equalled by his caution. If his voice were somewhat harsh, occasionally, amid the annoyance of private life, it is as music to the sick man's ear. If his hand be

hard as iron, and true as steel, in the theatre of operation, it is soft as thistle-down, when applied to the throbbing pulse, or the aching brow."

In deciding against the propriety of ovariectomy, Mr. Liston founds his opinion on the result of Mr. Lizar's operations, and others, I suppose, which have been performed, with which he is conversant. Mr. Liston expresses the opinion, I believe, of the entire body of the profession in "Modern Athens." Not long before the death of Sir Charles Bell, that very eminent and scientific man declared to me, that he was decidedly opposed to the operation in question. But I am well aware, from having witnessed the fact, and watched the result, that the neck of the womb may be amputated with safety, and success. In a case recorded by my esteemed friend, and highly distinguished obstetrical physician, Dr. Simpson, the learned Professor of Midwifery, in the University of Edinburgh, in the 146th Number of the *Edinburgh Medical and Surgical Journal*, and report of the patient's subsequent history, and accouchement, in Number 147 of the same periodical, by my son, Robert Lewins, junior, M.D., &c.—in reference to this very interesting case, I may mention, as an extraordinary physiological fact, that information obtained from the patient's husband, a respectable, and trustworthy person, enables me to state, positively, that conception must have taken place on the tenth night from the day the operation was performed.

I have the honour to be, &c.,

ROBERT LEWINS, M.D.

Tiverton, Devonshire.
Saturday, March, 15, 1845.

[We have been favoured with a report of a case of excision of the uterus performed by Dr. Lewins, junior, which we consider highly interesting. Our readers will find it in No. 147 of the *Edinburgh Medical and Surgical Journal*.

We have to express our dissent from the opinions entertained by Mr. Liston, and Dr. Lewins, Senior, relative to the diagnosis of ovarian disease, and the propriety, in certain cases, of the operation.—ED.]

NOTICES TO CORRESPONDENTS.

Mr. Sibley desires us to say, that the Association for the Promotion of Improved Paving, Cleansing, and Drainage will give their Annual Dinner on April 10.

M.D. (Glasgow) will register as physician, with liberty to practise as a general practitioner.

A Years' Subscriber.—We do not approve of the "advice gratis" system, and cannot therefore sanction it by example. Maladies depend on so many causes, and their treatment should be influenced by so many circumstances no letter can give, that powers of witchcraft alone solve such questions as Subscriber addresses to us.

X. Y. and Others'.—Communications without real names are all but worthless.

M. O. R.—A gentleman registered under one title, it would seem, may practice under another. Whether the Bill passes or not, the Apothecaries' Society will never prosecute another Medical Practitioner.

A Member of the College inveighs in forcible terms against the mal-treatment of his brethren by the recent Charter—a wrong sanctioned by the New Bill. He pledges himself not to register if the Bill pass in anything like its present shape, and recommends a warm support of the National Association as the body that must bring the demented corporation to its senses. We regret that we cannot give the whole letter.

Sussex.—It is most unlikely that the Bill can pass in anything like its present shape. The "Membership," degraded as it now is, will "hold its own again" before long. We say pass at once.

Dr. P.—We are much obliged by the information sent. We shall make the fullest enquiry. A private note shall be sent on the first leisure moment. It is impossible to explain the immensity of affairs that press just now on each minute.

An immense mass of circulars containing resolutions passed against the Bill at a great number of meetings have reached us. We shall give a brief reference to their contents in our next number.

We have received a communication from Manchester, being an account of a Meeting held in the Town Hall on the 18th instant, Dr. Radford in the chair. We propose noticing it at greater length next week.

B. D.—Further progress in his interesting studies will enable B. D. to answer all his own questions.

A Constant Reader.—In Amussat's operation, the colon is opened in front of the quadratus lumborum, where it is not covered by peritoneum.

A Subscriber.—Volume II. commenced on the 5th October, 1844.

Dr. Wade, (Belturbet).—The covers and volume I. can be had from this office.

J. C., (Edinburgh).—The Foreign Diploma will, in all probability, be worthless.

If Mr. Smith will look to another portion of our journal he will see the full regulation of the Glasgow Faculty.

Justus (London).—We have considered this letter very attentively, and think, that under present circumstances, it would unnecessarily increase discord.

Justus has been anticipated in another column.

A Student.—There can be no doubt, that under the present Bill, the whole body of gentlemen preparing themselves as surgeons will not be allowed to register as such.

J. A.—The interesting addendum furnished by the Police Reports to the trial given in our columns, will be carefully searched for. Further information is desired.

Mr. W.—With respect to the petty intrigues about the University, will much favour us by a second communication.

X. Y.—The resolutions sent us can be inserted only as advertisements.

An immense mass of papers—editorial and otherwise—must, from the pressure of political matter, be necessarily postponed this week.

The numerous enquirers about the Black Soap, mentioned some time since in the Medical Times as a cure for paralysis, are informed that this vegetable potash soap is an article of extensive manufacture in Sweden, and Russia. It is a compound of soap-boiler's potash-lye, and hempseed, or linseed oil. Occasionally to the above oils, a quantity of tar-oil is added, and the whole saponified together. This soap is a semi-liquid, opaque, greasy mass, of most nauseous smell, and caustic to the taste. It is readily soluble in water, and alcohol, and is rendered somewhat more liquid by exposure to the atmosphere.

THE MEDICAL TIMES.

SATURDAY, MARCH 29TH, 1845.

"And as a child, whom scaring sounds molest,
Clings close and closer to the mother's breast:
So, the loud torrent, and the whirlwind's roar
But bind us to our native mountains more."
Goldsmith's Traveller.

We cannot let this number pass through the press, without making a solemn appeal to the Profession, in behalf of the National Association of General Practitioners. It is an association to which medicine owes much, and from which, if properly supported, it will receive incalculably more. There never was a juncture which required from us a larger or stronger organization for defence; there never, happily, could be an organization more adapted to the immensity of the need. It is as great as is the crisis, equal to the magnitude of the juncture that creates it. The man that dares to weaken it, let him be proclaimed an outlaw to his brethren. The time is gone by for petty strifes for committee office. The man that makes it, no matter under what disguise, is a traitor—the more disguises, the more hypocrisy a traitor. He is the stumbling-block of his brethren; their feebleness in the hour of danger, their bane in the moment of struggle.

But there is worse than wounded vanity in the treason. There is gold, or place, or patronage. To create a diversion in the camp, at the very moment the enemy is at the gate, is symptomatic far less of hot passion than of cool interest. The schism-breeders are in the pay of the foe; and that the every hope of these wretched speculators

may be in an instant annihilated, let the Association have, forthwith, each honest man's support. The vigour of the faithful many, must overwhelm the reckless energy of the conspiring few.

When was there a moment when the Association deserved better of the Profession? Every remonstrance founded in reason, addressed to them, has had its effect. For ourselves, in unfeigned gratitude we say it, we have offered no weighty suggestion, which has already not had an honourable justice done to it. Their adoption of the representative principle was direct, clear, and definite. Their strong preference of an "Independent Incorporation," has not precluded a pledge to adhere to the College of Surgeons, if Government will make it what it should be. Nay, what has been one of their latest resolutions? This, "That a letter from this Committee be forwarded, without delay, to the Council of the Royal College of Surgeons in England, requesting to know whether the Council is disposed to apply to Government for a supplementary Charter, and to alter its recent internal policy respecting the Members at large:—whether it is disposed in any way to further the conciliatory views held out by the Right Honourable Sir James Graham in the House of Commons, on the 25th inst., and if in the affirmative, to ask for a conference; and that the sub-committee be requested to carry this resolution into effect." Could anything be better?

Prudence, sound policy, kindly conciliation to their brethren—these qualities have each day been more fully developing themselves, and as a further instance, they have recently avowed their earnest desire, in almost the words of our request to them, to become the reflex image of their brethren's feelings and opinions in the proposition of any scheme of reform. And is it on such men, thus accommodating themselves to every improvement honestly proposed to them, and giving their energies and time to the faithful service of their brethren—is it on these men, placing themselves at a moment of great peril, at the very front of our battle, that we shall suffer rude obloquy to be poured, in the hope of disgusting them from public life? A demonstration in their favour, on all sides, should at once be made. In the meantime, let the Committee manfully meet their enemy, and at once.

Beware
Of entrance to a quarrel; but being in,
Bear it, that the opposer may beware of thee.

"My Lord! this argues conscience in your Grace,
But the respect thereof is nice and trivial,
All circumstances considered."

Richard III.

It is an old truth that your practised villain is of all men the least likely to escape the toils of the law. Impunity is so certainly followed by heedlessness, a series of success by imprudences, that the fact has shaped itself into the adage—"give a rogue rope enough and he will be sure to hang himself." There is something of a fate about the audacity inspired by a few happy escapes. On the score of a run of good luck, your scoundrel feels himself authorized to treat the public for ever after, as composed of so many fools; and feels himself, indeed, out of his element except when practising on their supposed folly to the utmost extent.

Among your political adventurers in what may be considered a more creditable sphere of life, it is possible that Mr. Wakley occupies a somewhat analogous position. We must do him the justice of owing that we never heard of a person who acted out of a more daring faith in the credulity

or idiotism of his readers or hearers. He seems to be never happy, save when trying their charity and good sense to the utmost. He appears, even ingeniously, to shape his conduct into one everlasting insult to their understandings. Nothing will satisfy him till the blindest of his old partisans becomes unfascinated, uncharmed, disgusted. When detection becomes co-extensive with its cause—when every medical man has been forced to play for him the part of a moral policeman, and hand him to the custody of universal “perdurable shame”—he promises to cease from his labours, not before. There is something in the thought that the hour is not far distant. The circumstance will spare the double discomfort of dolour on one side and disgust on the other.

We need not discuss now the character of the National Association of General Practitioners. That it has had its faults is certain. It declared too prematurely for a third incorporation, and in our opinion over-looked too much the surgical portion of the question of Medical Reform. But these were faults atoned for by a generous and energetic effort to unite the profession into one firm phalanx against all further aggressions; and at no time, while openly urging our objections, did we conceive it our duty to do anything to impede the enrolment of its members. But whatever the faults—great or small—of the body, Mr. Wakley should have been the last to have thought of its impairment; much less its destruction. Who forgets his mean-spirited and imitative cry of “Hurrah for” (repeal?) “President Pennington!” or his fulsome and unwelcome adulations, so profusely poured out, on each act, or omission of act, by the Association? For long months did this consistent politician, spontaneously and uninvited, make himself and the journal he more or less commands, its spiritless and sycophantic parasite. With a low-minded humbleness to which independence or spirit are as remote as health or freshness to the lazar, he licked the very dust on which the Association stood.

The Committee, to their immortal honour be it said, treated the truckling slave—the smile on his his mouth, the wound in his heart—with a hauteur and indifference worthy of his meanness. They were too disgusted, or too proud, to recognise even his servitude. They seemed to be ignorant of his existence. He played slave for nothing.

Thus pandering, he hoped to creep, in a way congenial to his soul, to a place in the Committee. He felt his failure, and would try—happy thought, congenial resource!—a *bribe*! His ten guineas were returned him; and his third resource is to *bully*! He will now abuse and blackguard every body and everything with a force proportionate to the excess with which he formerly panegyricized them. Pandarus is turned Hector!

There is the condemnation and infamy of a volume of *Phillips* in the one fact, that he lauded, for months, every one of the proceedings which he now fumes about; and that the very day before his plot to ruin the Association, he thus sent his guineas to support it, craving (alas! in vain) the honour of *sharing* in its proceedings! The unblushing effrontery of so rapid a transition, ostentatiously shewn too, from fawning parasite to bullying foe, is almost unparalleled. What a compliment to the public's good sense!

How has the Association met this absurd hostility? Boldly, and, therefore, most prudently. A Committee Meeting was called on Monday last, and, in a crowded hall, one voice was unheard, one hand unraised for the demented Culprit. Universally, ignominiously, was he pro-

claimed a traitor to the Profession. His unanimous and shame-marked exclusion from the body was voted with the enthusiasm of a triumph.

But sharp votes, and sharper letters, are not enough. The foe must be met foot to foot. We have done the work of defeating and unveiling Mokanna: the final blow—if not left for us in a court of justice—lies with the Association.

THE GLASGOW FACULTY.

SINCE the introduction of the Medical Bill of Sir James Graham, by which alterations are to be made in many of the existing Corporations, and by which the two weakest are virtually deprived of all power, our attention has been repeatedly solicited to the consideration of the case of the Faculty of Physicians and Surgeons of Glasgow, which—with the Apothecaries' Company of Ireland—is to be shorn of all its former privileges. Like the Irish Society, it is not once mentioned in the Bill; and thus depriving them of all power of forming the recognised examining Boards of the country. It would appear, that were antiquity to be considered as a claim to immunity from the contemplated destruction, that the Faculty of Physicians and Surgeons of Glasgow might put in a very satisfactory plea. It was founded by a charter, granted by King James the Sixth, in 1599; confirmed by the Scottish Parliament in 1672; by which Peter Lowe, his Majesty's “Chirurgiane,” and “Chirurgiane” to his “dearest sonne the Prince,” and Robert Hamilton, “Professoure of Medecine, and their successours, indwellers in Glasgow,” were endowed with full power “to call, summon, and convene before thame, within the said burgh of Glasgow, or onie of its boundis, all personis professing or using the arte of chirurgie, to examine thame upon thair literature, knowledge, and practice; gif they be fund wordie, to admit, allow, and approve thame; give thame testimonial according to the airt and knowledge that they sall be fund wordie to exercise thareafter; resave thair aithis, and to authorize thame as accordis, and discharge thame to use onie farder nor they have knowledge passing thair capacite, laist oure subjectis be abusit.”

By this charter, power was also given them of preventing any person from practising medicine within the counties of Ayr, Renfrew, Lanark, and Dumbarton—the field to which their license in surgery was restricted—unless such person possessed a “testimonial of ane famous universitie,” or was so privileged by the Queen's “Chief Medicinaire.” Thus constituted and recognised as a double institution, the component parts of the Faculty—Physicians and Surgeons—continued to dwell in harmony for some time—history sayeth not how long—until the pride of the Physicians, taking offence at the similarity of occupation in some respects between their surgical brethren and the barbers, forced the former to join with the men of the razor, and to register their proceedings in a separate book from that containing the proceedings of the Physicians, which book was, however, to be deposited in the Hall of the Faculty for the inspection of the Sangrados of that day. Both bodies met separately—the Physicians by themselves, and the Surgeons along with the Barbers, who forced by the gentlemen of the gold cane to this “holy alliance” were made to pay most dearly for “their whistle,” being mulcted in the sum of “fortie pundis Scots”—as many shillings English—and “elk twentie shilling to the pair;” and after this enormous registration

fee of the middle ages, were only considered as a “pendicle of chirurgie”—in other words, as *Inceptors in Surgery*, in the language of the Sir James Graham who framed the above ordonnance. Though in reality divided and existing as separate corporations—a fact which is evident to any one who peruses attentively a pamphlet lately put forth on behalf of the Faculty—the successors of Peter Lowe and Robert Hamilton exhibited, at least on one point, the happiest unanimity, namely, whenever an attempt was made to question the power they possessed of restricting persons from practising either art or mystery of medicine or surgery, within the prescribed burghal limits. Such attempts have been made, and more than once. In 1816—to come down to our present day—some persons holding the M.D. degree of the University of Glasgow, sought, on its strength, to enter upon the field of practice, which centuries had declared to be the undoubted property of the Licentiates of the Double Faculty of Glasgow. Opposition was offered to the encroachment, and an appeal was made to the Court of Session, which at once declared the University men intruders, and forbade them giving their neighbours any further annoyance. The prospect of advantages *in futuro* were too tempting to be at once, and without another struggle, given up by the discomfited party. Accordingly, in 1816, the University of Glasgow sent—framed and glazed—into the world, or rather into the microcosm bounded by the four counties of Ayr, Lanark, Dumbarton, and Renfrew, a new diploma—that of “Master in Surgery”—by which, as by some magician's talisman, they hoped to win the wished-for prize. The project, though one that would do honour to any corporation or university, however failed; for we find the “Faculty,” fully alive to the necessity of maintaining the honour of their Charter, granted “*lang syne*,” again bringing the University men, though in a new garb, before the Court of Session, which again bade them respect their “neighbour's goods,” and forbade them from the emoluments of Glasgow practice, though possessed of their *pro re nata* surgical diploma. This—the last—effort which has been, directly or indirectly, made to invalidate the claims of the Faculty of Glasgow to the sole practice in Medicine and Surgery within their ancient limits—has been pronounced illegal by the Lord Chancellor and Lord Brougham in the House of Lords.

Along with its claim to reverence as an ancient institution, the Faculty possesses a still stronger title to respect, as being the place where was “cradled the fame” of Cullen, Hope, and Black, and a host of other names—lesser stars it may be—but whose lustre is of, at least, the average brightness. From it have been taken, from time to time, teachers to fill the principal chairs in the Edinburgh University, and of some—not the least—of the Medical Schools of London. Its present curriculum of education is certainly not the most ample, nor that best calculated to *turn out*, as the phrase goes, properly qualified men; but we do think, that with the powers to be possessed by the contemplated Medical Board of enforcing a uniform system of examinations among so many Medical Boards, that nothing exists to prevent solely the Faculty of Glasgow going on as before,—i. e. if remedying this defect. In the first Medical Bill, extraordinary powers were to be given to the above body, which, united to the Glasgow University, was to be known as the “Royal College of Physicians and Surgeons of Glasgow,” with power to confer the higher degrees in medi-

cine and surgery. Notwithstanding this boon, the Faculty grumbled at being deprived of "the right and privilege of examining and licensing the General Practitioner in Medicine and Surgery." A severe reverse of fortune has now overtaken them—they, the men sitting in the high seats of the synagogue, by the first Bill—are now, by its successor, thrust outside the gates of the temple, as unclean lepers, made the scape-grace of the whole tribe of corporations who are to prosper by their ruin.

To strengthen these "pleas," in mitigation of damages already put in, an additional one exists in the erroneous opinion of Sir James Graham, relative to the jurisdiction of the "Faculty." Their non-possession of any legal right as stated in his speech introductory to the Medical Bill, was an unfounded notion; the right did exist. The Council of that body earnestly but respectfully deny, that any legal document can be proven or shown which abrogates or cancels their ancient charter. Under these circumstances, a clause recognising the "Faculty" might, it is suggested, be introduced, and its claim allowed to be considered still a legal Medical School; especially as Glasgow is the most largely populated city by far in Scotland, and promises a further development of commercial manufacturing greatness. If a sacrifice is to be made of any of the Scotch Schools, we think there are some of them, at present connected with trade—and whose early recollections smell strongly of the "barley bree"—which might, with benefit to the medical world, more appropriately be "killed" than the doomed "Faculty."

SIR JAMES GRAHAM'S COMMENT ON HIS OWN BILL.

In answer to queries from an Association in Hull, the following letter has been sent from the Home Office:—

"Whitehall, March 17, 1845.

"Gentlemen,—I am directed by Secretary Sir James Graham to acknowledge the receipt of your letter of the 12th instant, and to inform you that, under the Bill for the Regulation of Medical Practice, a gentleman at present practising as a member of the Royal College of Surgeons, and licentiate of the Apothecaries' Company (dispensing his own medicines and practising midwifery) can register as surgeon.

"The bill does not contemplate double registry.
"The registered surgeon may practice generally, if he pleases.

"I am, Gentlemen,

"Your obedient servant,

"S. M. PHILLIPPS.

"Henry Cooper, Esq., M.D.,
"Robt. P. Sleight, Esq., Hull."

Our first remark is, that under the Bill as it stands, "Members" cannot register as "Surgeons." Clause 32 expressly limits registration as "Surgeons" to "Fellows," for it names no fee for registration as "Surgeons," save to the "Fellows." One pound is to be paid by "Fellows" for registering as "Surgeons," and five shillings by "Members" as what? As "Surgeons"—i.e., less money for the same title? Hardly! Sir James, who stickles so much for a charter universally odious, cannot thus mean to give the "Members" statutory equality with the "Fellows" at lower prices. The thing is absurd, to a pitch that should in itself make any bill ridiculous.

Besides, the College, when the Bill passes, will be admitting members just as now, students who, in the faith of existing arrangements, have vested their life's interests in a surgical position as "Members." What, in so many words, says the

Bill of these gentlemen? Clause 21 fixes their status as "Licentiates of Medicine and Surgery," and Mr. Phillipps tells us they cannot register doubly. Are we then to have a fourth grade in the College? First, the "Fellow-Surgeons;" secondly, the "Member-Surgeons;" thirdly, the "Member-Licentiates of Surgery and Medicine?" Can ridicule reach a higher height?

Finally, how can it be reconciled with justice that Members with double qualifications, who are practically physicians as well as surgeons, and whose practice is as much medical as surgical, shall be placed before the public as "Surgeons" only; thus, compelled by law to abrogate to day, what they were compelled by law, at a great expense and trouble, to assume yesterday. If the Bill is as its commentators say, and its clauses deny, it will introduce a confusion into the Profession—"a confusion worse confounded" to which our present anarchy and discord will be order and peace itself.

Petitions for its amendment cannot be too rapidly sent in.

AN ODD ADVENTURE WITH MR. WAKLEY.

Visit of Messrs. G—, C—, S—, and H— to a hypothetical meeting of the National Association of General Practitioners.—Repulse at the Hanover Square Rooms from the porter.—Search after the Meeting to its supposed place of adjournment.—Admission therein.—Singular discovery of Mr. Wakley in the midst of a small conclave, which is not the National Association, but a conspiracy to destroy it.—His gentlemanly civilities to his invited, but unexpected visitors.—Disclaimer of his coarse brutalities by his associates.—Retirement of the four visitors.

ON Saturday, the 23rd instant, we, i.e. Dr. C—, of Golden Square, and Wyke House, Mr. G—, of Lower Belgrave Street, Pimlico, Mr. S—, of Ranelagh Street, and Mr. H—, of the Temple, were spending a comfortable hour together, when the second-named gentleman introduced to us a very extraordinary note he had that day received by post. It ran thus:—

"THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS,
HANOVER SQUARE.

A preliminary Meeting of the Members of this Association will be held THIS EVENING (Saturday, March 22nd), at the HANOVER SQUARE ROOMS, at Eight o'Clock PRECISELY, to adopt such measures as may be necessary in consequence of the Provisional Committee having, on Friday last, between 10 and 11 o'Clock at night, when NEARLY THE WHOLE ASSEMBLY HAD DISPERSED, obtained, from a small number of Members,* a vote making that Committee a PERMANENT body, without a single law for its government.

SIR,—You are particularly requested to attend the above Meeting.

I am, Sir, your obedient servant,

HENRY OBRE, M.R.C.S.E. & L.A.C.

And a Member of the National Association."

Grove Place, Lisson Grove.

The object of the meeting, called by such a statement, and in such a hurry, was obviously most hostile to the very existence of the National Association, and each of us having some knowledge of Mr. Obre, it appeared to all inexplicable how so young a practitioner, with apparently very moderate, and very rational views on medical politics, should have come forward in such a course, and so prominently. We all concurred, that there was no want of cunning in the mode of action, however hastily devised. We saw at once, that a meeting (however small or select), assembled under the name of *The National Association*,

* This is a mistake. The time was between 9 and 10, and the room contained several hundreds, and three resolutions, one of them much discussed, were subsequently passed.—Ed.

at the Association's very rooms, would look a very grand affair indeed, and would acquire for their resolutions, when extensively advertised—as was doubtless part of the plan—a most damaging effect, in public opinion, to the genuine Association. Curiosity and interest alike prompted us, therefore, to accept Mr. G—'s invitation to accompany him to the meeting.

We proceeded then to the Hanover Square Rooms, and finding, as we passed its side, that the lofty windows of its large room lay "in darkness hushed," were speculating by what magical process the large meeting, that so attractive an announcement must have summoned, could have compressed itself into any of the lesser apartments, when we arrived at the front entrance. A tall spare porter met us at the door, darting at us very sinister intentions, and standing edgeways so as to fill the half-opened portal, *as well as he could*, with his person. Not being sure that this was sufficient bar to our ingress, he advanced towards us, and securing the pass behind him by firmly fastening the door, now felt himself in sufficient security to grant us a moment's parley. "There is no meeting not here, Sir," said he. "They thought to do us with the name; they pretended it was private, and they wanted to use it for public; but we found out in time, that it was not the right people." The amazement this announcement threw us into, was somewhat relieved by the advent of a small specimen of low London humanity, robed in sable black, which the unpropitious gas-lamp hard by revealed to be sadly rusty and threadbare,—his head surmounted by a weather-worn hat, whose primeval *hauteur* had given way to many a wreathed and dimpled smile, and altogether, internally and externally, so ill made up a man, as to create some perplexity whether he were the reporter of the *Lancet*, or more fortunate still, the sweeper of a neighbouring crossway. The poor man solved the mystery for us, in favour of the former supposition, by slyly introducing into our hands a card, of which the following is a *fac simile*.

FROM CIRCUMSTANCES WHICH WILL BE EXPLAINED,

THE

PRIVATE MEETING

OF MEMBERS OF

THE NATIONAL ASSOCIATION

WILL BE HELD THIS EVENING AT THE

BRITISH AND FOREIGN HOTEL,

12A, GEORGE STREET, HANOVER SQUARE,

(Corner of Maddox Street.)

AT 8 P.M. PRECISELY.

March 22, 1845.

Thus admonished, we proceeded, armed with our cards, to the new rendezvous. Our reception by the servants was most "gentlemanly." With every appropriate courtesy we were shown into the long sought meeting room to their temporary masters. Dr. Costello led the way; Mr. G— followed, the two other gentlemen pressing on their heels. We had hardly time to notice that we were in a well furnished sitting-room, tenanted by about a dozen gentlemen, dispersed at greater or smaller intervals round a large table, when one of them at the further end (who was noticed to have turned ghastly pale on Mr. Healey's entrance to the room—as pale as if the latter had been a constable summoning him to the Old Bailey) rose up, advanced somewhat towards us, exclaiming—"These gentlemen cannot be admitted: I know them. This is Costello," (pointing with his finger to that gentleman) "and this is—is—" (with much hesitation and painful anxiety to express contempt) "Healey! He is no medical man!" Of course the polite speaker and "all obliging host" could be no other than MR. WAKLEY!*

* One of the visitors thus gives his impression of that gentleman:—"I had never so good an opportunity of observing him. He looked like a tavern roysterer spoiled, a finished bully lost to the tap-room. The small, uneven, cunning, restless eye was still there—but the fire—where, we interiorly asked, was that? The lion's mane rolling to his shoulders, and which, contrasting so admirably with his sayings and doings, led so naturally to his comparison with the ass in the fable, was all but gone, but the 'burle

It may well be conceived, that so ill-bred an outburst of malignant feeling to gentlemen who entered the room as the friends of a guest specially invited to the meeting, created not a little commotion. Mr. Obré and Mr. Bloxam endeavoured to explain that Mr. G——, was invited, and much apparent doubt prevailing among both sides as to what should be done, Mr. Healey observed, "We came here believing that, with Mr. Obré's invitation, we should be welcome. But seeing how circumstances are, I have only to say for myself and friends, that we are quite as anxious to leave the meeting as Mr. Wakley evidently is that we should not stay." We were beginning, in accordance with this assurance, to retire, when Mr. Hillier, of Gower-street, rose and said—"Before these gentlemen go, something has been said that should be explained. For my part I fight under no man's flag; I am quite independent; and the gentleman (Mr. Healey) in saying that he is as anxious to leave as Mr. Wakley is that he should not stay, appears to me to impugn our sense of fairness." Mr. Healey remarked, "Mr. Hillier is more on the alert for censure than anything I remarked can justify. All I meant to say was, that from the friendly terms on which I met Mr. Obré the other evening, I conceived that our presence here would have been anything but unwelcome. But finding that the strongest desire has been expressed, on the part of at least one party here, that we should not be present at your proceedings, we feel"—These words acted like Ithuriel's spear on the Miltonic toad, for Mr. Wakley, expanding to his utmost breadth, here broke in with "Who said so, Sir?" and rising up, still more pallid, if possible, and expanded, and crossing the room with insane earnestness repeating the interrogation at each step, "Who said so?" did not stop until he came directly before Mr. Healey, rubbing up, with the attitude of a bully, against the very person of that gentleman, and trying, like a street bravo, to provoke Mr. Healey to strike him. At this interesting moment, a new hero of violence made his appearance in the shape of a youth with ruddy looks, who, we were informed, has the distinction of being Mr. Wakley's son. Mr. Healey, while threatened by fisty cuffs from the latter, was besieged by impetuous and wild appeals from the father, continuously kept up of "Who said so?" When answered by Mr. Healey, that he, Mr. Wakley, had said so—for he had protested against their remaining—the gentlemanly member for Finsbury became still more excited, and being restrained from violence, turned appealingly to the room, saying, "This is the man of all the world I hate," and meeting no favouring response now flew to the door and ordered the servants, waiting outside, to come in to extrude us by violence. The son gesticulated his readiness to aid pugilistically in this ruffianly movement; but the company, who felt the ignominy of suffering such brutality to gentlemen who had behaved most courteously and inoffensively, interposed between both the father and son in their attempts at violence; Dr. Costello proclaiming the sense of himself and companions, in the words, "we have no anxiety to remain, but we will suffer no indignity in our retirement." Cordial assurances of good feeling and courtesy were now given on both sides (excepting, of course, the Messrs. Wakley), handsome disclaimers of the brutalities committed liberally offered, and good night was mutually given, with shaking of hands. Before, however, we could pass the door, Mr. Wakley, Jun.

figure of gross and sensual vulgarity still remained, and in rotundity more developed. The face, however, spoke but ill of the more important point—the *stamina*. We shall never forget it! Bloated, lardaceous, a mass of pultaceous, covered as it were with an infinitely delicate and tense gold beater's skin; it seemed as if the heart wanted vital force to animate it, or that the moral feelings, which give expression and vivacity to the facial surface in others, had there been long *funeti officio*. May we never, except in a visit *à la Selwyn*, view such a face again! It was *patibulary*. We can imagine no worse, no more unjust visitation, than that an honest man should be condemned to carry it for life!"

had the good taste to exclaim to Mr. Obré, "I would not have shaken hands with such a wretch" (meaning Mr. Healey), but several round him immediately checked him for this expression of vulgar malignity—one of them (Mr. Bloxam) handsomely declaring, "We disclaim this person altogether."

We returned with feelings more easily comprehended than explained; but to all of us the conviction was fixed, that to the most devoted of his admirers—if there be still such *rari aves in terris*—Wakley, after that scene, must appear a fallen, a shrunken, an insignificantly small minded and miserably defeated man. Detected in the fact of holding a hole and corner meeting, called under false pretences, and with the aim of destroying an association most necessary at the present juncture to the profession, and which he had himself constantly lauded as most useful, he had the bad taste and feeling to play the low tap-room ruffian among gentlemen; and had the ill fortune to take nothing by his motion. Nothing could have been worse.

[We have the best authority for saying that this statement, in reference to all the facts given, is literally true. We say this to remove any doubt that might naturally have arisen from the outrageous character of the transaction.—Ed.]

SETTLEMENT OF THE SURGICAL FEUD.

I resume the consideration of what is considered the great impediment to the immediate and satisfactory adjustment of the Medical Reform question, viz., the feud between the council and members of the Royal College of Surgeons, an important and unfortunate matter certainly, but not one, I conceive, that should prevent the immediate settlement of the great question under consideration, so far as the interests of the public, the profession, and other medical institutions are concerned. The dissensions referred to, however, may, I have no doubt, be brought to a speedy termination, were the contending parties to exercise temper and moderation in their deportment towards each other.

The London College of Surgeons, notwithstanding defects in its constitution, is an institution which has very materially contributed to the advancement of science; the council has always included, and certainly, at this moment contains, men who, in the estimation of the most competent judges in Europe, have done honour to England,—a nation which has been long, most deservedly, famed throughout the universe, for the consummate skill, and scientific acquirements of her surgical teachers and practitioners. That the advantages resulting from a seat in the Council of the College have, sometimes, been enjoyed by individuals less entitled to such honourable distinction than others "passed over," is, I suppose, true, but it is equally so, that that proof of dereliction of duty on the part of the Council, and other venal delinquencies, so loudly complained of, have really done less harm to the profession, and to the public, than factious writers, and disappointed individuals, would lead the tyro in medical affairs to suppose. At all events, the evils referred to, are likely to cease with the abolition of the absolute and irresponsible power which the Council has heretofore possessed. A Government Board, properly formed, will, in future, be a check on the selfish and sinister tendencies, so very apt to be engendered in corporate bodies of every description.

The quarrel which has long existed between the governors and the governed of the College of Surgeons (and which designing men have done all in their power to foment), has, it appears, become deadly, in consequence of the first practical effect of the charter recently obtained by the College. 550 members (all individuals I believe, of acknowledged talent and high respectability) have, without examination, been admitted *Fellows*, and that act of the Council has, it seems, given mortal offence to many who have not been so honoured. Such a manifestation of temper is, in my opinion, more consistent with morbid feeling, than with professional independence of spirit, since, *any* member of the College would, by presenting himself for examination, if found qualified,

procure the envied honour:—one, after all, of much less importance, as will be shewn by and by, than many members seem to suppose, but, such as it is, more creditable to those who gain it by examination, than to those on whom it is conferred in any other manner, in as much as, examination is the only proper portal, I conceive, by which the *Fellow* should find entrance to the College.

That the members of Council exercised the power with which they were invested, in regard to the admission of Fellows, as discreetly as any other body of surgeons would have done, there is, I presume, little doubt; but the council erred, I imagine, in asking the power to confer Fellowships without examination. An acquaintance with human nature might have led to the knowledge that an effect, precisely such as has been produced, would be the consequence of selecting 550 individuals from the 8,000 on whom a mark of special distinction is placed—

"Et cum vidisti puerum donata, dolebas."

But the deed has been done, and the question now is, how can the untoward consequences be best obviated. Essential preliminaries assuredly are, temper on the part of the members, and inclination on that of the Council, to listen patiently to their complaints. Were each party seriously resolved to proceed in a conciliatory spirit, matters might, I am convinced, be yet arranged to the satisfaction of a great majority of the profession, and in a manner advantageous to the community, a party whose interest will certainly not be lost sight of by the government. Sir James Graham has shown, to the entire satisfaction of moderate medical reformers, who have considered the subject deliberately and dispassionately in all its bearings, that he knows the duty of one in the position he occupies, and that he will fearlessly perform it.

The present members of the College of Surgeons having complied with the laws and regulations in regard to course of study, &c., that were in existence when they entered the profession, and having passed an examination which makes them, to all intents and purposes, legalised surgeons; and many of them, beyond all doubt, are skilful and scientific surgeons, having moreover contributed largely to the funds of the College, the point of admission to the Fellowship should, we think, without further examination, be yielded to them, with such restrictions to time, as in the circumstances of the case, may be deemed just and reasonable.

But different terms may and should be imposed on all future entrants; a modification of the New Charter, or a supplementary one, will, I presume meet the exigency of the case, and secure the benefits to all concerned, that should accrue from such an instrument. To this subject I shall, however revert in a third and final communication on Medical Reform; the remainder of the present, devote to a consideration of the bearing which *Fellowship* with the College is likely to have on the interests of those who have shown such eagerness to obtain it. To talented individuals in the metropolis, Fellowship may, unquestionably, be attended with direct advantages, since it will render them eligible to fill offices of honour and emolument, from which they were, as *members* of the College, excluded. To gentlemen practising elsewhere, it is of little consequence by what name they are designated, provided it convey the idea of regular and adequate qualification. The public in these times is not misled by a name. "As a doctor's degree," said the late Professor Gregory of Edinburgh, upwards of fifty years ago "can never confer sense, the title alone can never command regard, neither should the want of it deprive any man of the esteem and deference due to real merit." "If a surgeon or apothecary had the education, and acquired the knowledge of a physician, he is a physician to all intents and purposes, whether he has a degree or not, and ought to be respected and treated accordingly." So is a *member* of the College of Surgeons, if his acquirements are equal to those of the *Fellow*, his *Peer*, and treated accordingly by the public.

The correct principle inculcated by Dr. Gregory is now very generally acted on throughout the United Empire of Great Britain.

The writer has passed through the differ-

grades in the profession of surgeon's apprentice, member of the College of Surgeons, general practitioner, licentiate, fellow, and office bearer in a Royal College of Physicians, and can, after 30 years' experience, truly declare, that however gratifying those distinctions may be to a man's feelings (and as affording proof of respectable talent and enjoying the approbation of our associates, are just causes of gratification), they contribute little to success in life. The grand secret of professional prosperity is, first, a complete knowledge of the principles and practice of the healing art, in the most extensive sense of the term; and, second, a diligent and faithful discharge of its important duties. The approbation and esteem of the sensible and virtuous part of the community follow as a matter of course, from whence surely result public confidence and all the benefits arising therefrom. LUCIUS.

Devonshire, March 8.

THE DEFENSIVE ASSOCIATION OF SURGEONS.

A public meeting of this association was held on Wednesday evening in the theatre belonging to the Western Literary and Scientific Institution, in Leicester Square, on which occasion, Thomas Wyse, Esq., M.P. presided.

Mr. Wyse observed, on taking the chair, that, in consenting to preside at that meeting, he had been guided solely by the desire he felt to forward the general interests of education, with which the honourable profession of medicine was connected. He himself had not the advantage of belonging to the profession, and was unacquainted with the differences which separated its members from each other. He lamented much that differences should exist in such a body, by the application of the experience and skill of which, humanity was much benefited, and its professors necessarily raised in public esteem. As they did exist however, it was not to be expected, that they should seek an opportunity to make the public acquainted with their grievances, and also to make known the nature of the plan, by adopting which, those grievances might be redressed. His own wish was to keep himself disengaged from the divisions of the profession, but, as he was deeply interested in all the branches of education, and as he belonged to the legislature—the ultimate tribunal to which all must appeal—he would venture to address a few words to them, on the principles upon which he thought medical reform should be based.

In these matters, there are two courses which may be pursued,—one is, to allow every man to deal with his private interests, and with those of the public, as he may think best; and the other is to point out the limits beyond which he may not proceed. With reference to the first course, a very natural conclusion has been come to, judging from what we see around us, that danger is to be apprehended from governing too much, and of incurring the charge of injuring, where it was intended to benefit, and of checking where it was wished to advance. This is the feeling both in and out of the House, with respect to legislative interference with general education; and it is an honourable feeling in the English people, who, even the very lowliest, may say, in these matters, that they effected the results, and not the government. With regard to medical affairs however, there are peculiar circumstances which require a modification of this plan. It has been said of the legal profession, that no legislative enactment was required for their protection, for the public would soon find out whether any individual were possessed of the requisite knowledge and talent, and that therefore there did not exist any necessity for the oppressive processes adopted in other countries. Such may, perhaps, be the case, but, under such circumstances, the utmost injury that could accrue, would be the loss of property; not that he meant to undervalue such a loss, for he knew that much evil might be thus caused, and he believed that there was a feeling among the profession, of the necessity of a proper education for the candidates for the legal profession, in order to protect the public against the effects of ignorance. If, then, this be true of the profes-

sion of the law, how much more forcibly does it apply to the profession of medicine? For it, a modification of this theory is especially demanded, and the Government is bound to give an assurance to the public against the practice of incompetent and ill-educated men, by whom, otherwise, the lives of the public would be endangered. He (Mr. Wyse) thought the legislature were bound to demand the very highest degree of education possible, and to require a proper test from medical men, to shew that that had been obtained; and finally, he was of opinion, that those who submitted to this test, should possess equality of title and of right to practice throughout the three kingdoms, for he thought it very strange and anomalous, that a medical man, declared competent to pursue his professional pursuits in one part of the kingdom, should be regarded as unqualified, and almost a quack, if he were to remove to another part of the same kingdom. He did not deem himself competent to point out the proper course of education, but it could not be too high, nor too scientific. Mr. Wyse then proceeded to describe the qualifications of the medical man, and his high and important office in ministering to the exigencies of the sick, and stated, that he would be strongly opposed to any measure, the operation of which would lead medical men to look on themselves, as lowered in the profession, and in the estimation of society. He thought, that on the contrary, every effort should be made to raise the position of the medical practitioner, and such attempts would meet with his most earnest concurrence on every occasion. With regard to the injurious operation of the Medical Bill, similar results might be expected for other members of the profession; he alluded to the apothecaries of Ireland, who, by its operation, would be placed in a much lower grade than that which, by custom, they had occupied for years. The apothecary, instead of being lowered, should be raised in grade, and this rule applied still more strongly to surgeons, who, he thought, were to be regarded as of equal importance with the physician. The only test for difference and distinction in the profession, should be the test of talent and superior merit.

Dr. Costello, in proposing the first resolution, alluded to the hopes which were entertained when the Warburton Committee was appointed, and a vast mass of information was elicited, that something would result for the benefit of the profession; but these hopes were disappointed. He then observed, that about that time the question of medical reform was agitated in France, and a commission was appointed to enquire into the necessity of retaining the inferior grade of practitioners in that country (the *Officiers de Sante*). The commission, which comprised the most eminent medical men of the country, in their report condemned the continuance of this class of practitioners, and stated, that no ill result would follow their suppression. In this opinion the government coincided, and the officers of health were suppressed. It was not found that there was any deficiency in fully educated medical practitioners, nor was there any want of the means to remunerate them properly for their professional exertions, and Dr. Costello enquired whether there existed in this country a deficiency of duly qualified members of the profession, or of the requisite amount of property in the middle classes for their remuneration, to render it necessary to have the profession swamped by the invasion of herds of half-educated men? He then alluded to the new distinction of the Fellowship, and said, that as the Members of the Council were elected from amongst the Members, they had a right to expect that they would have cared for the interest of the commonalty, instead of instituting the Fellowship, which could only be for the good of the few, and the degradation of the many. He then formally proposed the first resolution, as follows:—

That the present state of Society is highly favourable to the requirement from all future candidates for admission to the Medical Profession, of such high proofs of scientific attainments, that but one pass to the whole Medical and Surgical Practice of the country is necessary or desirable.

Mr. Morris seconded the resolution, which was carried unanimously.

Mr. Healey then proposed the second resolution, which, as it referred to the public, as distinct from the profession, had been entrusted to him by the committee. He had a strong feeling that the committee, in asking for the co-operation of the public, stood upon high ground, and shewed that they had no class interest at stake. Firm as they were in the conviction of the justice of their cause, they were moreover anxious to enlist support on all sides. There never was a time when it was more required. Though the crisis was great and imminent, and especially to the surgical portion of the profession, yet they did not come forward as they should, and make that bold stand against the aggressions on their rights that the occasion demanded (Hear, hear.) Those gentlemen who, in practice, received the support of their professional brethren, had not come forward to lead them on, and to rescue them from the further degradation threatened by the new Bill. The public, he believed, was not disinclined to aid them, and he instanced the presence of their honourable chairman as a foretaste of what they might obtain by an appeal to it. This was also shewn by the two governing journals, the *Times*, and the *Chronicle*, both of which devoted entire columns to the consideration of their wrongs. The public, indeed, had an interest in this matter, as great, or greater, than their own. Take, for instance, one of the grievances:—take midwifery, in which the due exercise of the skill of the medical attendant is sometimes required to save life, but the practice of which, for a long time, was left almost solely to old women. The charter which has been recently granted, puts its ban on midwifery, and declares that no one who practises that branch of the profession shall enjoy any of its honours. In this decision the public is deeply concerned, because the withholding the honours from midwifery practitioners must cause, to a greater or less extent, negligence on the part of the students in acquiring the necessary knowledge, and consequent errors and injurious results to the patients when in practice, as has lately happened in two very dreadful cases, where, although, as he understood, there was not any great difficulty in the case, the patients were killed from atrocious ignorance on the part of their medical attendants. Mr. Healey then alluded to the direct tendency of the New Bill, to create a class of general practitioners with no other medical knowledge than such as might be acquired by two years' study at British Universities, where the laxity of medical study was notorious. The over-crowded state of the ranks of the profession shewed the propriety of elevating the standard of education, for there never was a time when there existed a greater certainty of obtaining an efficient medical staff for the country, however high they might be required to be educated; and was this the time for Government to lower the amount of education for medical candidates, and to drive still more persons into it, when already over-stocked? It was requisite that the honours of the profession should be at its command, to be bestowed for merit and scientific acquirements, and not to be acquired by means of private interest, or otherwise young men would not devote their time to the study and to the advance of science, but would rather be led to become sycophants, and what is termed "pleasant fellows," instead of men of science. Mr. Healey concluded by urging medical men to work for themselves, and also to seek for public aid, or they would otherwise be degraded and depressed; and to shew the non-estimation in which the profession is held, he stated that a society in this metropolis having had occasion recently for a medical and a legal opinion, the medical being the more important, the committee prepared a case for the barrister, to which was unanimously added a large fee, while the requisite paper was drawn out for the medical man, to which it was decided, with one dissentient voice, that no fee should be given. Mr. Healey then proposed the following resolution:—

That the maintenance of the Medical Profession in the highest possible position, both as regards

scientific skill and social respectability, is of as high concern to the general public as to the Medical community; and that the co-operation therefore of our non-medical friends in opposing any parliamentary project which fails in either of these two great objects, is hereby earnestly solicited.

Mr. Lane, in seconding the resolution, observed, that if Sir James Graham had attended to the advice given by his old captain, Sir Home Popham, to the Emperor of Russia, he would not have introduced, his medical bill in its present objectionable form, nor have sought to establish, a new class of imperfectly educated practitioners. Sir Home Popham was asked by the Emperor how he was to prevent his officers from robbing him, to which the answer was—give them rank and proper pay, and they will not rob you.

The resolution was then put and carried unanimously.

Mr. Weathers moved the third resolution, which he regretted had not been placed in older and abler hands. He thought there could be but one feeling with respect to it; they had all entered the College as equals in collegiate and social standing, and any enactment which robbed them of that equality must be unconstitutional and unjust. The resolution was as follows:—

That this meeting cannot but deeply regret that an influential member of her Majesty's Government should have thought it consonant with his duty to her Majesty and the country, to have granted in the Queen's name, a Charter which makes the scientific practice of Midwifery, a bar to the possession of the Medical honours of the country, and which for the aggrandizement of a select few, unconstitutionally lowers to an inferior grade 12,000 British Surgeons, and strips them of a collegiate and social status legally acquired at great trouble and expense;—a status which they had been accustomed to regard as possessing the sacredness of a vested right.

This was seconded by Mr. Green, and carried unanimously.

Mr. Griffith, in moving the fourth resolution, stated, that the object of the meeting was to obtain justice from the College of Surgeons, and the restitution of their rights and privileges (cheers). When they bore in mind, that they were all originally members, all followed the same curriculum of education, paid the same fees, and underwent the same examination, it must be evident that it was not just to create distinctions between them, which can but serve to advantage a few, to the detriment of the majority. The College consisted of the President, Council, and Commonalty, and although the former had the power of making bye-laws, yet common sense must tell them that they ought not to make laws for themselves alone, but for the common benefit of all the members. With equality of talent, the members were entitled to an equality of rights, privileges, and titles, and this was conceded in the bye-laws, but had been practically carried out by an endeavour to fix on them the stigma of disgrace. The present aspect of affairs shewed the College tottering to its fall, and fall it must, unless the governing body yielded to the pressure from without. They did not seek the destruction of the College, hallowed as it was by the names of the illustrious dead who had graced it, and he earnestly desired that the collegiate executive would think proper to change their plan of proceeding. The resolution he had the honour to propose was as follows:—

That this meeting records its strongest condemnation of the Council of the College of Surgeons, as betraying, under the most suspicious circumstances, the interests of their brethren confided to their keeping and protection, and as evincing an incapacity for the discharge of their responsible duties, which makes their extrusion from the high trusts of the Profession an important point of any well considered scheme of Medical Reform, and that the Council of the College of Surgeons, in pledging themselves, in their official statement of May last, that their second nomination of Fellows should "supply the deficiencies of the former list," and that they would "omit the name of no indi-

vidual held in esteem by the other members of the College for his surgical experience and scientific attainments," have directly libelled the 12,000 surgeons whom they did subsequently omit from their list of Fellows, as persons deficient of that scientific knowledge which alone should qualify them for the heavy trust of the health and lives of the people of this country, and have thus attempted publicly to affix a suspicion of incompetence on those whom they had admitted to equal rights with themselves as members, and sworn "to protect and defend from disturbance in the exercise and enjoyments of the rights so acquired."

Mr. E. Griffiths seconded the resolution, which was carried unanimously.

Mr. Waite then proposed, and Mr. Osborne seconded the next resolution, which was to the following effect:—

That the new Medical Bill cannot but be considered as framed on the same principles as the obnoxious charter, and that its tendency to produce a low and semi-educated class of Medical Practitioners, cannot be too strongly reprobated as unjust to present practitioners, and most dangerous to the public.

Mr. O'Connor alluded to the state of the Apothecaries in Ireland, as affected by the Medical Bill, and wished much to impress on the honourable chairman's mind the importance of attending to their interests. He stated that they were in no respect inferior to the Apothecaries of this country, and in one respect had the advantage, in being subjected to the preliminary test of a classical examination. He fully concurred in the resolution which had just been read.

Mr. Wyse observed, that in his preliminary remarks he had alluded to the condition of the apothecary in Ireland, and was fully aware of his efficiency, and of the value of the classical test. He was obliged to Mr. O'Connor for giving him an opportunity of again recording an opinion which he believed was shared by many other members of the House.

The resolution was then put, and carried unanimously.

Dr. Costello then proposed, and Mr. Healey seconded, a vote of thanks to the hon. chairman, which was carried by acclamation.

Mr. Wyse returned thanks in a neat speech, and the meeting separated.

MR. WAKLEY'S PLOT MEETING.

On Wednesday evening, at half-past 3 o'clock, a meeting of Mr. Wakley's *instrumental band* was held, agreeably to notice, given two days before, at the concert room of the Princess' Theatre, Oxford Street. Among the gentlemen present on the platform, were Messrs. Wakley, Hodson Rugg, and Lynch, the latter an M.D. of —?*. The body of the room contained about 100 persons, fully 3-4ths of whom were medical students, apparently pre-assembled for a very fixed object. They were certainly no honour to the University College, of which, we have reason to know, they were pupils. Having recently voted themselves "caps," this meeting fully entitles them to add "bells." There was almost an entire absence of respectable medical men.

The chair, on this occasion, was occupied by Mr. Hillier, who shewed an indisputable title to preside over the assembly, by having passed through the Bankruptcy Court so late as two years since. He commenced a long and disursive speech by stating, that it might seem strange to those around him to see him in the chair. He was not very fond of figuring as a public character, but the occasion called for it. They all knew what brought them together on that occasion,

* So many of our correspondents have expressed, in their interest for the medical "orators" of the country, an anxiety to know to which of their Colleges of Physicians Dr. Lynch is indebted for the M.D. which has so long formed one of his distinctions, that we are reluctantly compelled to say, that we will open our columns to any information he can give them on the subject.—Ed.

namely, to protest against the line of conduct lately struck out by the National Association. The general voice of the Profession, not that of the Association, it was that should be heard in the audience chamber of the Minister. He had nothing whatever to say to the gentlemen of the committee, who were gentlemen, in every sense of the word; but, he would ask, what must all rational men think of their conduct as a committee in debarring from a seat among them his friend Mr. Wakley? He then uttered an eulogium on that gentleman, concluding with the climax of his being "a man who, in the face of the public had usurped the highest seat in the temple of fame." The committee had stated, that their roll amounted already to 4000. He had heard from another quarter, that their funds were £2000. As to what the latter might be, he could not say, but he knew well, that they had exaggerated their number. He then referred to the last resolution passed at the National Association's meeting, which had been carried against Mr. Cooper's amendment in an unfair manner, and at a time when there were but very few gentlemen present. (A Voice—There were 300 present.) He (Mr. H.) could not say how many were present. He would not detain them any longer, but would recommend unanimity!! He eulogised the "condescension" of Sir James Graham.

Mr. Bloxam claimed the indulgence of the meeting on the double plea, of then labouring under influenza, and being unused to public speaking. Warming as he spoke, and rising superior to the burr in his throat, which he had pleaded as an apology, in justification of what he, at setting out, promised should not be a long speech, the speaker told the meeting, that there were abroad those who sought to sow dissension among the unanimous brotherhood of General Practitioners! I might, perhaps, be said of him, that in succeeding from the National Association, he was somewhat instrumental in causing such discord. He endeavoured to relieve himself of any such imputation by a condemnatory review of the Association. He then concluded by proposing a very long resolution condemnatory of the conduct pursued by the National Association, &c.

Mr. Cooper, of St. Paneras, claimed credit to himself for moving an amendment to that resolution, by which the National Association Committee was converted from a provisional into a permanent one. He knew very well how his amendment had been negatived, and was also aware that members of the committee had left their places on the platform, and spread themselves through the room for the purpose of preventing his amendment from being carried. Mr. C., after designating the conduct which had been pursued towards him, as "bullying," concluded by expressing regret that he had not availed himself of other means than his amendment to prevent the "despotism" of the National Committee.

Mr. Brett, in a speech which, notwithstanding every effort of the chairman to ensure its being heard, was almost unceasingly interrupted by hissings, hootings, and other expressions of displeasure from the mal-content Medical Students defended the conduct of the National Association and reprobated the calling together of a meeting such as that before him. He proceeded to speak at some length, notwithstanding the clamour raised against him, but was eventually called to order by the chairman, and sat down, when

Mr. Hilles rose to condemn that meeting as *ill-timed* and *uncalled-for*, and most dangerous to the profession. (Cries of "Who are you?" "What's your name?") Persons were among them who sought to excite discord. (No, no.) He said "Yes, yes!" As they were so fastidious, he would not say that discord was sought to be introduced among them—but it *was* introduced. It was not a time when all their enemies were arrayed together—particularly their *open* enemies—to give them the advantage of such an unwarranted dissension. He cleared the "National" of the imputation of being a "permanent" committee, supporting himself by declaring the resolution passed at the great public meeting, as conclusive because the sole authority on the subject. The question of the late hour was trifling. Th

House of Commons passed its most important resolutions at three or four o'clock of the morning; and in the meeting, there were 300 or 400. The next charge was the exclusion of Mr. Wakley. (Mr. Wakley: "No, no!" as also from Mr. Wakley, Jun.—backed by the pupils). The speakers certainly introduced the charge, and the Chairman must know it. (Chairman: No.) Then, that was no crime in the Association. And he knew not what charge there was to justify this meeting—a meeting most injurious to the best interests of the profession. If no one else would move an amendment, Mr. Hilles would.

Mr. Brett, amid cries of "Sit down!" "Spoken!" &c., rose, but perceiving that Dr. Lynch had caught the chairman's eye, as the phrase goes, he gave way to the latter gentleman, handing him before he sat down, a piece of paper, which Dr. Lynch placed on a table upon the platform.

Dr. Lynch, then, in a long speech, in which he attempted to refute the observations of Messrs. Hilles and Brett, defended the present meeting, and said that it had been convened, not as had been stated, for the purpose of destroying the National Association, but for the purpose of placing properly before them the faults which they had committed. He concluded by an eulogium upon Mr. Wakley, whom, he said he had, some five or six weeks since, soundly rated for what he considered Mr. W.'s vacillation in medical politics. But he had since then discovered, that of the matters in dispute between him and that gentleman, that Mr. Wakley alone had taken a proper view, and that he himself (Dr. L.) was in the wrong. Under such circumstances, he could not hesitate for a moment to pay such a debt of justice.

The Chairman now rose to put the first resolution to the vote, but was interrupted by Mr. Brett, who stated that he had moved an amendment to it. (Cries of "no, no," in which Mr. Wakley joined.) Mr. Brett insisted that he had moved an amendment; and stated that as he was not allowed to read it himself, he had handed it to Dr. Lynch—and, added he, highly irritated, "as it is not forthcoming, I will repeat the substance of it, which is that this meeting be adjourned *sine die*." (Great uproar.)

Mr. Wakley said that Mr. Brett was acting contrary to all etiquette in moving such an amendment. He should have done it in his speech.

The original resolution was then carried.

Mr. Curtis moved the second resolution, which was carried.

Mr. Gray moved the third resolution, to the effect, that a deputation from this meeting be formed to wait upon the Hanover Square Committee, on Saturday next, at four o'clock, to learn their answer to the letter which had been sent them. Carried.

Mr. Wakley, in a very long speech, defended the meeting from the charge of Messrs. Hilles and Brett, and himself from the imputation which had been thrown upon his character as a medical reformer. He did not care for such charges, so long as those before him did not credit them. He defied his "enemies" to prove a single charge of theirs against him. He begged of the public to watch more closely than ever his conduct for the next few months, and protested, that he would accept of no situation in the future Council of Health, whether for emolument or honour. After making some remarks on the interest he had ever evinced for the welfare of the medical students, the hon. gentleman sat down, after explaining how their future interests would be affected by the New Bill, which, he said, after all, contained something worth thanking Sir James Graham for.

The meeting shortly after separated.

Not the most trifling incident during the proceedings of the evening was the protest which was made by two young medical men—Dr. Way and Mr. Ward—against the manner in which the business of the meeting had been managed, and the resolutions passed. "Numbers of persons, whom they knew from personal experience not to be members of the National or any other Medical Association, were there voting for these resolutions, and condemning the conduct of the National

Committee. Resolutions passed in such a manner, could not be looked upon as really conveying any censure upon that body, and would go forth to the world in their proper character—utterly valueless and insignificant."

An observer, who has communicated his name to us, has sent us a statement thereof, corroborative of the facts of this report. He remarks correctly enough, that nothing but outrageous proceedings on the part of the Committee, could have justified so schismatic an attempt, especially at such a period in the profession's history. He bears testimony, to the juvenile character of the audience, and says that standing at the door, waiting for the commencement of the proceedings, he heard one young gentleman remark to a comrade "that he feared it would be no go."

PROPOSITION FOR THE ADOPTION BY THE LEGISLATURE, OF ONE GENERAL PHARMACOPEIA FOR ENGLAND, SCOTLAND, AND IRELAND.

By WILLIAM RODEN, M.D. M.R. C.S.E.

Fellow of the Royal Medical and Chirurgical Society.

It behoves every one at this crisis who feels an interest in the advancement of medical science to point out any improvement which may tend to direct Sir James Graham and the Legislature in their deliberations on the subject of Medical Reform. One important point seems for the most part, if not entirely to have been overlooked, and which might with great advantage to the community find a consideration in Sir James Graham's measure now before the House, namely, the adoption of one general Pharmacopœia common to Great Britain and Ireland. The advantages to be derived from the establishment of one Pharmacopœia, especially with regard to the plan of Medical Reform now under consideration, are so obvious and so really important (especially to the public safety) that I need not occupy your space by enumerating them; and as it is almost certain whatever measure may gain the sanction of Parliament, that there will be a ruling body or Council of Health to preside over the different Colleges or Universities, it is also clear that from this body should also emanate a Pharmacopœia for the use and guidance of all classes of the Profession under its jurisdiction, instead of, as at present from the different Colleges of Physicians. It may possibly happen that the Council of Health is considered to be invested with this power as the Bill now stands; but so important a measure should be expressed in the Bill rather than implied. This desideratum might be provided for, in the following manner. A clause should be introduced into the Bill empowering the Council of Health, in conjunction with a Committee of able Chemists and Materia-Medicists selected by the Council, to adopt and publish a general Pharmacopœia for England, Scotland, and Ireland, as soon as convenient, after the passing of the Bill: such pharmacopœia to be revised every seven years in like manner or oftener, if the progress of chemical or pharmaceutical science should warrant it.

However great the errors of commission may be in the Bill, those of omission, it will be acknowledged, are still the greater, and the above appears to me to be one of such moment, that I trust the National Association will not lose sight of early recommending it to the notice of the Legislature.

Kidderminster, March 17, 1845.

THE SPA-FIELDS ABOMINATION.

(To the Editor of the Medical Times.)

SIR,—The condition of the Spa-fields Burying-ground has recently attracted much attention; and though the parties who profit by a continuance of that most disgraceful and dangerous receptacle of corruption are industriously engaged in circulating statements to the effect that the facts already before the public are much exaggerated, the reality is in truth far worse than the representation; and that it is so the following

I hold myself in every respect responsible, will abundantly attest.

The practice of burning the coffins and portions of their contents has been carried on in Spa-fields burying-ground for upwards of a quarter of a century; a fire has been continually burning day and night. It has not been possible for a very long period of time to obtain a grave for an adult, without mutilation, and disturbance of previous deposits.

Stephen Bishop, the WATCHMAN (?) of the ground, has performed the double office of calling the hour of the night and burning coffins, &c., in the BONE-HOUSE.* This person has executed the above-named compound functions during seventeen or eighteen years. Some years since, he was accustomed to devour his food in the bone-house, during the performance of his nightly tasks. Of late he has become more fastidious, and wears a "hand-leather," to avoid contamination from the contact of the coffin-wood. Some time ago he told one of his associates that "upon his soul he couldn't eat his grub in the bone-house now." The relief-guard (the gravediggers) entered upon their daily work in the grave-yard as Bishop had concluded his night-work in the bone-house. The man has frequently "let his fire out," and has been chidden by his employer for so doing. He has replied, that "*the wood was wet*." His master has rejoined, "*You ought to save all the deal-wood you can for the purpose of keeping up the fire.*"

The coffins of "still-born" children have been broken up and used for the purpose of lighting the fire in the bone-house; deal, of which they are composed, being more combustible than the elm-coffin of the adult.

A late "manager" of the ground has entered the bone-house at various hours in the morning, and has observed—"Ah, Steevy" (Stephen Bishop, the so-called watchman of the ground) "has been asleep. He's let his fire out. Why don't you take care of the deal for lighting the fire?"

It has frequently occurred that the poor creatures who have brought children to be buried ("still-born") have left, as a pledge for the eighteenpence fee they lacked, a shawl, an apron, or even duplicates, whilst the following Machiavellian trick has been often practised:—The corpse being taken into the parlour of the "manager," he has removed it from the coffin, and has endeavoured, by the exercise of a little tact, to elicit from the attendant or nurse, as the case might be, whether the child had breathed; if so, he refused to bury the child unless the fee of four shillings was paid—threatening the party, if they demurred, that he "*would compel them to bury it in a regular way, by an undertaker.*"

It has been a common practice to remove the gravestones from the "common" into the "best ground." A double object was thus accomplished—the ground had a more respectable appearance, in consequence of the array of tombstones; freer space was left for the digging-up, levelling, and raking over the "worst" ground, whilst an additional charge was demanded from the relatives of every new-comer.

The stone designating the family-grave of — has been removed about thirty yards from the place it once occupied, and the coffins of three other persons occupy the original grave.

The stone marking the grave of — has been removed.

The family grave of — was shifted from its position in the "worst" to the "best" ground; the difference in the charge for interment in the latter being four shillings extra. The stone has been replaced, for specific reasons.

The stone marking the family grave of — has been removed about twenty-two yards from its original site.

The stone marking the family grave of —

* The following sign-board is placed on the right-hand side of the entrance, in the grave-yard, near the bone-house. It is supported by a pole wedged in between two ledgers (upright gravestones):—"Take notice. The watchmen in this ground are provided with fire-arms. Take off your pattens."

has been removed twenty yards from its original position.

The family grave of — has been changed to the surface with the bodies of others not connected in any degree with the original purchaser, and this grave thrice filled and thrice "cleaned out" within the last ten years.

The bodies interred in the family grave —, of — Street, have been mutilated; upwards of two feet in length of the coffins and bodies have been chopped off.

A highly respectable family residing in — purchased a double family grave in Spa-fields burying-ground. This grave was marked by a head and a foot stone. The grave was opened some time since, for the reception of a deceased member of the family. A tier of eight or ten coffins was found projecting in every direction, and filling up half this double grave. The coffins and bodies of the adults and children were remorselessly cut through, and upwards of five hundred weight of coffin-wood taken out of the grave and burnt. The original occupant of this family grave, —, was "doubled up" and thrust into the mud, &c., at the bottom of the grave, out of which upwards of forty pailfuls of a most sickening compound were baled. His coffin was taken to the bone-house, the fire being alight at the time. The "manager" has frequently been on the watch through the wicket of the large gates of the ground, and, as soon as the mourners have made their appearance with the deceased, he has shouted to the gravediggers, "Make haste—they're coming;" earth has been quickly thrown over the floor of the grave, the body deposited, and within half an hour—even before the funeral service was concluded—the coffin has been covered by the water. Water containing, in solution or suspension, portions of human remains, has been almost constantly "bunketed" out of the graves, more especially those situated in the "best" ground. The earth covering the coffins and their contents in the immediate vicinity has been pierced in every direction by the boring-rod, for the double purpose of getting rid for the instant of the fluid material removed from the graves, and for promoting the more rapid decomposition of the bodies.

The body of a male relative of an ex-gravedigger of twenty years' practice in Spa-fields burying-ground has been mutilated, and his coffin burnt.

The "head man" in this ground, Tom Smith, an hereditary gravedigger, has committed the most fearful and unheard-of atrocities on the bodies of the dead. The long hair of the women has been cut off and sold to the hair-dressers; "rails" (teeth) have been taken from every corpse affording them of sufficient quality to stimulate his cupidity; whilst the materials in which the bodies of the dead have been clothed by the hand of affection have been, in hundreds of instances, torn off by this midnight prowler.

On December, 23, 1843, I attended at the Clerkenwell police-court, for the purpose of substantiating the above and other allegations, and should have endeavoured to do so had not the sitting magistrate, Mr. Greenwood, peremptorily declined interfering in the matter of a memorial that found its way into the Clerkenwell police-office, although, I believe, it did not come under his official cognizance.

I had the first intimation of the complaint then made from the *Times* of December, , 1843; and it is more than probable that the audacity of the manager, Mr. C. Bird, in his attempt to intimidate, under a threat of legal proceedings, induced me to give several hours of time, at much inconvenience to myself, for that occasion, although, from a sense of duty, I accepted a challenge I had neither desired nor provoked. The memorial, in my possession, is signed by about a hundred and fifty of the neighbouring inhabitants, and contains, among others, the following allegations:—

"The inhabitants of the aforesaid places" (Garden walk, Exmouth-street, Northampton-Road, Northampton-row, Vineyard-walk, Fletcher's-row, Chapel-row, and parts adjacent) "have been annoyed from the unpleasant and exceedingly unwholesome smell arising from the burning in the

bone-house of coffins in the Spa-fields burying-ground; and from the nauseous fumes which, at such times, impregnate the air, your petitioners firmly believe that human bodies are consumed therein; and your petitioner James Wilson humbly maketh complaint, that he standeth in constant dread of being burnt out, in consequence of the aforesaid bone-house being joined to the back of his house, from the chimney of which bone-house flames occasionally arise to a great height; and on last Thursday (December 21, 1843) the bone-house was actually on fire, which caused the adjacent inhabitants to remove their goods in great terror."

In March 1843, or thereabouts, I caused to be presented the following petition to the House of Commons. Upwards of five hundred signatures were attached thereto.

"To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

"The humble petition of the undersigned resident inhabitants of Exmouth-street, Northampton-row, Chapel-row, and adjoining neighbourhoods, SHOWETH—

"That your petitioners are forced to complain of, and are constantly annoyed by, the disgusting practices employed in the SPA-FIELDS burial-ground.

"That many of your petitioners have repeatedly witnessed the most shameful mutilations of the dead.

"That it is a common and almost daily practice to break up and consume the wood of the coffins (not yet decayed) in large quantities in an out-house in this place. That many hundred tons weight of coffin-wood have been thus disposed of.

"That your petitioners are frequently sensible of a most disgusting smell, which they have no doubt arises from the surface of this grave-yard, and from the burning of the wood of the coffins; and that your petitioners have every reason to believe that the health of themselves and families has been affected from the above causes.

"That, in the judgment of your petitioners, this burying-ground does not contain more than eighty seven thousand one hundred and twenty square feet of surface. That your petitioners believe that, on a yearly average, two thousand bodies have been pretended to be buried in this ground. That this place has been employed as a burying-ground more than half a century. That it appears that not more than one thousand five hundred bodies can be decently and properly interred in an acre of ground; and that consequently upwards of one thousand human bodies must have been displaced, mutilated, and mixed with the moist soil of this grave-yard, long before the process of natural decay can have taken place. That it is a common practice in this ground to displace the stones marking the graves of deceased persons, whose relatives have purchased the ground in perpetuity. That thus a fraud is perpetrated on the living, and gross indecencies inflicted upon the dead, whose bodies are frequently mutilated and displaced to make room for fresh-comers,

"That your petitioners desire to express their unfeigned satisfaction and gratitude that the practices resulting from the interment of the dead in towns have been the subject of a long, searching, impartial, and patient inquiry of a committee of your Honourable House; and your petitioners venture to express a hope that the labours of your committee will cause the immediate introduction of such alterations in the present system of interment as your Honourable House, in its wisdom, may deem necessary.

"And your petitioners will ever pray, &c."

Having passed in review the scenes of the terrible drama that has been constantly and systematically enacted in Spa-fields burying-ground, I reserve to myself the choice of time for a further unmasking of hypocrisy of a most disgusting description. I will prove that "grave-yard management," even to the minutest detail, is so perfect in its scheming, so determined in its execution, so terrible and dreadful in its results, that the well constituted mind must indignantly recoil from its imaginings, much more from its realities.

GEORGE ALFRED WALKER.

St. James's-place, St. James's-street, March 22nd, 1845.

CURRICULUM, &c. OF THE GLASGOW "FACULTY."

(To the Editor of the Medical Times.)

175, Buchanan Street, Glasgow,
March 24th, 1845.

SIR,—In your "Notices to Correspondents" of the *Medical Times* of the 22nd March, there is an intimation from an Old Subscriber respecting the Glasgow "College" not altogether correct. The Faculty of Physicians and Surgeons we presume is meant, and you will observe, from the annexed Curriculum, that the course of study required is very complete. The examination is as stringent as of any Licensing Board in Scotland, and more so than many.

At the desire of the President of the Faculty I forwarded to you, two posts ago, a pamphlet entitled, "Rights and Privileges of the Faculty of Physicians and Surgeons of Glasgow," which he will be obliged by your noticing in the *Medical Times* in any manner you think best.

I am, Sir,

Yours respectfully,

WILLIAM WEIR,

Member of Faculty.

REGULATIONS OF THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW, RELATIVE TO THE ADMISSION OF CANDIDATES FOR A SURGEON'S DIPLOMA.

The Faculty recommend that Candidates should attend Elementary Courses of Study in Mathematics and Natural Philosophy. These branches, however, are not imperative.

Every Candidate's knowledge in Latin shall be tested, at his Examination, by being required to construe some part of Gregory's *Conspectus Medicinæ Theoreticæ*.

Curriculum.

Anatomy, 2 Courses of 6 Months.
Practical Anatomy, 1 do. do., Enacted June 7, 1830
Surgery, 2 do. do.
Chemistry, 1 do. do.
Practical Chemistry, 1 do. of 3 months, Nov. 8, 1831.
Theory of Medicine, 1 do. of 6 months.
Practice of Medicine, 1 do. do.
Materia Medica, 1 do. do.
Midwifery, 1 do. do.
Clinical Medicine, 1 do. do., June 7, 1830.
Clinical Surgery, 1 do. do., June 7, 1830.
Medical Jurisprudence and Police, 1 do. do., April 4, 1831.
Botany, 1 do. of 3 months, Feb. 3, 1834.
A Public Hospital, 18 months, Feb. 3, 1834.
A Surgeon's or Apothecary's Shop, 6 months, Feb. 3, 1834.

The above Lectures must have been delivered by Professors or Lecturers in an University; or by Members resident of the Royal Colleges of Physicians or Surgeons, respectively, of London, Edinburgh, or Dublin; or by Members of the Faculty.

Every Candidate must have been employed in the above courses of studies for Four Winter Sessions, or for Three Winter Sessions and Three Summer Sessions, so that the whole period of attendance shall not be less than Three Years complete.

These branches, whose dates are specified, are not required by those Students who commence their studies anterior to these enactments. The commencement of Education is ascertained by the date of the first Ticket.

Every Candidate is required to produce Certificates of Attendance upon the above courses; to be examined respecting his knowledge of these various branches of study,—and to write an Essay upon some Pathological or Surgical subject, which must be given in and approved of by the Board of Examiners. The Fee of Seven Guineas must be deposited with the President previous to the Examination.

ROBERT PERRY, M.D., President.

MEDICAL REFORM AND MEDICAL REFORMERS.

Since we last commented on the Government plan of medical reform, as revealed in Sir James Graham's opening speech, we have been favoured with a somewhat fairer medium for viewing it—the bill itself. As might have been expected, the features which in the beautifying—because *dim*—radiance of the Home Secretary's oration provoked dislike, lose none of their repulsiveness in the brighter day to which the new ordeal exposes them. In truth, each nearer and clearer view convinces us that, on the whole, the bantling before us, though begotten with some labour, and on *very* philosophical principles, is everything but an improvement on the production of the previous year. It labours under the formidable disadvantage of having had considerably more of the forethought of her Majesty's Home Secretary. Yet if we may believe the reports—but they surely err—the Mr. Wakley who, some few months since, had solemnly pledged his word "to perish on the floor of 'the House'" rather than fail in "strangling" the coming stranger, offered on the occasion of its *accouchment* to perform for it—we know not on what terms—the office of *man-midwife*, an instance of the honourable member's forgiving disposition to Government that does infinite honour to his generosity, or—worldly prudence;—and the interesting baronet, it is said, reciprocating the opportune courtesy with an *utter* absence of haughtiness, chanted forth his joy that his little bill was at length born into the world under such favouring auspices. Supposing the reports correct, we can imagine nothing more pleasing than the carefully elaborated terms of extemporaneous "satisfaction" on one side, and equally improvised assurances of "delight" on the other. The cackling chorus of two matronly hens on the protrusion of some obstinate egg, long expected, was nothing to the charm of these loving *impromptus* fails a *loisir*.

It is disheartening to differ with two such disinterested authorities; but candour compels us to own that neither the profession nor the public are likely to look at the scheme with any thing of the "delight" or "satisfaction" of its Parliamentary duct of promoters. As in the former bill, so here, there are some innovations which in themselves are decidedly improvements; but then these lose much of their value from the part they are made to play in a general scheme which is beyond a doubt bad. If we can gather the objects of *this* bill from an attentive consideration of its clauses, we are safe in declaring that Graham seeks, as his great aim, first, the establishment universally of two grades in the profession; that is, of a class that *do*, and a class that *do not*, know their business; and secondly, the preservation to all existing medical corporations of all the rights, privileges, and emoluments they consider worth preserving. The whole bill is modelled to meet these two ideas; and every project of improvement in professional matters is accepted or rejected, added to or pared down, as it may harmonize with them or not. Unfortunately, it is impossible either to establish subordinate grades, or maintain in primeval force decayed or superfluous corporations, without wrong or dissatisfaction to the body of practitioners. So much the worse. Sir James Graham got his bill from corporators. Being themselves the great grievances of their brethren, they were kindly privileged by him to decide what were grievances! To Sir James Graham they were strong authorities, like the man of one eye in the kingdom of the blind; and the practitioners as the weaker, went to the wall. If medical reform meant the settled prosperity of medical corporations, and the settled injury of their numerous subjects, there can be no doubt that the present bill would be very nearly perfect.

Passing by the immense impolicy in the present day, with great wealth in society and the professions overcrowded, of having a semi-educated mass of medical practitioners—a matter we shall again have to advert to—we cannot hesitate now briefly to record our strongest protest against the way in which the present bill goes about *making* a subordinate grade out of the existing mass of general practitioners. Our readers know that this section of the profession numbers as members many who, with the licence of a physician, possess the diploma of a surgeon; others who, with the latter credential, own the licence of the Apothecaries' Society; and, finally, a third division, who possess but a single licence or diploma, generally from the College of Surgeons or Society of Apothecaries. Of the greater number of these gentlemen, it may be said that the only difference between them and the aristocratic physician or hospital "pure," but especially the latter, is the chance one of natural ability or more favourable opportunities of experience. The same education and examination have been ordinarily undergone alike by both, and the same collegiate titles with almost equal frequency secured. Indeed, the rural doctor, of plain name and pretensions, is not unfrequently a match in scientific acumen to the most accomplished of his metropolitan superiors, and medical science, during the last five years, has owed as much to its general practitioners—as the names of MARTINEAU, HEE, CEELEY, NEWHAM, TRALE, CLAY, and others testify—as to any other division of its cultivators. We have already seen in what a mischievous way the recent charter to the College of Surgeons—which now turns out to have been but a preliminary portion of the present measure—operated on the members of that body. It suddenly reduced to an inferior, and very uncomfortable position, about 90 per cent. of those general practitioners who happened to be members of that unfortunate corporation. A few gentlemen, selected for reasons which, in many cases, their dinner tables could best explain, were arbitrarily elevated over the heads of others, "previously their equals in professional rank, senior to many of them as members of the College, and not inferior to most of them in scientific, and practical knowledge." We quote the words of nearly 4,000 of those who were thus injured.

What this obnoxious charter has done on a small scale, the bill, it would appear, is to do on one much larger.—[From the MORNING CHRONICLE.]

PROGRESS OF ENGLISH, ITALIAN, AND AMERICAN SCIENCE.

BRONCHOPHONY, ÆGOPHONY, AND PECTORILOQUY, AMPHORIC RESONANCE.—Dr. Durrant, in a paper published in the *Provincial Medical Gaz.*, on physical diagnosis, thus describes these three stethoscopic indications of pectoral disease:—Bronchophony is a clear, distinct, and unusually loud resonance of the voice within the chest, varying in the degree of its tone. When weak and feebly pronounced, it becomes necessary to examine carefully both sides of the chest, in order to substantiate a point of comparison on the healthy side. It is usually a permanent sound, so long as the lesion on which it depends exists, and is commonly associated with bronchial respiration. The physical cause of bronchophony consists either in an enlarged calibre of the bronchial tubes, or in an unnatural density of the pulmonary or adventitious tissues within the chest, becoming thereby better conductors of the sound. The seat of bronchophony is variable; it may obtain in all parts of the chest.—Ægophony is a sound, which when once clearly heard, is not liable to be mistaken; when not fully developed, its characters are more or less amalgamated with bronchophony. It is a clear, tremulous, and bleating sound, presenting many varieties of intonation, not easily described. The best definition of ægophony, is that of its resembling the peculiar and well known voice, imparted by the operator to the puppet, "Punch." It is persistent, although liable to removal by change of posture. The physical cause of ægophony is the compression of the lung by a thin stratum of fluid, through which the vocal vibrations are communicated. It is usually detected in the lower part of the scapular region, and extending sometimes to the side. Dr. Durrant's experience does not lead him to place implicit reliance on the diagnostic value of this sign, unless it be unequivocally developed, and accompanied by other well-marked phenomena. Pectoriloquy, in its perfect form, imparts the sensation of the voice issuing from a cavern in the lung, and passing directly through the tube of the stethoscope with painful distinctness to the ear. This sound, from not having been perfectly understood, has very frequently been confounded with bronchophony, and hence have arisen, from time to time, errors in diagnosis; indeed so many circumstances are necessary, in order to insure the production of perfect pectoriloquy, that, as a diagnostic sign for caverns in general, he prefers the substitution of "cavernous voice," as adopted by MM. Barth and Roger. In order that perfect pectoriloquy obtain, it is necessary that the cavity be of moderate size, superficial, communicating freely with the bronchi, empty, having smooth and dense walls, and free from interstitial bands. The existence of a cavity of this description favouring the vibration and transmission of the vocal resonance, constitutes the physical cause of true pectoriloquy. Although its favourite seat is the summit of one, or both lungs, it may, when influenced by other lesions besides phthisis, occur indifferently in any part of the chest. A modification of the two preceding sounds, in which the vocal phenomena assume a metallic character, constitutes the resonance termed amphoric. It has been aptly compared to the sound produced by speaking into an empty or partially-filled pitcher. In this, the voice is not articulate, as in pectoriloquy, neither does it give the impression of passing through the tube of the stethoscope. The physical cause of amphoric vocal resonance is the existence of a large cavity in the lung, communicating with the bronchi filled or nearly so with air.

HÆMATURIA: SCIARRHUS OF THE BLADDER.—Mr. Dunford, in the *Provincial Medical Journal*, describes a case of hæmaturia occurring in a man 58 years old, which admitted only of occasional relief, and was attended with great pain at the neck of the bladder. The man ultimately

sunk, and the following appearances were found at the *post-mortem* examination:—Left kidney pale and flaccid, about the natural size, with its pelvis and ureter enormously distended with urine; ureter large enough to contain a mould candle; texture of the kidney pale, otherwise healthy. Right kidney three times its natural size, pale and somewhat indurated, containing small abscesses: the ascending colon bound down to it by strong adhesions: ureter similarly distended as the other. Bladder one solid mass of scirrhus, most hardened at its fundus, some part ossified; its cavity so obliterated and so small that it would not contain two drachms of urine. Prostate partook of the scirrhus. Liver and other viscera healthy.

DISLOCATION OF THE HUMERUS, COMPLICATED WITH FRACTURE.—Mr. Hancock, in the *Provincial Medical Journal*, gives the following directions for diagnosing these accidents from simple fracture:—The fall and sinking of the shoulder are less marked, as the end of the shaft of the humerus occupies the glenoid cavity. The head of the humerus can be felt either in the axilla, under the clavicle, beneath the pectoral muscle, or in the infra-spinatus fossa, according as the displacement occurs downwards, forwards, or backwards; but it does not obey the motions of the arm when the latter is rotated. When the head of the bone is displaced either into the axilla, or forwards under the clavicle, a grating and crepitus may be perceived on raising the arm; but when the displacement occurs backwards, you are deprived of this diagnostic sign. The upper end of the shaft of the humerus is drawn upwards and forwards against the coracoid process. It may be returned to its proper situation, but quickly slips forwards again when left to itself. As greater violence is required to produce these accidents than in simple dislocations; and, moreover, as this violence must act directly upon the joint, there will be more contusion, more swelling, and considerably more pain than in the latter injuries. The result of these cases depends very much upon the situation of the fracture. When it occurs at the anatomical neck, or immediately below the tubercles, the surgeon cannot return the head of the bone to the glenoid cavity, as there is many purchase whereby the reduction can be effected; but when the fracture obtains three inches below the or lower down, a cure may be effected, when, therefore, the fracture occurs at the anatomical neck, or immediately below the tubercles, extension is of no use, further use, than to bring the upper end of the shaft into the glenoid cavity. With regard to the treatment, do what we may, the patient will never recover the proper use of his arm; the question, therefore, for the surgeon's consideration, is the degree of action which may be recovered; and endeavours should be directed towards obtaining as great a latitude of motion as possible. The treatment should be directed towards keeping the upper end of the shaft as much as possible in the glenoid cavity, and favouring the formation of adhesions, by which it may be permanently restrained in that situation. To support the elbow is injudicious. Mr. Hancock advises treating these accidents as a simple fracture of the anatomical neck of the humerus, and to render this treatment more effectual he uses an iron angular splint, with a joint where it corresponds to the elbow. It is intended to be placed on the inner side of the arm, and front of the forearm. That portion appropriated to the arm, consists of two pieces, which slide one upon the other, and are fixed by a couple of thumb-screws, by which it may be adapted to any length of arm; whilst the upper or maxillary end of the arm-piece ends in a pad, like the top of a crutch. This serves the treble purpose counter-extension against the margins of the axilla; reserving those margins from excoriation which the sharp edge of the splint might otherwise produce; and, lastly, it presents an axillary pad and splint of one, certainly an improvement upon the detached pad, which is always liable to shift and get out of its place.—When the fracture has taken place lower down, more towards the middle of the shaft of the humerus, the surgeon should endeavour to reduce the dislocation at once.

FRACTURE OF THE ACETABULUM WITH DISLOCATION OF THE FEMUR.—Mr. Hancock, in the *Provincial Medical Journal*, says that a case of this kind fell under his notice some years ago at the Westminster Hospital. A young woman, about 20 years of age, fell down and dislocated the right hip; she was taken to the hospital, where the bone was reduced without much difficulty by the house-surgeon and two or three of the dressers; her legs were tied together, and she was placed in bed. Upon visiting her next morning, the bone was found to be again dislocated, and was again reduced, without, however, any permanent benefit. Mr. Guthrie, whose patient she was, saw her, and ascertained that she had incurred a fracture of the upper part of the acetabulum, in addition to the luxation of the head of the bone on the dorsum ilii, so that when the bone was reduced, there was nothing to prevent the muscles again drawing it out. The patient was placed on a double inclined bed, and the foot of the injured limb firmly secured to prevent retraction; she ultimately left the hospital with a very useful limb.

EMPHYSEMA AFTER CHILD-BIRTH.—Mr. Davies attended a lady in her confinement, who by the advice of her nurse, strained violently during the presence of labour-pains, to assist them; after the child was born, she complained of great difficulty of breathing, and the face, throat and breast were swollen to three times their natural size, and of a bright scarlet colour. She also complained of great pain in the throat, about two inches above the sternum, and the difficulty of breathing seemed rapidly to increase: crepitation was very perceptible on pressure. Large venesection afforded relief, and she soon recovered. Digitalis, with salts, nitre, and antimony, were exhibited at the same time. Uterine hemorrhage was going on at the time, but was arrested by the free abstraction of blood from the arm.

CASE OF POISONING FROM HYDROCYANIC ACID.—Mr. Harthill at a meeting of the Sheffield Medical Society, related a case of recovery from poisoning by hydrocyanic acid, which had recently occurred under his care. He was summoned to a soldier, aged 23, and was informed that he had taken poison. He found him insensible, with convulsions. The mouth having been forced open, emetics of mustard and sulphate of zinc were exhibited; a stream of cold water was applied to the spine, and turpentine enemata administered. The effects of the cold water douche were instantaneous, feeling and consciousness becoming immediately evident; powerful stimuli, brandy and ammonia were administered; sinapisms applied to the thighs, and in about four hours, eight minims of tincture of opium given. The next day he was much recovered, and has since been sent to head quarters.

GONORRHOEA.—Dr. Radclyffe Hall in the *Provincial Medical Journal* says, that in the first stage of gonorrhœa, before the discharge has become completely puriform or the scalding great, a single injection of about two fluid drachms of the strong solution of the chloride of lime, will always put a stop to the disease, either in a first or subsequent clap. In the second stage, when there is considerable discharge of pus and more pain, several injections are required. In gleet, provided the discharge he not kept up by some structural change in the urethra, the strong injection is likewise useful, but not to so striking an extent. The effects of injecting the strong solution, are sharp pain, and often erection for the moment, slight puffiness and eversion of the orifice of the urethra, and tenderness on pressure, and a feeling of unusual firmness for two or three inches down the corpus spongiosum, where these did not already exist. In a short time, the pain subsides, and in a quarter or half an hour, a serous discharge issues from the mouth of the urethra. Occasionally, œdema of the prepuce, with its attendant sense of numbness in the part, ensues. There is scalding, but usually not very great, for the first two or three micturitions after the injection; and what there is may be in a great measure obviated by injecting a little almond oil just before attempting to make water. In about eighteen or twenty-four hours, the lips of the urethra are found separated by a clot of firm

yellow pus; this is removed by the stream of urine, and may or may not form a second time. If the disease was only in its first stage, it is now cured; but if more established, the injection will have to be repeated, as often as the peculiar tingling sensation and gonorrhœal secretion re-appear. In this case, the small firm clot is not formed, but in its stead, there is a discharge of more fluid pus. The number of injections, and consequently the length of time required for cure, depend chiefly upon the previous duration of the disease. In the acute stage of a first attack, where both pain and discharge are considerable, Dr. Hall says he has never seen any harm from employing the strong injection, using, at the same time, mild aperients, tartarised antimony and opium internally, enjoining perfect rest and abstinence, and frequent washing out of the urethra with some weak astringent solution of acetate of lead and sulphate of zinc combined in the form of the lotio alba. On the contrary, the course of the disease has appeared to be materially shortened. When the inflammation is subacute, but the discharge still purulent, as in persons habituated to elaps, or, after a certain period in a first attack, he has given copaiba or cubebs in the usual way, but the injection has manifestly been of service. In gleet a single injection has sometimes led to a cure after the failure of almost all other kinds of injection; more frequently, several injections have been required; in a few instances the chloride has entirely failed, but in these cases, no other form of injection subsequently tried has succeeded, and the disease has been cured by the use of bougies, or it has lasted until a fresh clap was contracted, or it has gradually worn out as the patient's general health improved. The pain caused by this injection is not so great as that attending the use of the strong solution of nitrate of silver, and the occasional œdema always subsides in a few hours, requiring only that the patient remain quiet. Dr. Hall has also found the strong solution of great use in the treatment of purulent ophthalmia.

ABSCESS IN THE PELVIS.—Mr. Elkington, in the *Provincial Medical Journal*, mentions the case of a woman, aged 30, who was delivered of her first child, March 26, 1842. She had a severe lingering labour, and was delivered with the forceps, the use of the instruments requiring considerable force. The child was born alive, and continued to live. Delivery was followed by sloughing of the parts covering the rami of the pubes, more particularly on the left side, retention of urine, fever, &c. At one time the finger could be passed through an opening formed by the slough, down to the bone. With great care and attention, regularly drawing off the urine and syringing out the vagina, she so far recovered as to be able to get down stairs at the end of the third week. Her general health was much improved; she could pass her urine without the use of the catheter, and the ulceration over the ramus of the pubis was nearly healed. After being down stairs for two or three days, she had rigors followed by fever, pain in the pelvis, left groin, and in the left iliac fossa. This was followed by swelling in the left iliac fossa, and then in the groin. The swelling increased, and in a short time fluctuation was felt. Mr. Elkington opened the abscess in the groin, and nearly a quart of fetid pus was discharged in a full stream. She afterwards became hectic, and died about ten weeks after her confinement. The discharge continued more or less from the groin up to the time of her death. The ulceration in the vagina had healed, and there was no contraction of the vagina in consequence. No *post-mortem* was allowed.

FISTULOUS OPENING INTO THE CAVITY OF THE CHEST.—Mr. Stafford narrates the case of a phthisical patient, who had ulcers in the neck, communicating with the œsophagus, and an external opening between the first and second ribs of the left side, communicating with a cavity in the upper portion, or apex, of the lung. Both lungs were extensively diseased. Mr. Stafford does not consider this fistulous opening as in any way accelerating the death of the patient.

On Diet, with its Influence on Man; being an address to Parents, &c., or how to obtain Health, Strength, Sweetness, Beauty, Development of Intellect, and Long Life. BY THOMAS PARRY: London, 1844

As our author has not informed us in his title-page of his profession, or of his opportunities of becoming theoretically or practically conversant with his subject, we have not examined his book with so much care as we might otherwise have bestowed upon it. We shall, therefore, content ourselves with giving an extract or two, that our readers may judge of the style and character of the work. "The active professional man, when deprived of his natural sleep, should always take the earliest opportunity of making this restorative part of his life as soon as possible. A short sleep is highly restorative to a fatigued person, &c." "If a man, in the plenitude of his inexperience, fancies he can diet himself upon meat, he will attain a temporary feeling of strength, with great irritability of body (which he may mistake for courage), but he will soon wither, and fall into disease. If he diet himself chiefly upon fish, he will get disease of skin; if upon oil, or butter, the same. If chiefly upon wine, he will only attain a temporary and evanescent feeling of energy, followed by an almost instant nervousness. If he attempt low vegetable diet of roots, stalks, and leaves, he may attain a state of being adequate to perfect quietism, but he never can get strength or power enough for active life." These two quotations give a very favourable specimen of the author's style.

A meeting of medical students was held at University College, on Thursday last, at 4 o'clock, p.m. Twenty-two students having been prevailed on to sign a requisition asking Mr. Wakley's presence, that gentleman, whose humility is every day on the increase, did them the honour of attending. Sundry resolutions, suggesting numerous improvements in the Bill, were passed in great harmony and unanimity. A vote of thanks was now proposed to the hon. visitor, and a scene of tumult commenced difficult to describe, and in which the principle of respect to personal security was anything but sacredly maintained. A student protested against all thanks, unless Mr. Wakley could answer three questions:—1st, Did he not send letters offering to pay for the admission of certain persons if they would serve in the Hanover Square Association Committee? 2ndly, Why he had wheeled about on the Apothecary question? 3rdly, Whether the £30 he professed to give the Protection Assembly one week, was not restored to him the next as purchase money for 600 numbers of the *Lancet*, sent by the Assembly, to as many Members of Parliament.

The last question was left unanswered, the second elicited from him a claim to the right of changing his opinions on deliberation, and the first received a total denial. The hon. member said so anxious had he been to contribute to the success of the National Association, that knowing its early lack of funds, he had liberally offered to give it, whenever it chose eight pages of the *Lancet*, if they would pay the extra expence! Dr. Way now rose, as a perpetual pupil, to express his opposition to the vote of thanks. This led to a violent tumult, terminating in the chairman's decision, that he could not be heard. For three quarters of an hour, nothing was done in the incessant uproar, and when Mr. Wakley, on the resolution finally being declared passed, rose to return thanks, he was met by such a storm of yells and hisses, that he was compelled, after three vain essays, to leave the room—anything but satisfied at this result of his lamentable attempt to introduce violent disorders and ill-feelings in this once peaceful school.